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Hot Springs County Natural Resource Management Plan

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ACRONYMS

ACEC- Areas of Critical Environmental Concern

APHIS - Animal and Plant Health Inspection Service

ARPA - Archeological Resources Protection Act

AUM- Animal Unit Month

BBL - Barrel of oil

BGEPA - Bald and Golden Eagle Protection Act

BJFTA - Bankhead-Jones Farm Tenant Act

BLM - Bureau of Land Management

BMP - Best Management Practice

BOR - Bureau of Reclamation

BTNF - Bridger-Teton National Forest

CAA - 1970 Clean Air Act

CAP-SSE - Community Assistance Program – State Support Services

CCA - Candidate Conservation Agreements

CCAA - Candidate Conservation Agreements with Assurances

CEQ - Council on Environmental Quality

cfs - Cubic Feet per Second

CLG – Coalition of Local Governments

CWA - Clean Water Act

CWD - Chronic Wasting Disease

DOD - Department of Defense

DSA – Designated Surveillance Area

EA - Environmental Assessment

EAJA – Equal Access to Justice Act

ECOS - Environmental Conservation Online System

EIS - Environmental Impact Statement

ENSO - El Niño-Southern Oscillation

EPA - Environmental Protection Agency

ERFO - Emergency Relief for Federally Owned Roads

ESA - Endangered Species Act of 1973

ESD - Ecological Site Description

FAR - Functioning-at-risk

FAST - Fixing America's Surface Transportation Act

FEMA - Federal Emergency Management Act

FERC - Federal Energy Regulatory Commission

FDQA - Federal Data Quality Act

FHWA - Federal Highway Administration

FLAP - Federal Lands Access Program

FLH - Federal Lands Highway Division

FLPMA - Federal Land Policy and Management Act of 1976

FLTP - Federal Lands Transportation Program

FSA - Farm Service Agency

GHG - Greenhouse Gas

GLO - General Lands Office

GPC - Groundwater Pollution Control

GRAIP - Geomorphic Road Analysis and Inventory Package

GYE - Greater Yellowstone Ecosystem

HA - Herd Areas

HMA - Herd Management Areas

IMR - Intermountain Range

IPM - Integrated Pest Management

IRA - Inventoried Roadless Area

kV - Kilovolt

LNG - Liquefied Natural Gas

LRTP - Long Range Transportation Plan

LUP - Land Use Plan

LUPAs - Land Use Plan Amendments

LWC - Lands with Wilderness Characteristics

LWCF - Land and Water Conservation Fund Act of 1964

MBTA - Migratory Bird Treaty Act

MIM - Multiple Indicator Monitoring

MCF - Million Cubic Foot

MOA - Memorandum of Agreement

MOU - Memorandum of Understanding

MUSY - Multiple Use Sustained Yield Act of 1960

NAAQS - National Ambient Air Quality Standards

NAO - North Atlantic Oscillation

NEPA - National Environmental Policy Act of 1973

NF - Non-Functioning

NFHL - National Flood Hazard Layer

NFIP - National Flood Insurance Program

NFMA - National Forest Management Act of 1976

NFS - National Forest System

NGL - Natural Gas Line

NHPA - National Historic Preservation Act

NHT - National Historic Trail

NM - National Monument

NPS - National Park Service

NRCS - Natural Resource Conservation Service

NRMP - Natural Resource Management Plan

NSFLTP - Nationally Significant Federal Lands and Tribal Projects Program

NSS - Native Species Status

NST - National Scenic Trail

NWR - National Wildlife Refuge

OAA - Organic Administration Act of 1897

OHV - Off-Highway Vehicle

OMB - Office of Management and Budget

PDO - Pacific Decadal Oscillation

PFC - Proper Functioning Condition

PHSMA - Pipeline and Hazardous Materials Safety Administration

PIBO - PACfish/INfish Biological Opinion Monitoring Program

PILT - Payments In Lieu of Taxes

PSA – Pipeline Safety Act

RMP - Resource Management Plan

RNA - Research Natural Area

R.S. 2477 - Revised Statue 2477

RSRA - Rapid Stream-Riparian Assessment

RTP - Recreational Trails Program

SHPO - State Historic Preservation Officer

SIA - Specialist Interest Areas

SLIB - State Lands and Investment Board

SRMA - Special Recreation Management Area

SSRB - Snake/Salt River Basin

SVAP - Stream Visual Assessment Protocol

SWAP - State Wildlife Action Plan

TCP - Traditional Cultural Property

TMDL - Total Maximum Daily Load

USACE - U.S. Army Corps of Engineers

USFS - U.S. Forest Service

USFWS - U.S. Fish and Wildlife Service

USGS - U.S. Geological Survey

USRS - U.S. Reclamation Service

VRM - Visual Resource Management

W&WP - Water & Wastewater Program

WDEQ - Wyoming Department of Environmental Quality

WEQA - Wyoming Environmental Quality Act

WFRHBA - Wild Free-Roaming Horse and Burro Act

WGFD - Wyoming Game and Fish Department

WLB - Wyoming Livestock Board

WOGCC - Wyoming Oil and Gas Conservation Commission

WQD - Water Quality Division

WSA - Wilderness Study Area

WUI - Wildland Urban Interface

WWDC - Wyoming Water Development Commission

WWDO - Wyoming Water Development Office

WYDOT - Wyoming Department of Transportation

CHAPTER 1: INTRODUCTION

1.1 PURPOSE

1.1.1 Natural Resource Management Plan

A Natural Resource Management Plan (NRMP or Plan) is a document prepared and adopted by a local government that federal agencies are required to review and consider when making decisions that may affect the local area. Locally elected governments and elected officials have far-ranging and important responsibilities to their constituents, described by state statute as protecting their "health, safety and welfare" (Wyo. Stat. §§ 18-3-504(v); 18-5-208(a)). That responsibility includes specifically interacting with federal agencies on all federal issues impacting the local community and counties. Rural counties' socioeconomic well-being, health, safety, and culture are impacted by the management of the surrounding federal and public lands. To give locally elected governments the strongest voice possible during "government-to-government" interactions, local governments can formally adopt "local land use plans" (LUPs) or NRMPs. These plans establish policy regarding the use and management of federal lands in local governments' jurisdiction and can influence the development and implementation of federal policies, programs, and decision-making that affect local communities. NRMPs are intended to help protect the local citizens' use of, and access to, federally-administered lands and resources and to ensure the socioeconomic wellbeing, culture, and customs of a local community are adequately considered in federal decisions and to enhance the coordination between the local County and the federal agencies. NRMPs do not regulate the use of private lands and do not constitute zoning. LUPs are generally associated with the planning document that counties use to determine zoning on private lands. An NRMP is a separate type of land use plan prepared by rural counties and conservation districts, containing policies relating to the management of federal and public land in the County and reflecting the local government's position on federal decisions concerning those lands.

The Hot Springs County NRMP serves as a basis for Hot Springs County to have a path to communicate and coordinate with the federal government and its agencies on land and natural resource management and use. Counties are particularly well-suited to understand the impacts of federal land management decisions on the local economy, custom, and culture. Under Wyoming statute, a County is deemed to have special expertise on all subject matters for which it has statutory responsibility including, but not limited to, all subject matters directly or indirectly related to the health, safety, welfare, custom, culture, and socio-economic viability of a County (Wyo. Statute 18-5-208(a)).

Local governments do not have jurisdiction over the federal government or federal lands. NRMPs cannot require federal agencies to take specific actions. However, federal agencies and departments are mandated by various federal statutes to engage local governments during decision-making processes on federal plans, policies, and programs that will impact the management of land and natural resources within a community and ultimately affect the local tax base and lives of local citizens. Federal agencies are required to coordinate and consult with local governments and give meaningful consideration to policies asserted in written plans

prepared and adopted by local governments concerning the management of federal lands in their area.

Wyoming does not have substantive participation laws similar to those of federal agencies. In turn, the state and its agencies are not required to review this NRMP or follow consistency review, coordination, or cooperating agency status associated with this plan. However, the County requests that the state and its agencies review and follow this NRMP whenever a decision may affect the county or its citizens. Further, to the extent that there is a federal nexus involved in a state decision or public policy necessarily requires coordination between the County and state decision makers, the County expects that the state shall be consistent to this plan to the extent allowed by law.

1.1.2 Statutory Requirements and Legal Framework

Federal agencies are required to identify and analyze the impacts on local economies and community cultures when making decisions. NRMPs outline the past and present economic and cultural conditions and the desired future conditions of a county and demonstrate how those conditions are tied to activities on adjoining federal lands. The plan establishes the local government's preferred policies for the planned use, management, protection, and preservation of natural resources on the federal and public lands within its jurisdiction. The goal of an NRMP is to protect private property, the local tax base, and local custom and culture. An adopted NRMP is a critical tool that allows a local government to have a substantive impact on federal decisions, plans, policies, and programs. A written plan can play a key role in the success of a local government engaging the federal government (Budd-Falen, 2018).

Required engagement between federal agencies and local governments takes the form of "consistency review" under the National Environmental Policy Act (NEPA) and the Federal Lands Policy and Management Act (FLPMA), the requirement for "coordination" under both FLPMA and the National Forest Management Act (NFMA), engaging local governments acting as a "cooperating agency" under NEPA, and a State Governor's consistency review process. Further discussion of how these processes work under each of these federal statutes can be found in Appendix B.

1.2 HOT SPRINGS COUNTY NRMP PROCESS

1.2.1 NRMP Organization

This plan considers the current conditions of federal resources, County objectives for each resource, and how the County would like to see those objectives achieved. For all federal resources in the County, this plan addresses the following:

- **Resource Assessment and Legal Framework.** Includes background and detailed information on the resource, including qualitative as well as quantitative information. The assessment includes an evaluation of the importance of the resource to the County, location, quality, and size, as well as a map of the resource, where appropriate. The Resource Assessment relies on the best data available at the time of publication, though new data collection or research is not required. The Resource Assessment addresses the

question, “What is the state of the resource now?” This section does not describe how the County interprets or proposes to use a particular resource or topic. This section describes how federal agencies interpret federal laws, guidance, and handbooks.

- **Resource Management Objectives**. Describes general goals in the form of broad policy statements regarding the use, development, and protection for each resource. Resource Management Objectives address the question, “What does the County want for and from this resource?”

- **Priorities**. Describes specific priorities on how to achieve the County’s Resource Management Objective for each resource. Priorities tied to Resource Management Objectives for each resource and address the question, “How would the County like to see its objectives achieved?” The general agreement or disagreement with the interpretation described in the Resource Assessment section should be used as the defining direction for the priority statements.

1.2.2 NRMP Development

This document is the third generation of Hot Springs County’s Natural Resource Plan for State and Federal Lands. Overcoming the limitations posed by its small population and remote location, several dozen Hot Springs County residents gathered in the late 1990s and early 2000s to draft one of the nation’s earliest examples of a resource-based policy plan focusing on public lands. After several years of volunteer committee effort, that entirely homegrown document was adopted in 2005. Later, in 2014, the Natural Resource Plan was updated and readopted. This third effort not only updates the Resource Management Plan but formats it in a manner consistent with that of most other Wyoming counties. Doing so allows these documents to be utilized in a more unified manner in order to protect commonly shared public land values that transcend county boundaries. Yet much of the language of the County’s two earlier documents has been retained in this present document, as a testimony to the “can do” attitude of those original authors.

The Hot Springs County Natural Resources Planning Committee (NRPC) prepared the 2014 Hot Springs County Natural Resources Plan for State and Federal Lands, which when combined with the Revised Land Use Plan of 2002 prepared by the Hot Springs County Planning and Zoning Commission, espouses a philosophy that:

- Encourages input and participation from all citizens of Hot Springs County throughout the process.
- Represents a consensus of the widely differing interests and concerns within the County.
- Develops new approaches and techniques that avoid the problems of traditional land-use planning.

Hot Springs County belongs to an economic development district (“EDD”), known as the Yellowstone Development District. For the County to qualify for project

funding from the Economic Development Administration ("EDA"), it must belong to an EDD and the Yellowstone Development District and, in turn, is obliged to adopt a Comprehensive Economic Development Strategy ("CEDS") every five (5) years setting forth various anticipated projects that might need funding. Hot Springs County participated in the CEDS process, but not as part of the adoption of this Natural Resources Plan for State and Federal Lands. The two are not to be confused.

Consistent with Wyo. Stat. § 9-4-218(a)(viii)(D) and in accordance with Wyo. Stat. §§ 16-4-401 through 16-4-408, Hot Springs County developed this plan in public meetings, allowing for participation and contribution from the public. A steering committee has guided the development of the draft document, including objective and priority development.

A draft NRMP was released for a 30-day public comment period beginning on May 27, 2022 through April 28, 2022. Comments received during the public comment period were incorporated into the final plan as appropriate. The final plan is anticipated to be presented to the Hot Springs County Board of County Commissioners for final adoption on June 07, 2022.

This plan is based on criteria developed by the Office of the Governor of the State of Wyoming in consultation with the counties, consistent with Wyo. Stat. § 9-4-218(a)(viii)(B).

1.2.3 Amending the NRMP

This plan can be amended following the same process for public involvement and adoption as described in the previous section. It is recommended to review the plan every five years. Economic data and minor changes within the plan may be updated more frequently with a much simpler process.

Minor amendments to the plan only require that the NRMP with amendments is presented and adopted by the Hot Springs County Board of County Commissioners during one of their regular meetings. The proposed action item to make amendments to the plan must be on the Hot Springs County Board of County Commissioners Agenda before the meeting and the changes should be made available for the public when the agenda is posted.

1.2.4 County Expectations for NRMP

Hot Springs County recognizes that a major part of creating an effective NRMP is to develop a solid working relationship with the federal and state agencies doing business in Hot Springs County. The County also recognizes that it may be entitled to participate as a cooperating agency, and that "coordination," and "consistency review" are required actions that federal agencies must undertake. However, the County also understands that communication and ensuring that the agencies have access to the NRMP is essential to accomplish the goals set out in this plan. Additionally, to that end, Hot Springs County commits to the following actions and requests the following from the state and federal agencies:

1. Within 90 days of the date of adoption of this plan, Hot Springs County will notify federal agencies of the date, time, and location of their regularly scheduled meetings with an

open invitation that federal agency personnel should attend such meetings if there are items to discuss. Public meetings with the agencies should be scheduled on the agenda on at least a biannual basis.

2. Within 90 days of the date of adoption of this plan, Hot Springs County will transmit a copy of this local land use plan to the state, regional, and local federal agency offices doing business within Hot Springs County for their consideration as part of any consistency review that is required pursuant to federal statute. At a minimum, the County plans on distributing the NRMP to the following agencies:
    a. Bureau of Land Management (Lander Field office in Lander and Worland Field Office in Worland)
    b. Bureau of Land Management (Wyoming State Office), Cheyenne, WY
    c. Shoshone National Forest (Washakie Ranger District, Lander and Wind River Ranger District, Dubois, Shoshone National Forest Supervisor Office in Cody)
    d. Wyoming Governor's Office (Cheyenne Office)
    e. Wyoming Game and Fish (Lander and Cheyenne Offices)
    f. Wyoming Department of Environmental Quality (Cheyenne Office)
    g. Office of State Lands and Investments (Cheyenne Office)
    h. Wyoming State Archeologist (Cheyenne Office)
    i. Bureau of Reclamation (Casper Office)
    j. U.S. Environmental Protection Agency (Region 8 Office Denver, Colorado)
3. Within 90 days of the adoption of this plan, the County will contact the above federal agencies' offices to develop a written protocol for timely communication and appraisal of upcoming items, issues, and concerns.
4. In a timely manner, the County will review NEPA documents to determine if they will request "cooperating agency status" and will consider entering into Memorandums of Understanding (MOU) or Memorandums of Agreement (MOA) as appropriate. The County reserves the right to negotiate an MOU or MOA on a case-by-case basis, although an MOU or MOA is not appropriate nor necessary in all cases.

Hot Springs County supports the establishment of a multi-agency stakeholder group hosted by the Board of County Commissioners or its designee to review and discuss ongoing issues on public lands and propose regular meetings on a schedule to be determined, but not less than quarterly. This meeting will give all parties the ability to provide updates to specific projects pertaining to public lands within Hot Springs County and allow the opportunity for questions and answers to be provided in a collaborative space.

1.2.4.1 Hot Springs County Expectations Objectives

A. The goal of the NRMP is to involve citizens and the Hot Springs County government in establishing guidelines and criteria for future utilization of the public lands on an ongoing basis.
B. Community perceptions and the physical capabilities of the land (such as water, grazing, geography, geology, soil conditions, drainage patterns, mineral rights, etc.) rather than population projections will guide primary use planning.

C. The NRMP will provide a tool to reduce public costs and mitigate private conflicts within Hot Springs County.
D. The NRMP will assist in maintaining historic land use patterns, custom and culture, on public land, as a means of stabilizing existing economic uses and keeping the character of Hot Springs County intact.

1.2.4.2 Hot Springs County Expectations Priorities

1. Hot Springs County will strive to turn around adverse economic trends occurring in recent years. The County intends to maintain and encourage a moderate sustainable growth rate and continue to support existing positive economic factors.
2. Hot Springs County residents will continue to adhere to the multiple use concepts for public lands to sustain social, cultural, and economic values that we hold dear to our western heritage.
3. Hot Springs County recognizes the goal of its citizens to protect our natural environment through sound planning practices.
4. At its discretion, Hot Springs County will seek to become a cooperating agency or member of federal planning teams for state and federal lands in order to effectively protect the County's custom, culture, and general welfare.
5. Hot Springs County requests that the state and its agencies review and follow this NRMP whenever a decision may affect the county or its citizens.
6. To the extent that there is a federal nexus involved in a state decision or public policy requires coordination between Hot Springs County and state decision makers, the County expects that the state shall be consistent to this plan to the extent allowed by law.
7. Federal agencies shall perform a consistency review with this NRMP for all NEPA decisions and should attempt to be as closely consistent to this plan as allowed by law.
8. Hot Springs County requests to be notified at the earliest time possible of any regulatory or management process (e.g., scoping, EIS, public hearings, working groups, cooperator status for NEPA, etc.) which impacts its cultural and economic stability so that the county may choose to participate in that process.

1.3 CREDIBLE DATA

Credible scientific data is defined as rigorously reviewed, scientifically valid chemical, physical, and/or biological monitoring data, collected in a timely manner under an accepted sampling and analysis plan, including quality control and assurance procedures and available historical data. To the greatest extent possible, data should drive all land use planning decisions. In this plan, "data" refers to information that meets, at a minimum, the Federal Data Quality Act (FDQA). The FDQA directs the Office of Management and Budget (OMB) to issue government-wide guidelines that "provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies" (Sec. 515 Pub. Law. 106-554; HR 5658; 114 Stat. 2763 (2000)).

The OMB guidelines apply to all federal agencies and require that information disseminated by the Federal government will meet basic informational quality standards 66 Fed. Reg. 49718, Sept. 28, 2001; see also 67 Fed. Reg. 8452, Feb. 22, 2002).

This "standard of quality" essentially requires that data used and published by all Federal agencies meet four elements. These elements include (66 Fed. Reg. 49718):

a) Quality,
b) Utility (i.e., referring to the usefulness of the data for its intended purpose),
c) Objectivity (i.e., the data must be accurate, reliable, and unbiased), and
d) Integrity.

In addition to following the OMB guidelines, all federal agencies were to issue data quality guidelines by October 1, 2002. 67 Fed. Reg. 8452.

In 2004, the OMB issued a memorandum requiring that, after June 15, 2005, influential scientific information representing the views of the department or agency cannot be disseminated by the federal government until it has been "peer-reviewed" by qualified specialists (Office of Management and Budget, 2004). This requirement does not specifically require outside peer review, but an internal review.

The Wyoming State Statute also defines credible data as 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 (Wyoming State Statute §35-11-103(c)(xix)). Chapter 1, Section 35 of the Wyoming Water Quality Rules also defines credible data, that definition can be found here and is similar to that defined in Wyoming State Statute.

1.3.1 Credible Data Resource Management Objective:

A. Credible data is the basis for all federal and state agency decisions within Hot Springs County and follows Office of Management and Budget guidelines.

1.3.2 Credible Data Priority Statements:

1. Federal and state agencies should use credible scientific data in all federal and state land use decisions.
2. Federal and state agencies should include quantitative data in land use planning processes that meet credible data criteria, even if the data were not produced by a federal or state agency.
3. Federal and state agencies should adopt a universal definition of credible data consistent with the Hot Springs County Natural Resource Management Plan and federal and state law.
4. Federal and state agencies should only use and consider data that is legally collected and meets the minimum criteria described in their respective handbooks when making land

management decisions unless other criteria are agreed upon between Hot Springs County and federal agencies.

5. Federal and state agencies should work with cooperating agencies in making sound natural resource decisions that are scientifically based, legally defensible, sensitive to resource health, and responsive to multiple-interest users.
6. Federal and state agencies should be transparent in their decision-making and provide the source for all data and studies relied upon for all decisions. Any studies not available to the public should either be made available for public review or not relied upon.

CHAPTER 2: HOT SPRINGS COUNTY CUSTOM AND CULTURE

2.1 HOT SPRINGS COUNTY INTRODUCTION AND OVERVIEW

2.1.1 Hot Springs County Overview

Hot Springs County is the smallest of the 23 counties in Wyoming containing 2,000 square miles (nearly 1.3 million acres) (Map 1). More than 43% of the County's land area (557,000 acres) is managed by the federal government. The BLM manages nearly 502,528 acres, the USFS manages approximately 54,400 acres. State lands account for more than 7% (89,276 acres) of the county's land area. Most of the state land area is held by the State Lands Commission. Local government manages nearly 19% of the land in the County (approximately 244,000 acres). Approximately 31% of the county's land area is privately owned (404,000 acres).

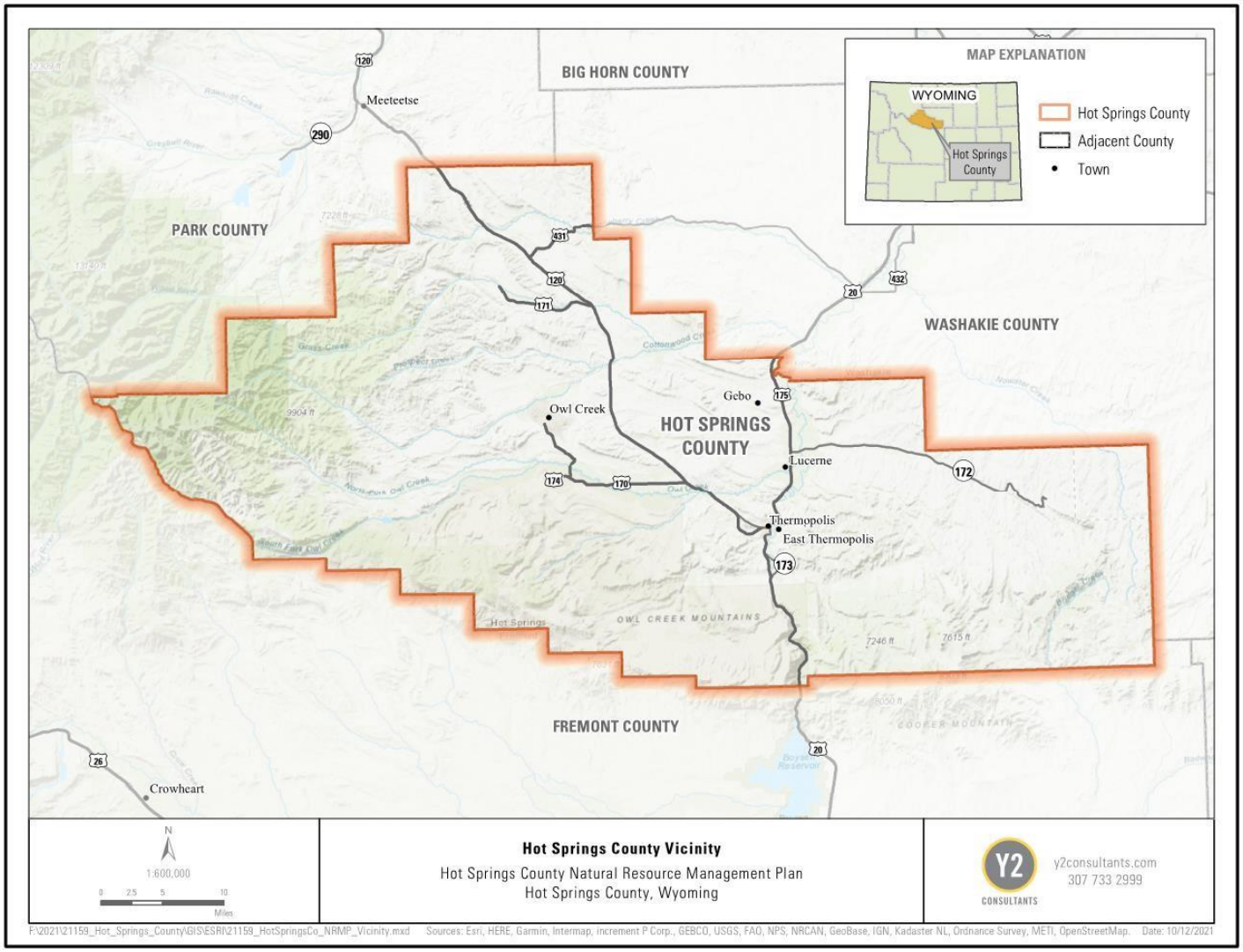
The County lies in the southern curve of the Big Horn Basin, both a topographic and geologic structural basin. The County is bordered on all sides by physical barriers, the entire Basin was slow to develop. Mountains form three sides of Hot Springs County: the Big Horns to the east, the Owl Creek Mountains to the south, and the Absaroka Range to the west. The Washakie Needles in the Owl Creeks contain the highest point in the County, 12,495 feet; the lowest point is 4,268 feet north of the Town of Kirby (where the Big Horn River flows into Washakie County).

Federally or state managed lands and resources throughout Hot Springs County have historically been utilized for many uses including livestock grazing, mining, timber harvest, oil and gas development, wildlife habitat, and outdoor recreation. The earliest commerce in the County was resource-based on such activities as ranching, fur trapping, gold and coal mining, oil drilling, and railroad tie manufacturing and timbering. Hot Springs County is also a recreation paradise.

The total population in Hot Springs County according to 2020 U.S. Census data is 4,696 persons with most of the population living within the cities and towns throughout the County. However, Hot Springs County also has a large rural population which has shaped its custom and culture and the natural resource uses throughout the area. The following are the cities, towns, census-designated places, and unincorporated towns within Hot Springs County.

Table 1. Cities, towns, census-designated places, and unincorporated towns within Hot Springs County.

- Thermopolis (Town – County Seat)
- Kirby (Town)
- East Thermopolis (Town)
- Lucerne (Census-designated)
- Owl Creek (Census-designated)
- Embar (Unincorporated)
- Grass Creek (Unincorporated)
- Wedding of the Waters (Unincorporated)



Map 1. Vicinity map for Hot Springs County, Wyoming (data from USGS ESRI in 2020)

2.2 Hot Springs County History

2.2 HOT SPRINGS COUNTY HISTORY

2.2.1 Pre-Hot Springs County History

Historic Indigenous tribes known to occupy historic Hot Springs County and surrounding areas included the Blackfoot, Crow, Gros Ventre, Sioux, Cheyenne, Arapaho, and Shoshone. John Coulter in his famous winter trek of 1807-1808 came from Montana through the Big Horn Basin and over to the Wind River Mountains. Coulter is credited with being the first white man through what is now Hot Springs County. While fur trappers continued to travel by horseback and boat through the area, Jim Bridger's trail at the eastern end of the County accessed the basin for wagon travel in 1864.

With the Fort Bridger Treaty of 1868, the Shoshones were allotted the vast Wind River Reservation in central Wyoming. The northern boundary was the South Fork of Owl Creek and Owl Creek itself; the eastern boundary ran due south from the mouth of Owl Creek to the crest of the Sweetwater-Popo Agie Divide; the line then ran west to the Wind Rivers and north to Owl Creek.

The only major battle between Indigenous peoples and European settlers to occur within the County was near the eastern County line in 1876. The Shoshone tribe, the cavalry stationed at Fort Washakie, and civilians fought an intruding band of Arapahoes. Two years later the U.S. government placed the Arapaho peoples on the Shoshone reservation as an initially temporary measure, despite the Shoshone tribe's vigorous protests. The Wind River Reservation became a permanent home for the Arapaho. It was not until 1938 that reparations were made to the Shoshone tribe for this loss of their land to the Arapaho.

A ten-mile square at the hot springs was removed from the Reservation in an 1896 treaty, and later a one-mile square was set aside primarily as a health reserve. Again, in 1904, the northern portion of the Reservation was removed from the Reservation and opened to homesteading and mineral exploration, including acreage that would become Hot Springs County. In 1941, land that was not homesteaded after the 1904 Treaty was returned to the tribes.

2.2.2 Hot Springs County Development

Acts of Congress that led to the settlement of the West included the Homestead Act of 1862 (160 acres), the Desert Land Act of 1877 (640 acres of land could be taken up, but before it could be patented it had to be irrigated), the Carey Act of 1894 (states planning irrigation projects to water arid lands would receive one million acres of Federal land; Wyoming was the first to take advantage of this), and the Homestead Act of 1916 (640 acres were allowed, but the federal government reserved the mineral rights). Vacant, unreserved, and un-appropriated lands were withdrawn by Executive Order after the passage of the Taylor Grazing Act in 1934. White settlement of Hot Springs County began with J. D. Woodruff who built the first cabin in the Big Horn Basin on Owl Creek. He also brought in the first herd of cattle. His holdings became the headquarters of the huge Rocky Mountain Cattle Company (Embar and Mill Iron). The Padlock/Arapaho ranch started below this, and numerous small holdings were soon settled all

the way down Owl Creek. Over in the Gooseberry/Grass Creek area was the LU/Dickie Ranch. Early settlers on upper Cottonwood were Vede Punteney and Warren Martin, both former Embar ranch hands.

In 1941, land that was not homesteaded after the 1904 treaty was returned to the tribes. At that time the Padlock Ranch was sold to the Arapahoes in a complex transaction, which also included the Shoshones.

The mountainous western portion of the County, due to altitude and soil conditions, was suitable only for stock grazing, timbering, dude ranching, and hunting. Much of this area lies within the present-day Shoshone National Forest. On the eastern portion of the County, stock raising became a main agricultural industry, with the Hayes/Picard and the Sheep Queen, Lucy Moore, ranches being among the first.

Beef cattle and horse-raising (draft, freight, stage, and saddle horses) formed the first livestock industry. Although opposed by some cattle ranchers, sheep moved into these ranges also. After the first period of bitter feelings and warfare, some ranches began to run both cattle and sheep. The winter of 1886-1887 brought about a great change in the agricultural industry as it was a harsh winter that resulted in the loss of hundreds of livestock due to lack of forage. The days of the open range year-round were numbered, and most ranches began raising supplemental feed like grass hay and alfalfa to feed their livestock during the winter months.

Settlement accelerated on the valley floors where crops could be raised. Hog raising, dairy farming, beekeeping, fox farming, poultry operations, field crops, and garden produce were and continue to be important for the economy of Hot Springs County.

Near the mouth of Owl Creek was one of the first towns in the County, Thermopolis. Thermopolis was moved upriver across from the springs in September 1897. It was incorporated in 1899. A second town grew up on the east side of the river, just off the Hot Springs Reserve. East Thermopolis was proposed for incorporation as early as 1910 but was not incorporated until 1947. The other incorporated town in the County is Kirby. Kirby for many years was the hub of railroad activities in the southern Big Horn Basin since a roundhouse was located there, along with stockyards, which were also sited at Lucerne and Thermopolis.

Wherever there were post offices and stage stops in the earliest days usually small stores and sometimes other amenities sprang up. Included in this category were Ilo on Grass Creek; Middleton, Owl Creek; Holt in the southeastern end of the County, and Lucerne in the north-central. Roads came into these centers from the south via Blonde and Mexican Passes on the west side of Wind River Canyon, or Birds Eye, "D" or Bridger Pass on the east. Early roads followed the river from the north. Staging, carrying the mail, and then freight became important businesses during a time when the road over Blonde Pass was the main road between Lander, Meeteetse, Cody, and later Red Lodge, Montana.

On February 9, 1911, seven Wyoming counties were created and included Hot Springs, Campbell, Goshen, Lincoln, Niobrara, Platte, and Washakie. Governor Carey appointed Nate P. Wilson, a harness maker; C. E. Blonde, a rancher; and Charles Anderson, a founder of Andersonville (on the east side of the Big Horn River, about six miles downriver from today's Thermopolis), as the first Hot Springs County Commissioners. On January 6, 1913, the first elected county officials, Wilson, Anderson, and Bernard (manager of the Gebo Coal mines) began organization of the County. Those first officials were: Hosea Hantz, Clerk and Ex-Officio Clerk of District Court; Victor T. Johnson, Prosecuting Attorney; Scott Hazen, Sheriff; M.E. Congdon, Treasurer; Joseph Magill, Assessor; George Short, Road Supervisor; Nellie L. Wales, Superintendent of Schools; Lew M. Gay, Coroner; Mark B. Woolery, Surveyor. (Milak, 1986)

The railroad was the beginning of a new era for the County. By 1913, the longest gap in the railroad system between Montana and Colorado on the Chicago, Burlington and Quincy was closed when the railroad was run through Wind River Canyon. Finally in 1924, auto traffic was also moving through the canyon.

Agricultural income and taxes began to take second place to the extraction of non-renewable resources throughout the early to mid-1900s.

Major changes since World War II in Hot Springs County include electrical and telephone lines, water pipelines to rural areas, oil/gas development, and fiber optic lines. Most of these lines cross public lands and have changed the ways in which residents live. The technology of radar and satellites has brought drastic changes. Many of these developments lead not only to right-of-way issues but also brought up the issue of aesthetics.

2.3 HOT SPRINGS COUNTY CUSTOM AND CULTURE

The customs and culture of Hot Springs County are defined by the activities and values of the residents, past, present, and future, which derive their well-being and subsistence from natural resources. These values and activities are what make Hot Springs County unique. Hot Springs County recognizes that custom and culture are based on traditional values and activities subject to gradual continuous changes by various influences incurred by succeeding generations.

Therefore, the Hot Springs County Natural Resource Management Plan must continue to be a "work in progress" reflecting changes as they occur. In this Plan, public policy is set accordingly to either promote or discourage how those changes occur based on potential effects to the County's custom and culture.

Integral to the values and activities that create well-being and provide subsistence is the land. Public lands, and the rights and privileges residents have come to rely on of the public lands, are central to the custom and culture of Hot Springs County, as follows:

- Agriculture (farming, irrigation, livestock grazing, etc.)
- Recreation and Tourism (motorized and non-motorized transport and activities, including but not limited to hunting, fishing, water and land sports, hiking, wildlife viewing, etc.)
- Industry (mining, power production, oil/gas production and exploration, timbering, etc.)
- Water (agricultural, industrial, recreational, domestic uses, power, and general water resource development and conservation)
- Intangible Values (historical and cultural sites, open space values and access to open space, aesthetic values, conservation, entrepreneurial values, etc.)
- Transportation
- Communications & Utilities (the County's infrastructure)

Hot Springs County, through a series of community assessments, surveys, reports and public meetings, has determined what makes it unique – its custom and culture. The history of the County is laid out in greater detail elsewhere; however, it was the history of this county and the promises made to its settlers, which brought the farmers, ranchers, miners and energy companies that molded and formed the custom and culture the community enjoys today. For instance, the boom-and-bust economic cycles common to the western states, impacted Hot Springs County; both positively and negatively.

The greatest outside influence on the County has been and will continue to be the State and Federal governments. State and Federal government agencies' jurisdiction over public lands and natural resources is fundamental to the County's economic structure. The Federal government's program of "payments in lieu of taxes" (PILT), farm subsidies, social security benefits, and other such programs cannot be relied on as consistent revenue sources. The presence of so many State and Federal employees and offices represents a major sub-culture and economic stimulus to the County.

2.4 CULTURAL, HISTORICAL, & PALEONTOLOGICAL RESOURCES

2.4.1 History, Custom, and Culture

Hot Springs County is home to many historical artifacts ranging from the time of the dinosaurs to the development of the railroad. This provides a rich and deep history that has led to the present-day custom and culture of the area. Many fossilized microscopic organisms, flora, and fauna have been found throughout the county. Cultural resources located on public land bring perspective to Hot Springs County history and may have historical significance relating to other natural resources. For instance, the Bridger Trail, which bisected the County, has historic implications regarding the westward migration of people during the Nineteenth Century and points out the significance of our water resources as connected to transportation.

2.4.2 Resource Assessment and Legal Framework

Hot Springs County offers a unique expression of human occupation which can be divided into two categories: Prehistoric and Historic. Included in the Prehistoric resources are game and Indigenous people trails, individual tepee rings, petroglyphs, camp and chipping sites and game traps. Historic sites add to the evidence of Hot Springs County's long and significant history. They remind us of our rich cultural heritage. They include lonely, outlying cemeteries, stage station sites, ghost towns, rocky quarrying sites, and oil fields where production is gradually diminishing, and the Wind River Indian Reservation.

Hot Springs traditional lifestyle has centered on agricultural pursuits and resource-based industries for generations. Cultural resources link us to the past and convey the legacy prior generations left for us. Preservation of what's here provides insight into the fabric of the community and what it will likely become.

Through private efforts, several houses and buildings have been restored and protected. New uses have been found for historic buildings. The Hot Springs County Museum, the Hot Springs Pioneer Association, the Hot Springs County Historical Society, Washakie Chapter DAR, Thermopolis Woman's Club, the towns of Kirby and Thermopolis, and special committees have all played a role in the preservation of the County's cultural resources.

Preservation of irreplaceable historic and cultural resources promotes a sense of community. Historic preservation promotes revitalization of our towns and the countryside. The economic values of historic preservation have been proven again and again. Historic preservation of property enhances values and provides the basis for heritage tourism.

Historic and Archeological Resources

Many historical and cultural resources are sensitive and protected by law. There are two acts that primarily protect these historic and archeological resources. The National Historic Preservation Act (NHPA) was passed in 1966 and authorized the Secretary of Interior to maintain and expand a National Register of Historic Places. This act established policy for the protection and preservation of sites (e.g., districts, buildings, structures, and objects) that are placed on the National Register of Historic Places. The Register of Historic Places is managed by the National Park Service. Under NHPA, federal agencies are required to evaluate the effects of actions on any designated 'historic properties' and follow the regulations set by the Advisory Council on Historic Preservation (ACHP) (36 C.F.R. § 800). (National Preservation Institute, 2020)

For listing in the National Register, a property or site must usually be at least 50 years old and have historic significance within one or more of the four criteria for evaluation. The criteria relate to a property's association with important events, people, design or construction, or information potential. The National Register criteria recognize these values embodied in buildings, structures, districts, sites, and objects. The four criteria are as follows:

1. That are associated with events that have made a significant contribution to the broad patterns of our history; or

2. That are associated with the lives of persons significant in our past; or
3. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
4. That have yielded or may be likely to yield, information important in prehistory or history. (Wyoming SHPO, n.d.)

The Secretary of the Interior has the ultimate decision-making authority when deciding whether a site is listed in the National Register. However, local governments, including counties, can significantly influence the process. Local governments certified by the State Historic Preservation Officer (SHPO) are entitled to prepare a report stating whether a site nominated in its jurisdiction is, in its opinion, eligible for listing in the National Historic Register (see NHPA Section 101(c).

Perhaps most influential on federal actions, Section 106 of the National Historic Preservation Act (NHPA) grants legal status to historic preservation in federal planning, decision making, and project execution. Section 106 applies when two thresholds are met: 1) there is a federal or federally licensed action, including grants, licenses, and permits; and 2) that action has the potential to affect properties listed in or eligible for listing in the National Register of Historic Places.

Section 106 requires all federal agencies to consider the effects of their actions on historic properties. The responsible federal agency must consult with appropriate state and local officials, Indian tribes, applicants for federal assistance, and members of the public and consider their views and concerns about historic preservation issues when making final project decisions.

Although all agencies must follow the NHPA when it has a degree of control over a project, the NHPA does not impose general obligations on federal agencies to affirmatively protect preservation interests. *Waterford Citizens' Ass'n v. Reilly,* 970 F.2d 1287, 1291 (4th Cir. 1992). Rather, the NHPA only requires that federal agencies keep the Advisory Council informed of the effect of federal undertakings and allow the Committee to make suggestions to mitigate adverse impacts on the historic sites under its protection. *Id*. In turn, the NHPA ultimately was created to discourage federal agencies from "ignoring preservation values in projects they initiate, approve funds for, or otherwise control." *Id*.

Effects are resolved by mutual agreement, usually among the affected state's SHPO or the Tribal Historic Preservation Officer (THPO), the federal agency, and any other involved parties. The ACHP may participate in controversial or precedent-setting situations.

In 2014 the act was amended, and the codified law was moved from Title 16 to Title 54 and retitled the Historic Preservation Act. However, the substance of the act remained the same, so the listing criteria for placement of sites in the National Historic Register and the requirements under Section 106 remain.

The Archaeological Resources Protection Act (ARPA) of 1979 provides regulations on the management of historic sites on federal land and the issuance of permits to excavate archeological discoveries.

National Register of Historic Places

Presently, the following structures and sites are listed on the National Register of Historic Places. Currently Hot Springs County does not have a Historic Preservation Commission to maintain the status of a certified local government. While some of these sites are on private land, the success of these properties often depended greatly on the public lands. Those starred are also in the 2002 Revision of the Hot Springs County Land Use Plan, with its accompanying recommendations:

1. **Bates Battlefield (H046)**
    - Located in the eastern end of the County, adjacent to the Washakie County line. It was the scene of a battle on July 4, 1874 between a group of Arapahoes under Black Coal against Shoshone Indians led by Chief Washakie and U.S. Army troops and a few civilians under the command of Captain Alfred E. Bates.
    - **Recommendation:** This should remain as agricultural grazing land, with existing livestock watering devices, existing roads and fences. No other development of any type should be allowed.
2. **J.D. Woodruff Cabin Site (H045)**
    - The main residence of the Mill Iron Ranch headquarters on Upper Owl Creek. It was the first cabin constructed in the Big Horn Basin and represents the first livestock enterprise in the Big Horn Basin.
    - **Recommendation:** Lands surrounding the monument and cabin site should continue as a ranch headquarters and other agricultural uses continued.
3. **Legend Rock State Petroglyph Site (H04)**
    - This site, containing thirty acres on the north bank of Cottonwood Creek in the western part of the County, is an Indian petroglyph site and an archaeological site. This site has been vandalized through the years, but remains an impressive attraction for tourist and resident alike and is visited often by studies.
    - **Recommendation:** Existing uses should continue with no residential or commercial uses permitted.

Additional sites on the National Historic Register, but not in the Land Use Plan include:

4. **The Four Mile Bridge (H0381)**
    - Bridge over the Big Horn River near the mouth of Buffalo Creek. This was the site of an early day ferry. The original steel bridge has been removed by the Wyoming Department of Transportation (WYDOT).
5. **Steel bridge over middle Owl Creek (H0408)**
    - South of the Hamilton Dome Highway (State Highway 170). This was the site of a representative bridge of its type. It was replaced by WYDOT.
6. **Callaghan Apartments (Plaza Inn)**

- A 1918 structure built in Hot Springs State Park for those visiting the park for recreational or health purposes. It has been refurbished and is now a member of the Best Western chain.

7. **Downtown Thermopolis Historic District (H0406)**
8. **Thermopolis Main Post Office (H0202)**
9. **Halone House (H0679)**
    - The home of the Halone family starting in 1906. Alexander Halonen (Halone) was an outstanding stone mason and worked on many of the stone buildings in this area, as well as such structures as the base of the Buffalo Bill statue in Cody. His house is representative of his workmanship and the materials he used. His son, Eugene, followed in his footsteps and was an award winning stone mason of the Billings, Montana area.
10. **Town of Kirby Jail**
    - One room jail at Kirby. This jail has the original cages for prisoners and served the railroad town of Kirby during its heyday as an important shipping point for cattle, horses, and sheep. The first owner of the site, John Nelson, ran cattle on public lands for years within the County.

Paleontological Resources

Paleontology is the branch of geology that deals with prehistoric forms of life through the study of plant and animals fossils.

The Paleontological Resource Preservation Act (PRPA) was enacted in 2009, directing multiple federal agencies to establish comprehensive management plans for paleontological resources. PRPA applies to the USFS, BLM, BOR, NPS, and the USFWS. For information concerning each agency's plan regarding paleontological resources refer to their websites below. (Bureau of Land Management, 2016b; National Park Service, 2020)

1. Forest Service, fossils and paleontology
2. Bureau of Reclamation, fossil resources
3. U.S. Fish and Wildlife Service, historic preservation
4. Bureau of Land Management, Paleontology
5. National Park Service, Fossils and Paleontology

2.2.2 Cultural/Historical/Paleontological Resource Management Objectives:

A. Sites, structures, and landscapes on public and state lands within the County which the County views have played a significant part in creating the cultural, prehistoric, and historical fabric of the community are recognized.
B. Cultural, historical, geological, and paleontological resources within Hot Springs County are preserved and protected for current and future public education and enjoyment.
C. Existing property rights and uses within Hot Springs County are considered when managing cultural, historical, geological, and paleontological resources.
D. Hot Springs County is coordinated with concerning the designation and management of all cultural, historical, geological, and paleontological resources.

E. Split estate mineral development within Hot Springs County is not impeded by cultural surveys.

2.2.3 Cultural/Historical/Paleontological Priority Statements:

1. Federal and state agencies should develop public education and stewardship programs which will:
    a. Increase awareness about cultural, paleontological, and archeological resources ("Cultural Resources") and lead to understanding of the history and meaning of various sites within the county.
    b. Enhance responsible visitation.
    c. Heighten protection strategies carried out within the context of multiple use.

2. It is Hot Springs County's intent to be recognized as a consulting party under Section 106 of the National Historic Preservation Act (as amended).
3. State and federal authorities should coordinate with Hot Springs County in identifying significant cultural resources in the County, make such sites known, and evaluate the significant of proposed land use actions and their impact on cultural resources.
4. Federal and state agencies should make significant local cultural resources available for research and education and protect those cultural resources. However, agencies should not create unrealistic buffer zones around historical and cultural resources. Buffer zones shall be determined on a case-by-case basis and should not exceed one-quarter mile in width.
5. Federal and state agencies should coordinate with the Hot Springs County Sheriff Department and the Hot Springs County attorney to prevent, and if necessary, investigate and prosecute vandalism of historic sites and public lands.
6. Federal and state agencies should recognize that cultural and archeological resources located on private lands in Hot Springs County are the property of the surface owner and uphold that property ownership in any federal planning action or decision.
7. Federal and state agencies should support development including roads, pipelines, and power lines that may cross trails in areas where previous disturbance has occurred and/or where the trail segment has lost the characteristics that contribute to its National Register significance.
8. Hot Springs County opposes management of roads that have historically been used by the public and were established for public access to be managed as historical trails with restricted access or use.
9. Hot Springs County supports visitation opportunities to significant local cultural sites on public lands and strongly urges protection of these cultural resources.

CHAPTER 3: LAND USE

3.1 LAND USE

3.1.1 Overview

When speaking of "public land", the reference is to real property owned or controlled by an agency or bureau of either the state or federal government. Over 68% of the land which makes up Hot Springs County is "public land". These positions are not intended, nor should they be interpreted, as a position(s) toward private property issues, or rights of private property owners dealing with County regulations. The County's custom and culture has been significantly influenced by the relationship of the citizenry to public land, and the economic benefits that derive from public land. Federally managed lands and natural resource availability and use greatly impact Hot Springs County's social and economic stability. Agriculture, mining and mineral production, outdoor recreational tourism, and the significant number of government employees are directly tied to federally managed lands. Indirectly, these sectors provide guidance and economic stimulus for the rest of the County. Federal management decisions can have long-term economic consequences throughout Hot Springs County.

This section of Hot Springs County's Natural Resources Plan is intended to identify and establish local public policy standards for the management of public land. The County finds public land management practices are both relevant and substantive to its custom and culture, its economy, its environment, its quality of life, and its ability to protect and enhance local resources in spite of potentially detrimental outside influences.

The County recognizes the importance of public land to residents' quality of life. To that end, the Natural Resource Management Plan identifies the issues, background, and action steps recommended by Hot Springs County related to land use planning on state and federal lands. The information, goals, and policies were all arrived at through extensive public input. The County will endeavor to continue gathering public input as various issues arise, change and evolve with time. Past experience shows that customs and culture cannot be adequately represented by federal or state officials without local input. The local economy, as it relates to the use of the federally or state-managed land, is best protected by the citizens who live locally within the County and will not be given adequate regard by agencies headquartered far from the affected community. This is the spirit in which the federal laws were enacted calling for federal coordination with local governments, just as the nation itself was formed with a spirit of federalism that ensured that the people were to govern themselves in a citizen-run government.

The economy of Hot Springs County benefits from multiple-use policies that allow for grazing, mining, timber harvest, oil and gas development, water storage, preservation of natural scenic, scientific and historical values, abundant wildlife and fish, and recreation on the federally or state-managed lands. Many industries in the County are impacted by decisions made without adequate local coordination. Changes in land use in the County that may hamper or negatively impact traditional land uses will likely cause undue social distress, dislocation, and hardship to the community.

3.1.2 Bureau of Land Management

The BLM we know today was established in 1946 by combining the General Lands Office (GLO) and the U.S. Grazing Service. The GLO was created in 1812 and was responsible for all public land sales, patents, and entries established within Treasury Department to oversee the disposition of ceded and acquired lands (Bureau of Land Management, 2016a). In 1934, the Taylor Grazing Act authorized grazing districts, regulation of grazing, and public rangeland improvements in Western states and established the Division of Grazing (later renamed U.S. Grazing Service) within the Department of the Interior.

The Federal Land Policy and Management Act (FLPMA) is the BLM's governing document outlining the management responsibilities of the BLM to balance public access and multiple uses with the protection and preservation of the quality of the lands and its resources (43 U.S.C. § 1732) (FLPMA, 1976). FLPMA requires the BLM to administer public lands "on the basis of multiple use and sustained yield" of all resources (FLPMA, 1976).

Hot Springs County is managed by two BLM field offices, the Lander Field Office and the Worland Field Office. The Lander BLM Field Office is located in Lander and encompasses 6.6 million acres in central Wyoming and includes portions of Hot Springs County. The Worland Field Office is located in Worland. The Lander Field Office Resource Management Plan (RMP) was last updated in June of 2014, and the Worland Field Office Resource Management Plan was updated in 2015.

3.1.3 United States Forest Service

In 1876, United States forest management was formalized with the creation of the office of Special Agent within the Department of Agriculture to assess the quality and condition of U.S. forests. In 1881, the Division of Forestry was added to the Department of Agriculture. In 1891, Congress passed the Forest Reserve Act allowing the President to designate western lands as "forest reserves" to be managed by the Department of the Interior (USFS, n.d.-b). Western communities strongly opposed forest designations because development and use of "reserved lands" were prohibited. In 1897, Congress adopted the Organic Administration Act of 1897 (OAA) to protect the use of forest reserves for local citizens. The OAA declared that forest reserves would be created either to protect water resources for local communities and agriculture and/or to provide a continuous supply of timber. Thus, the purposes for which forests were to be used changed from the land being reserved from local communities to the land being used for economic development by local communities.

Responsibility for forest reserves was transferred to the Department of Agriculture with the Transfer Act of 1905 and the establishment of the USFS. The Multiple-Use Sustained-Yield Act of 1960 (MUSY) requires that forests be managed for various non-timber uses (MUSY of 1960, 1960). This idea was further codified in the National Forest Management Act (NFMA) (16 U.S.C. § 1601(d)).

The Shoshone National Forest is located within Hot Springs County. The Greybull Ranger District encompasses portions of Hot Springs County, with the district office located in Cody.

3.1.4 Bureau of Reclamation

The Bureau of Reclamation (BOR) began as the United States Reclamation Service (USRS) in 1902, as part of the United States Geological Survey (USGS). The United States Reclamation Service was established in accordance with the Reclamation Act to manage U.S. water resources. In 1907, the USRS was separated from the USGS and designated as a separate agency within the Department of the Interior, the Bureau of Reclamation (Bureau of Reclamation, 2018). The BOR is responsible for oversight and operation of irrigation, water supply, water storage, and hydroelectric power plant generation. The BOR was created to manage water projects and promote homesteading and economic development in the West. The mission of the BOR is "to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public" (Bureau of Reclamation - About Us, 2019).

The Anchor Dam is located within Hot Springs County and is managed by the BOR.

3.1.5 Bureau of Indian Affairs

The Bureau of Indian Affairs (BIA) was created in 1824 to be both a witness and a principal player in the relationship between the Federal Government and Indigenous tribes and Alaska Native villages. The BIA has changed over the past 180+ years, evolving as federal policies have changed. The BIA's core mission is to serve 574 federally recognized tribes through four offices: the Office of Indian Services, the Office of Justices Services, the Office of Trust Services, and the Office of Field Operations. Further information on the BIA can be found here.

Land under the BIA's jurisdiction south of Hot Springs County lies within the Wind River Indian Reservation.

3.1.6 Conservation Districts

During the 1930s, the Dust Bowl made the need to conserve natural resources, particularly soil, very clear. The Soil Conservation Act of 1935 created the Soil Conservation Service, now termed the Natural Resource Conservation Service (NRCS), to develop and implement soil erosion control programs (WACD, n.d.). In 1941, the Wyoming State Legislature passed an enabling act, which established conservation districts in Wyoming. Conservation districts were to direct programs protecting local renewable natural resources. Wyoming now has 34 conservation districts in 23 counties (WACD, n.d.). The authorities of the Conservation Districts are described in Wyoming Conservation District Laws 11-16-101 through 11-16-134 **NOTE:** all website links found in the document can be found in Appendix A).

The Conservation District for Hot Springs County is the Hot Springs Conservation District.

3.1.7 Wyoming State Lands

Several state agencies manage land within the county including the Wyoming Office of State Lands and Investments (OSLI), Wyoming State Forestry, and Wyoming Game and Fish Department (WGFD).

Wyoming Office of State Lands and Investments

When Wyoming became a state in July 1890, the federal government granted approximately 4.2 million acres of land to the State of Wyoming. The Wyoming Constitution and state laws direct the Board of Land Commissioners to manage state trust lands for two purposes 1) long-term growth in value, and 2) optimum, sustainable revenue production (OSLI, n.d.).

The OSLI is required by law to manage state trust lands to produce income to support public schools and other public institutions. Trust lands are leased for a wide variety of surface and sub-surface purposes and return revenues to the designated state beneficiaries in the form of rentals, royalties, and fees (OSLI, n.d.).

Wyoming State Forestry

The Wyoming State Forestry Division was officially formed in 1952 by the Wyoming State Legislature. Under State Statute the State Forester is mandated to "have direction of all forest interest and all matters pertaining to forestry within the jurisdiction of the State of Wyoming." The Forestry Division fulfills this charge by providing three basic programs: State Trust Land Management, Fire Management, and Assistance Forestry.

The Forestry Division is responsible for the management of approximately 263,000 acres of forested trust lands throughout the State. This management includes timber management and harvest and managing state lands for long-term forest health and productivity. The division is also responsible for fire management on 3.6 million surface acres of state trust lands and cooperative fire management on private and federal lands. Hot Springs County falls under the jurisdiction of the Riverton field office.

The Forestry Division has a Forest Action Plan that identifies important forest landscapes across all ownerships based on an analysis of key data layers. The assessment identifies 15 threats and priorities, including forest health, wildfire management, the need for a viable forest products industry, the decline of riparian forests, the challenge of community forestry in Wyoming, protection of water quality and quantity, and other factors. The Forest Action Plan can be found here (Wyoming State Forestry Division, n.d.).

Wyoming Game and Fish Department

The WGFD is responsible for the State's wildlife and its management. The WGFD also managed wildlife habitat management areas (WHMAs) throughout the state for wildlife habitat and wildlife recreational opportunities including viewing, hunting, and fishing. There are no WHMAs within Hot Springs County. Hot Springs County falls under the jurisdiction of the Cody Regional Office for WGFD which is located in Cody. The WGFD and its role, particularly in Hot Springs County, is further discussed below in the Wildlife Chapter Section 6.1.1 Wyoming Game and Fish Department.

3.1.8 Land Use Resource Management Objectives:

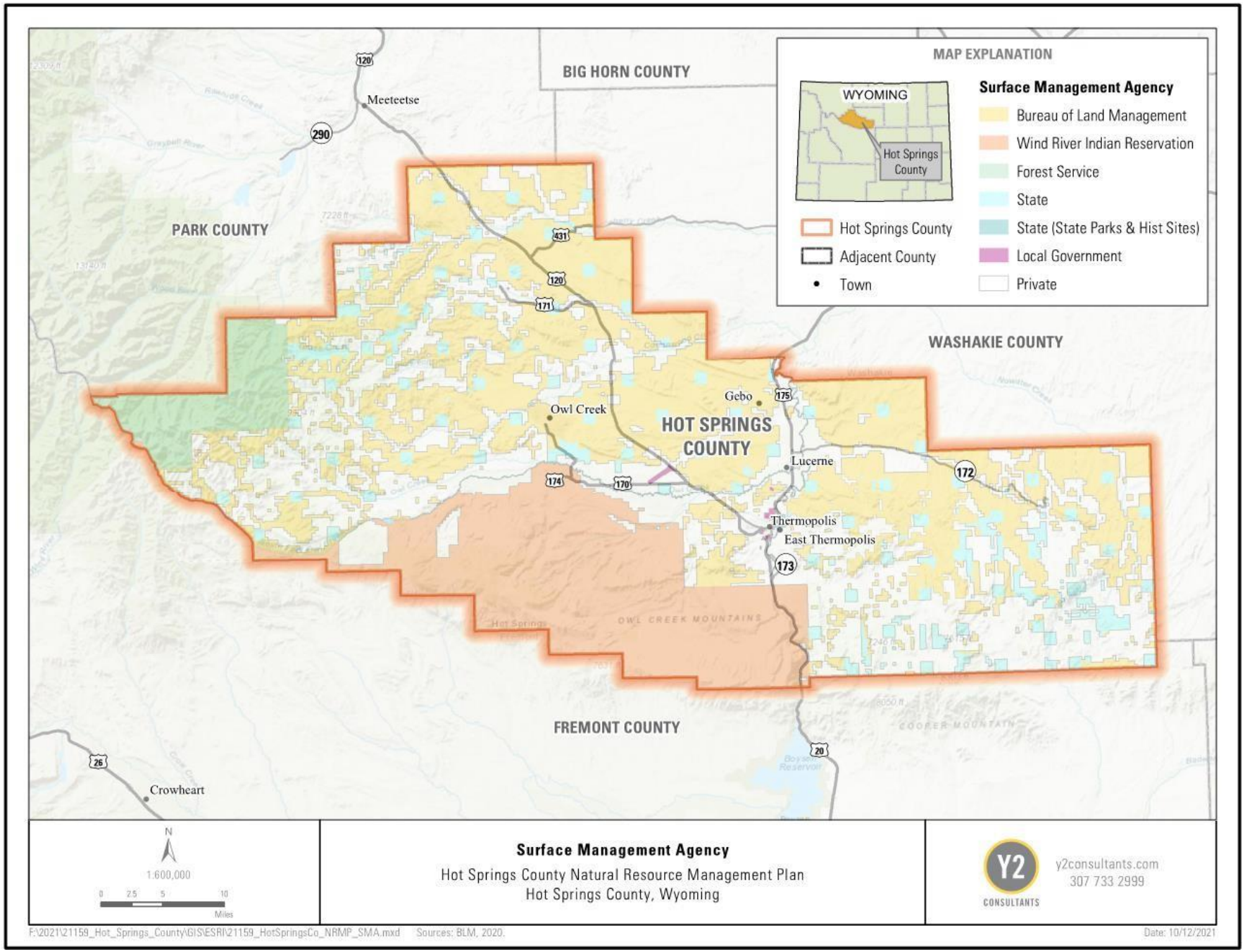
A. Management of all public lands within Hot Spring County is for multiple-use management and should be done in coordination with Hot Springs County.

B. Federal and state agency decisions support the socioeconomic well-being of Hot Springs County citizens and maintain the culture and customs of its constituents.

3.1.9 Land Use Priority Statements:

1. Hot Springs County supports the protection of all public lands while maintaining a balance of conservation, sustained yield, and multiple use.
2. Hot Springs County supports multiple use of public land.
3. Hot Springs County opposes management initiatives that restrict or limit existing and potential uses.
4. Federal and state agencies should coordinate with Hot Springs County to utilize cooperative agreements, federal statutes and laws, the Wyoming Wilderness Act, and/or broad-based legal precedent for appropriate and timely notice of anticipated changes in land use management of public land so it can provide essential information and exert the maximum amount of influence on land use management decisions negatively impacting multiple-use issues.
5. Hot Springs County supports the improvement of the productivity of the public lands in the County to include not only the existing industries of agriculture, mineral production, timbering, tourism, and health care, but also the condition of air, water, wildlife, and plant communities on the public lands.
6. Hot Springs County shall be notified and expects to be included as a cooperating agency, at the county's discretion, on National Environmental Policy Act review of proposed management decisions that may influence the economic stability of the County and the health, safety, and welfare of its residents.
7. Federal and state agency decisions should analyze and make management decisions that would avoid negative impacts to the current use of neighboring private lands within Hot Springs County.
8. Federal and state agencies should give regular (where regular is defined as biannually or as necessary) updates on current and proposed projects within Hot Springs County's jurisdiction and provide reasonable timelines and explanations for issuance of delays from permitting agencies.
9. Federal and state agencies should coordinate with Hot Springs County to protect and enhance historic and current natural resource-related industries to ensure that they remain economically viable within the County.
10. Hot Springs County supports 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.
11. Hot Springs County opposes material changes in land uses, which hamper or otherwise negatively impact traditional land uses.
12. Federal and state agencies should join Hot Springs County in forging cooperative agreements and update existing cooperative agreements with various agencies, bureaus, and administrations to assure the greatest possible communication and exchange between and among stakeholders to public land.

13. Hot Springs County expects that cooperative agreements with federal and state agencies will be relied on and acted on regularly with consistency.
14. State and federal authorities shall consider the environmental, social, cultural, and economic needs of the local human environment in any regulatory action impacting local custom and culture.
15. Hot Springs County expects that regulatory actions should investigate and publish findings on the impacts to the local economy, local custom and culture, the human environment those actions may cause. Agencies should conduct a consistency review for all actions and provide how such action is consistent with new, revised or supplements to the County's land-use plans.
16. Federal and state agencies should support decisions that ensure the socioeconomic wellbeing of Hot Springs County citizens, maintain the culture and customs of the constituents, and consider natural resource health.
17. Federal and state agencies should coordinate with and accommodate the reclamation needs of neighboring landowners whenever a project will affect adjacent lands.
18. Federal and state agencies should protect and enhance access for the enjoyment of federal and state-managed lands in Hot Springs County.
19. Hot Springs County does not support the creation of additional federal and/or state lands within the County.



Map 2. Hot Springs County surface management (data from 2020 BLM database).

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3.2 TRANSPORTATION AND LAND ACCESS

3.2.1 History, Custom, and Culture

Hot Springs County is sparsely populated, with limited access to services and goods, which are normally available in populated areas. Distances between services, neighbors, friends, and work can be considerable. These and similar factors make the need for state-of-the-art communications and transportation services an absolute necessity, as well as to compete in various markets. Today transportation and communications sustain commerce, provide the means to participate in state and national affairs, and forms the essential basis of our tourism industry.

Many of today's roads follow the routes of early trails made by game, indigenous peoples, mountain men, and exploratory expeditions. Mountain man Jim Bridger opened the Big Horn Basin for wagon travel when he guided gold seekers from the Oregon Trail to Montana via Copper Mountain, Bridger, and Kirby Creeks in 1864. Livestock was brought into the County beginning in the 1870s, and stock drive trails were developed. The Big Horn River was also used by the earliest travelers; today travel on it is recreational. Various freight trails traversed the County up to the time of the extension of the railroad into Thermopolis from the north and south.

Wheeled vehicles soon became common and included freight and stage wagons as well as military vehicles. Mail was carried first on horseback, then by vehicles. The first car hit Thermopolis' streets in 1906, and by 1924 a major breakthrough in travel to the county was affected when the Yellowstone Highway was opened through Wind River Canyon. There have been taxi services in the past and a bus line still runs through. Special transportation services include medical and senior citizen rides both locally and out of County.

The first railroad engine reached Thermopolis from the north in 1910. Regular passenger, freight, and mail service on the railroad between Billings and Casper became a reality in 1913 although it took three years to lay track south through the formidable Wind River Canyon. This connected Montana with Colorado and the southwest for the first time. Today Burlington Northern Santa Fe Railroad runs through the County but there is no passenger service. As noted elsewhere, Burlington Northern Santa Fe is the fifth largest taxpayer in the County.

Mail service was the first communications system in the County and was carried from Fort Washakie to Meeteetse. To serve the old and then the new town of Thermopolis from Casper, it came over Copper Mountain to the Holt post office and on down Kirby Creek.

The first telephone line came into the County from Casper in 1903, and telegraph service was established by 1906. Radio and TV pioneers, Joe and Mildred Ernst were installed in the Wyoming Association of Broadcasters Hall of Fame in June of 2004. They were instrumental in bringing radio to Worland, Riverton, and Torrington, and establishing radio and TV stations in Thermopolis in the mid-1950s. Today, the County is serviced by two radio stations, KTHE AM and KDNO FM.

The first official airport and air service in Hot Springs County were in place by the late '20s. Today's airport is a general aviation airport and serves demands by air cargo, air charter, Life

Flight, and business and corporate users. It is located approximately one-quarter mile northwest of the Town of Thermopolis. In 2012, the County began the construction of a new County Airport, located on Highway 120 West approximately 12 miles northwest of Thermopolis.

3.2.2 Resource Assessment and Legal Framework

Hot Springs County is bisected by U.S. Highway 20, running from Wind River Canyon to the Washakie County line. Wyoming State Highways include 171 along Grass Creek, 172 up Kirby Creek, 120 north to Meeteetse and Cody, 431 following Gooseberry Creek, 170 to Hamilton Dome, and the Buffalo Creek Secondary. There are 36 paved or graveled County roads. All public roads within the County are in excellent shape. The need for freight teams and wagons to turn around in downtown Thermopolis gave the town its wide streets. Interstate delivery truck services include UPS, NPT, Federal Express, and several local companies. Hot Springs County updated its addressing system and has adopted a comprehensive sign management program.

The County is served by several telephone companies and a fiber optics line runs through the eastern part of the County. Television and internet services are provided by three local carriers in addition to larger syndicated networks. Satellite and radar towers are located on high points in Hot Springs County. The number of cellular communication towers continues to increase, improving the range of the county's cell phone service.

The Wyoming Business Council determined that those areas not located within easy access of the State's interstate highway system were at a considerable disadvantage in developing commerce. Hot Springs County is not located near an interstate highway system, and other modes of transportation available to the County must be enhanced to compensate for this shortcoming.

Access to and across public lands is critical to the use, management, and development of those lands and adjoining state and private lands. Hot Springs County itself relies on access to federal lands to fulfill its statutory mandate to protect the health, safety, and general welfare of the people within its jurisdiction; including but not limited to fire protection, search and rescue, flood control, law enforcement, economic development, and the maintenance of County improvements.

The BLM and USFS both have specific provisions they must follow when considering the closure of roads and trails. These provisions require that such activity be conducted in coordination with the County prior to such action being taken.

The Taylor Grazing Act provides for the establishment, maintenance, and use of stock driveways within established grazing districts (43 U.S.C. § 316). The National Trails Systems Act defines the standards and methods by which additional trails may be added to the system including scenic, historic, and recreational trails. NEPA requires federal projects and land use decisions, including opening and closing of roads, to go through an environmental review process. The Wilderness Act of 1964 prohibits motor vehicles in wilderness areas except in emergency situations or when there is a possible management need.

United States Forest Service

The Multiple Use Sustained Yield Act (MUSYA) authorizes and directs the Secretary of Agriculture to manage the surface of USFS lands for multiple-use and sustained-yield (16 U.S.C. § 529) (Multiple-Use Sustained-Yield Act of 1960, 1960). Those surface uses include, but not are limited to agriculture (farming, irrigation, livestock grazing); recreation (motorized and non-motorized transport and activities, such as hunting, fishing, water and land sports, hiking, etc.); industry (timbering); intangible values (historical and cultural sites, access to open space, aesthetic values, conservation); and weed, pest, and predator control (16 U.S.C. § 528).

The Federal Roads and Trails Act of 1964 (FRTA) recognizes the importance of an adequate road and trail system in the national forests to achieve the purposes of the MUSYA (16 U.S.C. § 532). The FRTA, therefore, authorizes the Secretary of Agriculture to provide for the acquisition, construction, and maintenance of forest development roads within and near the national forests and other lands administered by the Forest Service in locations and according to specifications which will permit maximum economy in harvesting timber from Forest Service lands. However, the USFS must still meet the requirements for protection, development, management, and utilization of the resources in its jurisdiction (16 U.S.C. 535).

The USFS is directed to coordinate the preparation of Travel Management Plans with the County (36 C.F.R. § 212).

> *"The responsible official shall coordinate with appropriate Federal, State, county, and other local governmental entities and tribal governments when designating National Forest System roads, National Forest System trails, and areas on National Forest System lands pursuant to this subpart"* (36 C.F.R. § 212.53).
>
> *"Designations of National Forest System roads, National Forest System trails, and areas on National Forest System lands pursuant to § 212.51 may be revised as needed to meet changing conditions. Revisions of designations shall be made in accordance with the requirements for public involvement in § 212.52, the requirements for coordination with governmental entities in § 212.53, and the criteria in § 212.55"* (36 C.F.R. § 212.54).

Bureau of Land Management

BLM land is enjoyed by the public for numerous activities. The BLM must follow various federal laws regarding the management of transportation and travel on public lands. FLPMA is the BLM's governing document outlining the management responsibilities of the BLM to balance public access and multiple uses with the protection and preservation of the quality of the lands and its resources (FLPMA, 1976). The National Trails Systems Act defines the standards and methods by which additional trails may be added to the system including scenic, historic, and recreational trails. The BLM is required to coordinate "inventory" with the County (43 U.S.C. § 1712) (FLPMA, 1976).

Revised Statue 2477 (R.S. 2477)

Revised statute 2477 (R.S. 2477) provided that "the right of way for the construction of highways over public lands, not reserved for public uses, is hereby granted." The Act of July 26, 1866, § 8, ch. 262, 14 STAT. 251, 253 (1866) (formerly codified at 43 U.S.C. § 932). Congress enacted a grant of rights-of-way over unreserved public lands for the construction of highways. The grant was originally section 8 of the Mining Act of 1866, which became section 2477 of the Revised Statutes.

The grant was self-executing and an R.S. 2477 right-of-way comes into existence "automatically" when the requisite elements are met (*Shultz v. Dep't of Army*, 10 F.3d 649, 655 (9th Cir. 1993)). R.S. 2477 was repealed with the passage of FLPMA in 1976 (43 U.S.C. § 1701 et seq.) (43 U.S.C. § 932, repealed by Pub. L. No. 94-579, § 706(a), 90 STAT. 2743, 2793 (1976)). Even though FLPMA repealed R.S. 2477, FLPMA explicitly preserved any rights-of-way that existed before October 21, 1976 (43 U.S.C. § 1769(a) (stating that nothing "in this subchapter shall have the effect of terminating any right-of-way or right-of-use heretofore issued, granted, or permitted")); (*see also*, 43 U.S.C. § 1701, Savings Provision (a) and (h)). For a road to qualify as an R.S. 2477 right-of-way in Wyoming, the road must have been established by a board of county commissioners under the procedures established in Wyoming's county road statutes (Yeager v. Forbes, 78 P.3d 241, 254 (Wyo. 2003)). Additional information on R.S. 2477 can be found in Appendix B.

3.2.3 Transportation and Land Access Resource Management Objectives:

A. Open road access is maintained on federal and state lands throughout Hot Springs County and Hot Springs County is coordinated with on all road and access decisions.
B. Road management plans on federal and state lands emphasize protecting and enhancing private property rights.

3.2.4 Transportation and Land Access Priority Statements:

1. Hot Springs County supports retention of existing access to public land, and will oppose management initiatives, which restrict or limit access or might impact the livelihoods and/or quality of life of Hot Springs County residents.
2. Hot Springs County expects that roads and trails on public lands which have been removed from inventory and/or maps without proper decommissioning procedure to be fully restored until due process has been completed.
3. Hot Springs County defines a "public road or highway" as any formally established public travel way, including those on public lands, as well as any road or public highway so designated on a government map or plat on record at any land office of the United States within the state (ref. W.S. 24-1-101).
4. Hot Springs County relies on its cooperative agreements, R.S. 2477, ANILCA, and broad-based legal precedent, which all assure continued access of public land, and place the burden on state and federal officials, working through the decision-making process to prove by sound scientific means why access must be curtailed.
5. State and federal agencies shall provide appropriate and timely notice of anticipated changes to access or management of public land that impacts access.
6. State and federal officials should respect access to public land as contributing to the sustainability of local custom and culture. Toward this end, the County supports an

effort to: a.) *identify and perfect* stock trails, roads, and rights-of-way protected by law; b.) *educate* public land users regarding access issues; and c.) *promote* more efficient and effective regulatory measures that allow continued access through repairs and maintenance on existing roads.

7. State and federal officials work with Hot Springs County to finalize perfection of the County's rights under R.S. 2477, including assistance in obtaining the funding for the County to complete a road inventory.
8. Hot Springs County considers all formally-established public roads as valid unless formally abandoned, even if not presently maintained by the County.
9. Public trails shall be considered "public roads and highways" for the purposes of this plan.
10. Transportation and communications corridors are necessary to the economy of the County but should be balanced with aesthetics which have an impact on the tourist industry and the quality of life of Hot Springs County citizens.
11. Hot Springs County encourages the use of existing utility or transportation corridors whenever possible. Where possible, new installations should follow the routes of existing facilities and roads.
12. Hot Springs County supports the implementation of an assessment to determine the best location for off-road vehicle use on the public lands within the County and would consider cooperating in the analysis.
13. Hot Springs County considers any long-term (greater than one year) road closure a major federal action that significantly affects the quality of the human environment. Thus, a road on federal lands may not be closed until a full NEPA analysis has been completed including public review and coordination with Hot Springs County. Should the agency believe that a road closure falls under a categorical exemption, the County shall be consulted.
14. No road, trail, or R.S. 2477 right of way within Hot Springs County shall be closed unless public safety or health demands its closing and the proper analysis and disclosure, in consultation with the County and private property owners, is completed prior to closure.
15. Hot Springs County should be notified of any temporary road closures.
16. All forest roads in Hot Springs County within the designated 2001 Roadless Area Conservation Rule, are kept so there is no net loss of roads within these designated areas.
17. State and federal agencies should not use any eminent domain authority to create rights-of-way or roads through private lands to access federal or state public lands.

3.3 SPECIAL DESIGNATION AND MANAGEMENT AREAS

3.3.1 History, Custom, and Culture

Hot Springs County citizens have historically used wilderness areas and other special management areas for grazing, recreation, commercial guiding, and solitude. It is customary for people to use and enjoy the special areas in Hot Springs County.

Hot Springs County's economy relies heavily on the use of federally managed lands including wilderness areas and other special management areas. Wilderness recreation generates brisk

economic activity not only for guides, outfitters, and wilderness schools, but also the local goods stores, motels, dude ranches, and other retail businesses which increases the economic well-being of Hot Springs County.

3.3.2 Resource Assessment and Legal Framework

There are several special designation and management areas within Hot Springs County both designated by the USFS and the BLM. *Map 3 depicts the special management and designation areas within the County.*

Resource Areas

Washakie Resource Area (east of the Big Horn River in the County)

The Final Washakie Wilderness Environmental Impact Statement (EIS) of November 1990 established the Proposed Cedar Mountain Wilderness Area, partially in Hot Springs County and partially in Washakie County. The area encompasses 10,223 acres. The Cedar Mountain Wilderness Study Area can only become a fully adopted wilderness area by an act of Congress; therefore, it is being managed as *de facto* wilderness until such time as a final determination is made. The Washakie Resource Management Plan was adopted in 1986 and no further assessment has been performed on the Cedar Mountain Proposed Wilderness Area since. The County supports the recommendations of the 1990 Washakie Wilderness EIS that pre- FLPMA oil/gas leases are still open to exploration drilling, that existing grazing allotments are to be maintained, that 19 miles of existing roads and trails are open to use and that maintenance of 17 miles of fence, two water wells, and five reservoirs would continue to be allowed.

More recently, the BLM purchased a small tract of land on the Big Horn River, partially in Hot Springs County and partially in Washakie County. The tract covers 187 acres and is known as the Elizabeth B. Eggert Nature Tract. The Eggert property was acquired after an Environmental Assessment in 2000/2001 and will be managed as a public access area to the Big Horn River. The County did not object to the purchase of this small tract of land; however, purchase and retirement of large segments of private land from economically productive use by State and Federal entities will be carefully evaluated by the County in order to assess the impact on the County's economy, custom, and culture.

Grass Creek Resource Area (west of the Big Horn River)

The Final Grass Creek/Cody Wilderness Environmental Impact statement of August 1990 established a Wilderness Study Area (WSA) in the western-most portion of the County, adjacent to the Shoshone National Forest, and encompasses 710 acres. The BLM revisited the matter in their June 1996 Final Environmental Impact Statement for the Grass Creek Resource Management Plan (RMP), at which time, they dropped the WSA designation, but replaced and expanded the area with a designated 16,300 acre Area of Critical Environmental Concern (ACEC) in place of the defunct WSA. With respect to the existing ACEC designated areas in the extreme western portion of the County, there is a mixed pattern of land ownership resulting in the right of private property owners to restrict access to the area. This area is not open to the public due to the lack of public road easements (see mapped areas in the Grass Creek Planning Are RMP here).

The Final Grass Creek RMP of June 1996 delineates a Wild Horse Management Area along the Big Horn/Washakie County line but excluding any areas in Hot Springs County.

The Grass Creek RMP delineates an area called the Meeteetse Draw Rock Art Area northwest of the Town of Thermopolis Oil/gas exploration and production in this area is withdrawn from mineral location by the Grass Creek RMP (see mapped areas in the Grass Creek Planning Are RMP here).

The Gebo-Crosby historical mining area has been irrevocably altered by human activity including mining, slack piles, mining reclamation, road building, railroad grades, etc.; and with the exception of a few small sites such as the cemetery and town site, has lost much of its historical value. (see mapped areas in the Grass Creek Planning Are RMP here).

Anchor Dam

Anchor Dam is an attraction located in the southwest corner of the Bighorn Basin on Owl Creek, a tributary of the Bighorn River. The Anchor Dam was built in the 1950s to provide irrigation water to the surrounding agricultural operations. Upon construction of the dam it was discovered that the geology of the valley and surrounding formations were not conducive to holding water. The geologic formations experienced enough subsurface water flow to erode large cavities that later refilled with debris. During the construction of Anchor dam several of these sinkholes discovered and filled with cement. After a decade of construction, the reservoir began draining within days of holding water. Study by the Bureau of Reclamation showed that water lost through the many undiscovered sinkholes and permeable bedrock was not returning to Owl Creek. After nearly two decades 54 sinkholes were discovered and filled. The estimated cost of remediation for the reservoir exceeded $7 million. The center spillway on Anchor Dam was never utilized, and the reservoir now stores a small amount of water that is only used occasionally for late season irrigation. The area surrounding the reservoir does provide recreational opportunities in the form of camping, hiking, and hunting. (Hein, 2014)

Legend Rock State Petroglyph Site

The Legend Rock State Petroglyph Site encompasses a one-third mile trail along the Cretaceous Frontier Sandstone formation. Along the trail there are 15 marked stops. The area contains 92 panels with over 300 individual petroglyphs in total across the site. The trail and cliff site is located along Cottonwood Creek near the Hamilton Dome Oil Field. Legend Rock is open for viewing May through September. (WyoGeo, n.d.)

Wyoming Public Lands Initiative

Hot Springs County participated in the Wyoming Public Lands Initiative (WPLI). The WPLI was a voluntary, collaborative, county-led process that intended to result in one, multi-county legislative lands package broadly supported by public lands stakeholders in Wyoming. The ultimate goal of WPLI is a new federal law that governs the designation and management of Wyoming's WSAs and, where possible, addresses and pursues other public land management issues and opportunities affecting Wyoming's landscapes (WPLI, n.d.). Hot Springs County provided recommendations for public lands designation and management. It is important to note that a management or status change of these WSAs cannot change until Congress acts. The bill

has been drafted but these areas will remain as their designated status until Congress takes action. The recommendations proposed by Hot Springs County can be found here.

Visual Resources

The BLM defines Visual Resource Management (VRM) as the inventory and planning actions taken to identify visual resource values and to establish objectives for managing those values, and the management action taken to achieve visual resource management objectives. There are four different VRM Class Objectives that areas can fall into:

- **VRM Class I Objective:** This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.
- **VRM Class II Objective:** The level of change to the characteristic landscape should be low. Management activities may be seen but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.
- **VRM Class III Objective:** The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.
- **VRM Class IV Objective:** The level of change to the characteristics landscape can be high. Management activities may dominate the view and may be the major focus of viewer attention. However, the impacts of these activities should be minimized through careful siting, minimal disturbance, and repeating the basic elements of form, line, color, and texture within the existing setting.

VRMs mapped within the Worland Field Office can be viewed here.

Inventoried Roadless Areas

Inventoried Roadless Areas (IRA) are portions of National Forest that were identified in the USFS 2001 Roadless Area Conservation Final EIS as lands without roads that are worthy of protection. Construction and reconstruction of roads are prohibited in roadless areas unless the USFS determines the road is necessary to protect public health and safety or otherwise meets one of the exceptions listed in the rule. These lands are to be periodically evaluated for potential designation as wilderness based on the availability, capability, and need for these areas to be designated as such. Characteristics of roadless areas include things such as natural landscapes, high scenic quality, and traditional cultural properties. To help preserve the characteristics of IRAs, logging is greatly restricted.

There are 684,800 acres identified as IRA on the Shoshone National Forest. A map of IRAs can be found here.

National Historic Trails and Other Trails

The National Historic Trails Act of 1968 as amended allows for establishing trails in both urban and rural settings for people of all ages. There are two types of designations, National Historic Trails and National Scenic Trails. National scenic trails are to be continuous, extended routes of outdoor recreation within protected corridors. National Historic trails recognize original trails or routes of travel of national historic significance including past routes of exploration, migration, and military action (NPS, 2019).

The Bridger Trail runs through Hot Springs County. This trail, also known as the Bridger Road and Bridger Immigrant Road, was an overland route connecting the Oregon Trail to the gold fields of Montana. Jim Bridger was the first to blaze the trail and did so to create a shorter route than following the Oregon Trail and Lander Cutoff before turning north toward Montana. (Lowe, 2014)

Wild and Scenic Rivers

The National Wild and Scenic Rivers System was created in 1968 to preserve naturally, culturally, and recreationally valued rivers. Rivers are designated for the National Wild and Scenic River System by Congress or, in certain situations, the Secretary of Interior. There are currently 408 miles of rivers and streams designated as wild and scenic in Wyoming (National Wild and Scenic Rivers System, n.d.-b).

There are currently no rivers in Hot Springs County designated as wild, scenic, or recreational within the National Wild and Scenic Rivers System (National Wild and Scenic Rivers System, n.d.-a).

Scenic Byway

Scenic byways are designated byways by the USFS that provide opportunities to explore the beauty, history, and natural heritage of the National Forests. The byway system was created in 1987 and originally a total of 10 byways were designated nationally. Since then, the byway system has grown to include 138 National Forest Byways, each administratively designated by the USFS Chief. There is one byway found in Hot Springs County, the Wind River Canyon Scenic Byway.

Wind River Canyon Scenic Byway

The Wind River Canyon Scenic Byway is a 34-mile byway that's southern entrance is in the town of Shoshoni and travels north to Thermopolis. The byway offers fascinating Wyoming geology, history, and recreation and is the same path traveled by many pioneers, explorers, and Native Americans (America's Scenic Byways, n.d.).

America the Beautiful - 30 x 30 Program

On January 7, 2021, President Joe Biden signed Executive Order 14008 entitled Tackling the Climate Crisis at Home and Abroad. Section 216 of the E.O. required the Secretary of Interior in consultation with the Secretary of Agriculture, the Secretary of Commerce, the Chair of the Council on Environmental Quality, and the heads of other relevant agencies, to submit a report within 90 days of the date of the E.O. recommending steps that the United States should take, working with State, local, Tribal, and territorial governments, agricultural and forest landowners, fishermen, and other key stakeholders, to achieve the goal of conserving at least 30 percent of

our lands and waters by 2030. The Biden Administration believes that only 12% of US land is considered to be conserved, thus additional uses would have to be eliminated, or private and state lands would have to be acquired to achieve 30x30 (U.S. Department of the Interior, 2021). It is estimated that an additional 440 million acres would have to be acquired by 2030. On May 6, 2021, the preliminary report ordered by E.O. 14008 was released (U.S. Department of the Interior et al., n.d.). The report identified eight primary principles the agencies were going to follow in pursuing President Biden's 30x30 goal. (Conserving and Restoring America the Beautiful p. 13-16.) Those principles include:

1. Pursue a collaborative and inclusive approval to conservation.
2. Conserve America's lands and waters for the benefit of all people.
3. Support locally led and locally designed conservation efforts.
4. Honor tribal sovereignty and support the priorities of tribal nations.
5. Pursue conservation and restoration approaches that create jobs and support healthy communities.
6. Honor private property rights and support the voluntary stewardship efforts of private landowners and fishers.
7. Use science as a guide.
8. Build on existing tools and strategies with an emphasis on flexibility and adaptive approaches.

Additionally, the report recommended the creation of an American Conservation and Stewardship Atlas. The Atlas would be an accessible, updated, and comprehensive tool through which to measure the progress of conservation, stewardship, and restoration efforts across the United States in a manner that reflects the goals and principles of 30x30. (Conserving and Restoring America the Beautiful p. 17.) The American Conservation and Stewardship Atlas would aggregate information from these databases and others, supplement this information with information from the States, Tribes, public, stakeholders, and scientists, and provide a baseline assessment of how much land, ocean, and other waters in the U.S. are currently conserved or restored, including, but not necessarily limited to:

1) The contributions of farmers, ranchers, forest owners, and private landowners through effective and voluntary conservation measures;
2) The contributions of Fishery Management Councils and their conservation measures under the Magnuson-Stevens Fishery Conservation and Management Act; and
3) The existing protections and designations on lands and waters across Federal, State, local, Tribal, and private lands and waters across the nation.

Finally, the report created six goals that the agencies should provide their early focus on to achieve 30x30. (Conserving and Restoring America the Beautiful p. 18-21.) Those goals include:

1) Create more parks and safe outdoor opportunities in nature-deprived communities.
2) Support tribally led conservation and restoration priorities.
3) Expand collaborative conservation of fish and wildlife habitats and corridors.
4) Increase access for outdoor recreation.

5) Incentivize and reward voluntary conservation efforts of fishers, ranchers, farmers, and forest owners.
6) Create jobs by investing in restoration and resilience.

To date there has been no substantive guidance as to what lands or uses will qualify under 30x30.

3.3.3 Special Designation Resource Management Objectives:

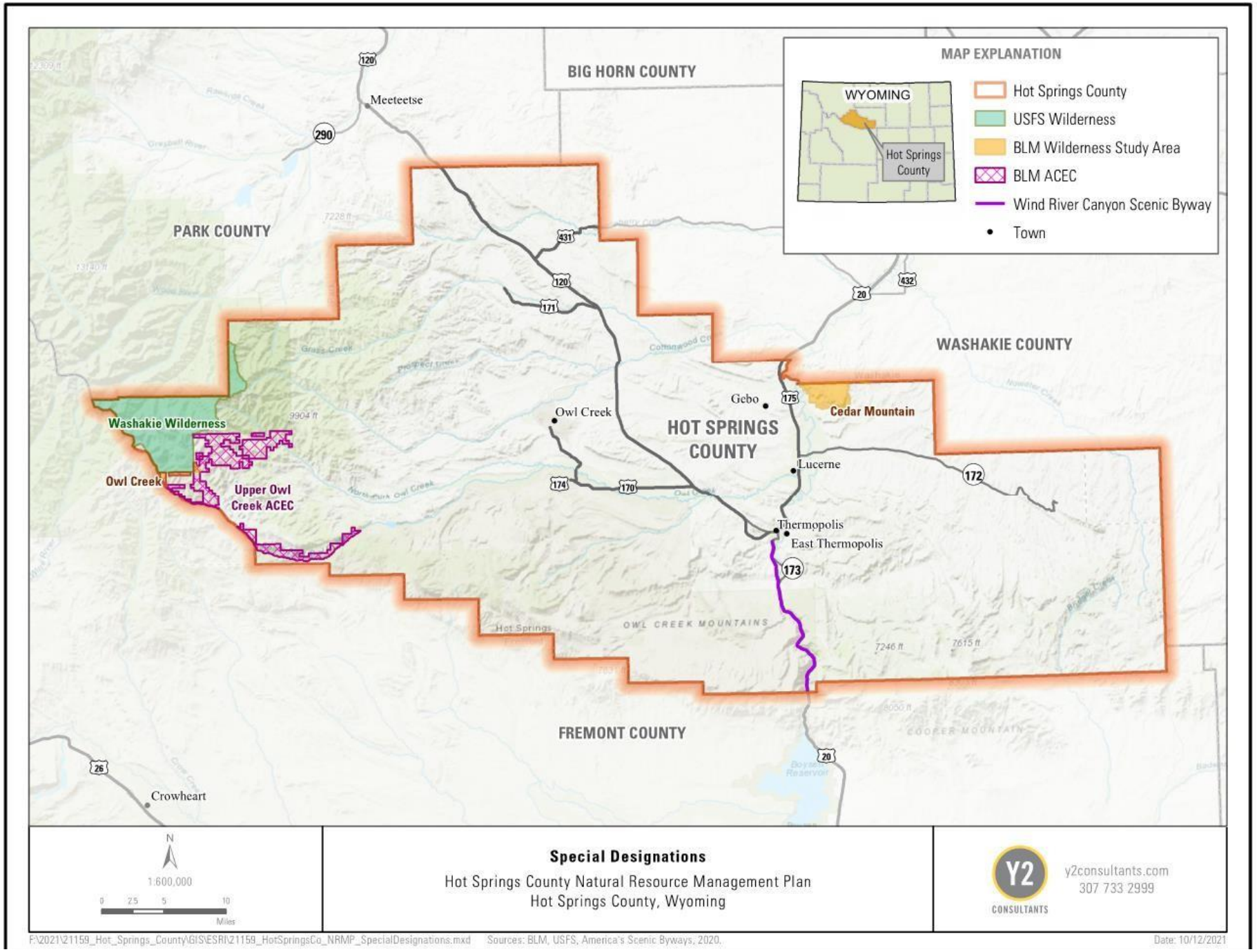
A. Hot Springs County supports a goal of allowing open access to the public land as much as possible, so long as it does not infringe upon private property rights, in order to promote the beneficial use of the public lands, provide emergency services to the rural parts of the County, control invasive species and predators, enforce laws, suppress fire, and control weeds and pests.
B. Hot Springs County is involved in the decision-making processes of the various state and federal agencies in order to incorporate the County's custom, culture, and general welfare into decision-making regarding special land designations.
C. Hot Springs County's goal with respect to roads and access shall be to maintain or increase the miles of open highways, roads, trails, R.S. 2477 roads, stock trails, logging roads, bicycling, hiking trails, and horseback trails on the public lands within the County.
D. In an effort to protect the economy, and because an excessive level of special land designations, restrictions, and stipulations have already been imposed on the state and federal lands within the County; the County establishes a goal of limiting the number of special land designations, restrictions, and unreasonable stipulations placed on the various industries in the County.
E. Designation and management of special designation or management lands are coordinated with Hot Springs County and adjacent landowners.
F. No new special designation or management areas are created in Hot Springs County without specific approval from the County.

3.3.4 Special Designation Priority Statements:

1. Hot Springs County supports the intent of the Wyoming Wilderness Act, which discourages efforts to promote additional wilderness areas and wilderness-like areas in any form.
2. Hot Springs County opposes attempts to create new *de facto* wilderness areas by using "roadless areas" or other restrictive management designations in and of themselves.
3. Hot Springs County asserts that all reviews of public land policies must include a review of existing restrictions, stipulations, and land designations, and the elimination of those which may be deemed excessive.
4. Hot Springs County opposes continuing to treat "wilderness study areas" as *de facto* wilderness.
5. Hot Springs County acknowledges the Washakie Wilderness Area is an important component of the National Wilderness System and supports important populations of wildlife species.
6. Hot Springs County opposes the expansion of the Washakie Wilderness Area to include designation of roadless areas and/or Wilderness Study Areas adjacent to the Washakie

Wilderness Area. For purposes of the revision of the Shoshone Forest Plan, the County desires to have land designations in the Shoshone National Forest of western Hot Springs County remain fundamentally as is.

7. Hot Springs County acknowledges and opposes the existing Areas of Environmental Concern (ACEC) designations and opposes new designations of ACEC and/or Wilderness Study Areas area on the federals lands within the County.
8. Hot Springs County opposes the creation of the Cedar Mountain Wilderness Area and/or any other new wilderness area in the County.
9. Hot Springs County supports the improvement of water resources within the Cedar Mountain Wilderness Study Area and supports the maintenance of the 19 miles of existing roads and trails for grazing purposes, oil/gas access to the pre-Federal Land Policy and Management Act leases, emergency services access, and access to control invasive species.
10. Hot Springs County supports managing the delineated area of the Meeteetse Draw Rock Art area as an area of limited access with grazing allotments fully intact and unrestricted.
11. Hot Springs County recommends protecting the petroglyphs in the Meeteetse Draw Rock Art area by discouraging public use and continuing traditional uses such as grazing while restricting off-road vehicle use.
12. Hot Springs County supports an assessment to determine the best future use of the Meeteetse Draw Rock Art area.
13. Hot Springs County asserts that grazing is the appropriate use of the land within the Meeteetse Draw Rock Art area for the time being and that volunteer patrolling and observation by the grazing lease holder(s) is beneficial to the protection of the site.
14. Hot Springs County supports the utilization of an assessment in order to determine the best future use(s) of the Gebo-Crosby area which has had changed uses and does not currently have a detailed management plan. The County expects to be coordinated with in the assessment.
15. Any proposed special management area designation shall undergo analysis of the impact on Hot Springs County's custom, culture, and economy.
16. Any special designation proposed within Hot Springs County should be coordinated with the County and have full support of the County before implementation.
17. No new historic trail designations will be created or pursued in Hot Springs County without the County's consent.
18. Federal agencies should consult with Hot Springs County when evaluating whether lands and the multiple uses on them qualify as "conserved lands" under 30x30.
19. Federal agencies shall not use coercive actions or the threat of condemnation to acquire land to achieve their 30x30 goals outlined in Executive Order 14008.
20. Unless lands or waters are given special management or designation in a respective agency's planning document, all public lands in Hot Springs County should be managed for multiple use as outlined in the Multiple Use Sustained Yield Act and Federal Land Policy Management Act.



Map 3. Special designations and management areas within Hot Springs County.

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3.4 FOREST AND RANGELAND RESOURCES

3.4.1 History, Custom, and Culture

Forest Resources

The beneficial use of forest natural resources has always been a part of Hot Springs County's economy, customs, and culture. Early citizens relied on forest resources for timber for buildings, corrals, fences, and fuel. Logging occurred through the years on both federal and private lands. Hot Springs County recognizes that historic logging took place within the County as part of a historic stable timber-harvesting program.

Timber harvesting in Hot Springs County is not a large industry and is restricted by access and total forested acres. The Grass Creek Road provides access to the national forest and has opened up the opportunity to harvest marketable timber and timber threatened by disease. Therefore, the County's threshold level for timber harvest shall not be set as a board foot goal. Rather, a broad-based goal is to harvest the timber necessary to maintain forest health, reduce fire hazards in the forest, provide firewood, house logs, corral poles, wildlife habitat, and recreational use. The County is especially concerned about sustaining forest densities that reduce fire, insect, and disease occurrences, and use timber harvesting as a mechanism to achieve those goals.

The Shoshone National Forest has, within recent years, been decimated by pine bark beetle infestations. Recent drought years and warm winters have accelerated this outbreak, by weakening the trees' ability to withstand the pest and reducing winter kill of the larvae. Large stands of dead trees have become part of the forest landscape, and the USFS has resorted to timber sales in heavily infected areas as a management tool. These timber sales have had mixed results due to the lack of a local lumber industry and legal challenges from the environmental community.

In recent decades throughout the West, a legal battle has raged over the USFS's policy of creating roadless areas outside of established wilderness areas.

New technology is being investigated which would generate energy – electricity, fuel, etc. – from forest "biomass," which is typically wood chips or pellets made from whole timber or waste from logging operations. Future forest regulations should anticipate the possibility of a new industry using forest materials in such a manner.

Rangeland Management

The rangeland resources in Hot Springs County have been heavily relied upon for livestock grazing, energy development, recreation, and other uses. In the early 1880s, ranchers began bringing cattle from as far away as Texas to graze on the area's grasslands. Livestock grazing to this day remains an important industry in the County. Any disruption in the use of the lands from what it was originally intended would harm the custom and culture of the County. The rangelands within Hot Springs County have also been important resources for the development of the energy industry within the County which has provided economic impacts for many years. These areas also maintain large acreages of important wildlife habitat and open space.

3.4.2 Resource Assessment and Legal Framework

Forest Resources

The Federal Government manages approximately 43% of the land in Hot Springs County, including about 503,000 acres by the BLM and 54,500 acres by the USFS's Shoshone National Forest. There are 127,009 acres are designated as suitable for timber harvesting across the entire Shoshone National Forest (USFS, 2015).

Timber management provides a source of materials for the forest products industries, posts and poles for fence construction, and an abundant source of firewood for local residents. Beyond these direct benefits, forest cover can be manipulated on lands suitable for timber production as part of a healthy ecosystem to produce multiple-use benefits. Timber management is important because it contributes to the production of multiple-use benefits.

Rangeland Resources

Most of the land in Hot Springs County is classified as rangeland with public lands being managed by the BLM. Most of the rangelands and riparian zones in the County support an understory or periodic cover of herbaceous or shrubby vegetation amenable to rangeland management principles or practices. The principal natural plant cover is composed of native grasses, forbs, and shrubs that are valuable as forage for livestock, big game, other wildlife, and pollinators. Rangeland includes lands revegetated naturally or artificially to provide a plant cover that is managed as native vegetation. Rangelands in the County consist of sagebrush, steppe, grasslands, desert shrub lands, and wet meadows. The soil and climate make most of the land best-suited for grass and shrub production, rather than farming. The BLM requires public rangelands to meet or make substantial progress to meet standards, which were developed for Wyoming as the 1997 Wyoming Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management.

3.4.3 Forest and Rangeland Resources Resource Management Objective:

A. Forest lands and rangelands within Hot Springs County are managed under multiple-use that promotes the timber industry, grazing, fuels management, and recreation and benefits the economy, custom, and culture of Hot Springs County.

3.4.4 Forest and Rangeland Resources Priority Statements:

1. Forest and rangeland management on public lands within Hot Springs County shall adhere to Multiple Use Sustained Yield Act, as well as the National Forest Management Act, National Environmental Policy Act, and the Endangered Species Act.
2. Federal and state agencies should promote the harvest of timber that has been impacted by bark beetles.
3. Wyoming State Lands should support and encourage timber sales on state lands to manage for forest health and promote the economics of Hot Springs County.
4. Hot Springs County encourages active management of forest land and rangeland resources on public lands to reduce invasion of unwanted species.

5. Federal and state agencies should support weed management and mitigation on public rangeland and forest lands within Hot Springs County.
6. Federal agencies should support salvage harvest when necessary due to insect/disease epidemic, blowdown, or post-fire situations using categorical exclusions as the federal regulatory mechanism to approve such harvest.
7. Federal agencies within Hot Springs County should use the authority granted under the Healthy Forests Restoration Act, Healthy Forests Initiative, and Good Neighbor Authority to expedite cross-boundary/agency planning, collaboration processes, and project implementation to treat and protect timber resources economically and efficiently.
8. Federal agencies should notify and coordinate forestland and rangeland management projects with Hot Springs County, state and local agencies, and private landowners to improve the scale and scope of each project.
9. Federal and state agencies should maintain and restore watershed health within Hot Springs County by demonstrating active rangeland and forest land management.
10. Federal and state land managers should continue to plant and develop a wide variety of trees, shrubs, and seedlings to the vegetation community for windbreaks and shelterbelts for aesthetic, wildlife, and agricultural value on public lands within Hot Springs County.
11. Federal and state agencies should support excluding the maximum area of land possible from single-use or restrictive-use designations, so that excluded land is available for active and sound management.
12. Federal agencies should support site-specific management decisions based on sound science, compliance with the 1997 Wyoming Standards for Healthy Public Rangelands, and Best Management Practices.
13. Federal agencies should ensure that rangeland health assessments identify all the causal factors when there is a failure to meet the 1997 Wyoming Standards for Healthy Rangelands and that livestock grazing uses are not reduced to compensate for or mitigate the impacts of other causal factors.
14. Federal and state agencies should explore and use vegetation management and harvest methods, where applicable, that enhance wildlife habitat through vigorous new growth and a natural mosaic that reduces fuel loads.
15. Hot Springs County supports the Wyoming Office of State Lands Strategic Plan, with respect to the management of forest resources on private land, to achieve the best long-term return on investment and promote healthy forests.
16. Federal and state agencies should support and work to identify range management objectives based on site potential, climate, and land uses.
17. Federal and state agencies should conduct future timber harvest, thinning, and fuel reduction projects on federal and state-managed lands as a necessary means to reduce the potential for unnaturally intense wildfires and to restore vibrant and healthy ecosystems to this area.
18. Federal and state agencies should obtain Hot Springs County approval before decommissioning existing roads on public lands unless there is demonstrated public

support that the road is not needed for public recreation or for economically efficient management and fire management purposes.

19. Federal and state agencies should manage rangelands to maintain and enhance desired plant communities for the benefit of watersheds, wildlife, water quality, recreation, and livestock grazing.
20. Native seed mixes consistent with the appropriate ecological site description and free of noxious weeds and invasive species are encouraged for all reclamation efforts and must be beneficial to both livestock and wildlife and developed collaboratively with the permittee.

3.5 WILDFIRE MANAGEMENT

3.5.1 History, Custom, and Culture

Wildfire is defined as an unplanned, unwanted fire that spreads rapidly and is difficult to extinguish. This includes accidental human-caused fires, unauthorized human-caused fires, escaped fires used as a management tool, and naturally occurring fires, or fires with a natural ignition source.

In Hot Springs County, as over most of the West, early settlers considered all fires as a threat, and they were automatically suppressed. As a result, there are areas where excessive fuel loading has built up and where undesirable shrubs and trees have encroached and crowded out more desirable vegetation.

3.5.2 Resource Assessment and Legal Framework

Large wildfires have occurred throughout Hot Springs County and have caused resource stress to watersheds, timber, grazing lands, wildlife habitat, and recreational activities that rely on healthy forests and rangelands. *Map 4 shows the wildfires that have occurred within Hot Springs County from 2000 through the development of this plan in 2021.*

Proactive planning for response to a wildland fire event is critical to the protection of Hot Springs County. Its citizen's health, safety, welfare, private property, and forest and rangeland health all depend on this. A high degree of coordination between federal, state, and local agencies is necessary for maximal prevention and suppression of wildfire.

Hot Springs County's economic viability depends to a large extent on the management of federal lands in the County and the wise use of their natural resources. Large wildfires on federally managed lands adversely impact the economic viability of Hot Springs County, through the loss or damage of the natural resources, including scenery enjoyed by the many tourists traveling through the area, grazing, timber, and recreation.

The National Cohesive Wildland Fire Management Strategy was developed by the Departments of Interior and Agriculture land management agencies and partners. The national strategy addresses the challenges of managing vegetation and fuels; protecting homes, communities, and other values at risk; managing human-caused ignition, and effectively and efficiently responding

to wildfire. Through collaboration with stakeholders, the plan strives to develop a resilient landscape, fire-adapted communities, and safe and effective wildfire response (USDA Forests and Rangelands, 2014). A link to the national strategy can be found here.

Wildland urban interface (WUI) areas are present throughout the county. These areas are where residential areas are intermingled within forested areas. These areas are particularly at risk should a wildland fire occur.

Table 2. Fire Occurrences more than 100 acres in Hot Springs County from 2000 to 2021.

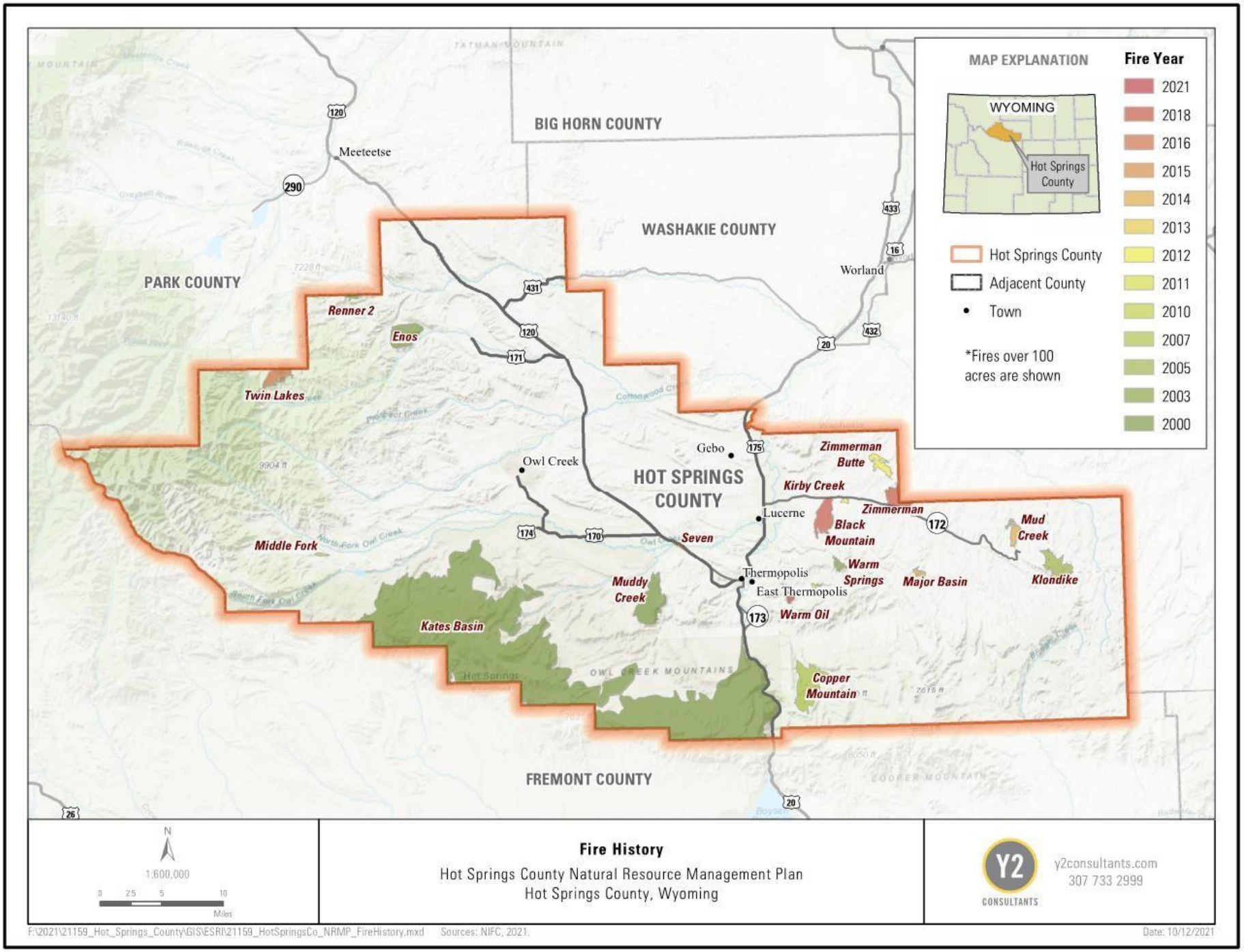
Year of Fire	Fire Name	Acreage
2000	Muddy Creek	3,849
2000	Enos	2,500
2000	Renner 2	203
2000	Kates Basin	105,634
2000	Warm Springs	395
2003	Kates Basin	103,233
2005	Black Mountain	1,954
2007	Copper Mountain	3,980
2010	Middle Fork	116
2011	Black Butte	105
2012	Zimmerman Butte	910
2012	Kirby Creek	122
2013	Klondike	199
2014	Major Basin	257
2014	Mud Creek	739
2015	Seven	200
2016	Twin Lakes	1,238
2018	Black Mountain	2,105
2018	Zimmerman	1,290
2021	Warm Oil	395

3.5.3 Wildfire Management Resource Management Objectives:

A. Wildfires, fuels, and fire rehabilitation are managed promptly and effectively using credible data, as defined above, in coordination with Hot Springs County.

3.5.4 Wildfire Management Priority Statements:

1. Federal and state agencies should coordinate with Hot Springs County to suppress wildfires in areas where fire would endanger human safety and private property or valuable vegetation that will support and expand multiple use.
2. Federal and state agencies should consider a "let burn" policy and prescribed burning for areas where invading trees or shrubs are reducing the value of livestock and wildlife habitat, or other considerations that support and extend multiple use.
3. Federal agencies should allow for adaptive grazing management practices and include them in federal grazing term permits to allow for flexible management practices that will decrease fuel loads on the landscape particularly in areas with a heavy grass understory.
4. Federal agencies should maximize efforts to cooperate with local governments and federal and state agencies to suppress and control fires in Hot Springs County, including, incorporating local fire association plans into their fire suppression and control plans, supporting efforts of local fire departments in wildfire suppression activities, developing Master Good Neighbor Agreement between federal, state, and local fire-suppression units.
5. If a vacant allotment is available, it should be utilized as an area for grazing to occur when fire has affected a permittee's allotment.
6. Federal and state agencies should coordinate with other agencies and local governments to suppress and control fires in the area by using proactive tools, such as implementing insecticide and herbicide treatments, targeted livestock grazing, biomass fuel removal, slash pile burning, and conducting prescribed burns.
7. Temporary fire restrictions should be used based on fire hazard designations to minimize the potential for human-caused wildfires. Restrictions should be removed as soon as it is safe for work and recreation on federal lands.
8. Federal and state agencies should rehabilitate forests and rangelands damaged by wildfires as soon as possible for wildlife habitat and reduce the potential for erosion and introduction of invasive or noxious weeds.
9. Post-fire objectives should be consistent with site potential as defined in approved Desired Future Conditions or Ecological Site Descriptions.
10. Promote the prompt rehabilitation of harvested areas and areas affected by wildfire, which include water, flooding, erosion control, and salvage logging operations.
11. Federal and state agencies should survey and manage invasive and noxious weeds after wildland fire events to reduce fire fuels on federal and state lands, using tools including (but not limited to) targeted livestock grazing; chemical, and mechanical controls that promote ecosystem health and as a management tool for vegetation manipulation.
12. Ongoing research and experimental options for new and alternative treatments to manage invasive and noxious weeds should be supported on public lands.



Map 4. Fire history within Hot Springs County (data from ESRI and USGS in 2020).

3.6 LAND EXCHANGES

3.6.1 History, Custom, and Culture

Land exchanges can be used to alter the intermingled disbursement of federal and private land, allowing lands to be consolidated by ownership type and reducing the amount of federal land that is isolated from other public ground. This allows for a more uniform management plan of USFS and BLM land and can create public access opportunities that were previously impossible due to the landlocked nature of such parcels and the lack of easements on neighboring private lands. Land exchanges can also be used to allow community development or other purposes that provide great value to the public interest. Exchanges usually take two to four years, but the process can be extended considerably if complications arise with NEPA, land valuation, or the Endangered Species Act (ESA).

3.6.2 Resource Assessment and Legal Framework

Exchanging private land for public is one way that agencies can improve their management of public lands and allow public access to said lands. FLPMA granted the USFS and BLM power to conduct land exchanges with private property owners and established five requirements for the process:

- Acquisitions must be consistent with the mission and land use plans of the agency
- Public interests must be served by the land exchange
- An agency may accept title to non-federal land if the land is in the same state as the federal land for which it is being exchanged and the agency deems it proper to transfer the land out of federal care
- The lands to be exchanged must be equal in value or equalized through the addition of a cash payment, but a cash payment may not exceed 25% of the total value of the federal land
- Land may not be exchanged with anyone who is not a U.S. citizen or a corporation that is not subject to U.S. laws (BLM Handbook, 1-1, 1-2)

The process for land exchanges begins with a proposal (by an agency or private landowner) of an exchange between an agency and a private landowner. The proposal then goes through multiple analysis and review phases to assure its compliance with the laws and regulations controlling such an exchange. After the review process is complete, an agreement to initiate is signed by both parties which outlines the scope of the exchange and who will be responsible for what costs in the procedure (USFS, 2004).

The parties are expected to share equally in the costs of a land exchange, but specific requirements may vary between agencies. The USFS requires private landowners to pay for title insurance, advertising, hazmat cleanup, and land surveys at a minimum. The Forest Service usually pays for appraisals (USFS, 2004). However, the BLM may share in some of these specific expenses as long as the total costs are apportioned in an equitable manner (BLM, 2005).

Next, an appraisal must be done on each parcel to determine their respective values and assure that the properties are capable of being exchanged. At this point, the agency and private landowner sign a formal exchange agreement binding them to the exchange. The plan is then

subject to final review before being completed. During the exchange process NEPA review must also be completed. The exchange must follow NEPA procedures to determine environmental impacts of the exchange, including scoping, environmental assessment, notice and comment, and appeals (USFS, 2004).

Recreation and Public Purposes Act

The Recreation and Public Purposes Act of 1926, as amended in 43 U.S.C. 869 authorizes the Secretary of the Interior to dispose of public lands to other federal agencies and state and local governments for public purposes, and non-profit entities for recreational or public purposes (BLM, n.d.-a).

3.6.3 Land Exchanges Resource Management Objectives:

A. Land exchanges that are mutually beneficial to private landowners, federal agencies, and the public are completed in a timely and cost-efficient manner.
B. There is no net loss of private lands or loss of economic growth potential within Hot Springs County unless supported by the County.
C. Land exchanges are coordinated with Hot Springs County.

3.6.4 Land Exchanges Priority Statements:

1. Hot Springs County opposes the acquisition of large tracts of private land by state and federal entities.
2. Hot Springs County Commission must be notified of all potential land exchanges within the County.
3. Federal and state agencies should proactively identify potential land exchanges within Hot Springs County and conduct analysis on lands for disposal that will consolidate land ownership type and reduce isolated public or private land parcels.
4. Federal agencies should prioritize land exchanges in areas where there may be resource or management conflicts between federal managers and neighboring private or state landowners.
5. Private land, including isolated tracts, should only be acquired by state and federal government entities when it is consensual and there is clearly just and adequate compensation to the landowner and separate compensation to Hot Springs County for the lost tax base.
6. Federal agencies should support voluntary land exchanges between the federal government and private landowners within Hot Springs County to adjust property lines and improve access and land management.
7. Government lands should be made available for traditional eminent domain uses, such as pipelines and transmission lines, where logical, recognizing that government land has no greater value than private land.
8. There should be no net loss of the private land based on acreage and fair market value.
9. Land exchanges should not be used as a method to coerce private sale of lands and all land exchanges and purchases should be between two willing parties.

10. Payment in lieu of taxes funds and other federal funding mechanisms should be used to offset any loss in tax income resulting from land exchanges or purchases by federal agencies.
11. Lands must be made available for disposal under the Recreation and Public Purposes Act and Hot Springs County should be notified and consulted.
12. When possible, land exchanges should be combined when doing so will increase process efficiency and reduce costs.
13. Land exchanges should be sought out when the said exchange will provide additional access to public lands or provide economic growth for Hot Springs County.

CHAPTER 4: GEOLOGY, SOILS, MINING, ENERGY RESOURCES, AIR QUALITY, CLIMATE

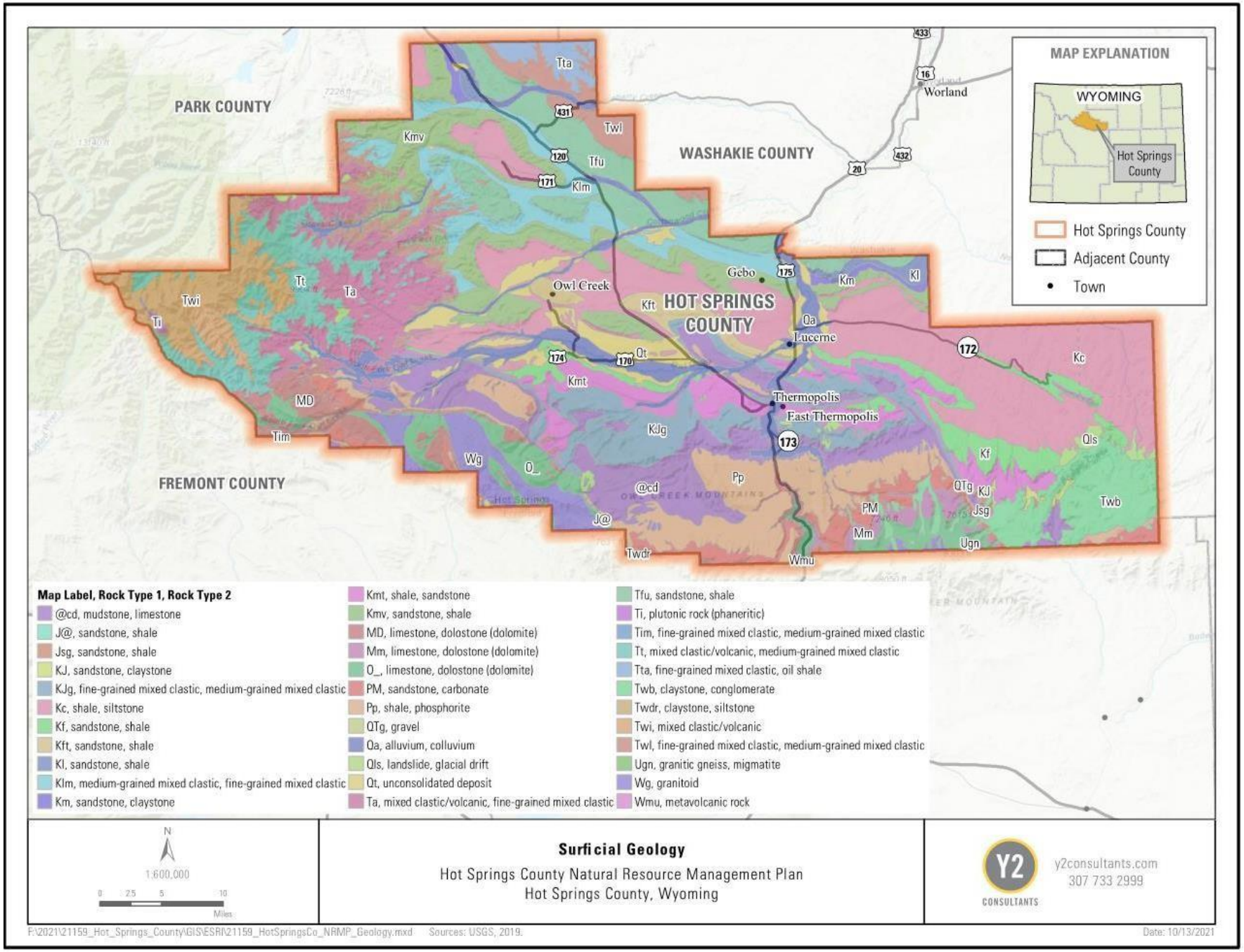
4.1 GEOLOGY AND CLIMATE

Hot Springs County lies in the southern curve of the Big Horn Basin, both a topographic and geologic structural basin. Hemmed in on all sides by physical barriers, the entire Basin was slow to develop. Mountains form three sides of Hot Springs County: the Big Horns to the east, the Owl Creek Mountains to the south, and the Absaroka Range to the west. The Washakie Needles in the Owl Creeks contain the highest point in the County, 12,495 feet; the lowest point is 4,268 feet north of the Town of Kirby (where the Big Horn River flows into Washakie County).

The economic development of Hot Springs County has been determined primarily by geologic resources such as oil and gas, coal, bentonite, dinosaur fossils, and mineral hot springs.

The outstanding geological feature, the one which gave the County its name, is the group of mineral hot springs near Thermopolis. Here the main spring pours out approximately 3,500,000 gallons of 135-degree Fahrenheit water a day. The springs have been a major draw and benefit to the people because of their recreational and therapeutic benefits. Many local events are related to the springs and to Hot Springs State Park, which is based here because of the presence of these important natural hot springs.

Hot Springs County's climate is considered relatively mild when compared to other areas of Wyoming. This is due largely to its lower elevation and protection from winds.



Map 5. Hot Springs County geologic formations (data from USGS in 2019).

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4.2 SOILS

4.2.1 History, Custom, and Culture

Healthy soils sustain plant communities, keep sediment out of streams, and dust out of the air. Land managers of public lands are mandated to manage soils and vegetation to ensure land-health standards are maintained and to safeguard sustainable plant and animal populations (NRCS, 2018). Soil type dictates the vegetation within an area, which determines the area's uses, productivity, resistance to disturbance, and scenic quality.

Anthropogenic land disturbance, as well as wildfire, can influence soil quality. Soil issues arising from both anthropogenic and natural causes include erosion, drainage, invasive species, soil compaction, salination, and loss of vegetation (NRCS, 2018).

4.2.2 Resource Assessment and Legal Framework

Soil Surveys

Soil surveys provide detailed information on soil limitations and properties necessary for project planning and implementation. Soil surveys document soil properties and distribution to monitor and understand the impacts of various uses. There are five levels or "Orders" of soil surveys depending on the level of detail involved. Order 3 is typical for most public lands projects which do require onsite investigations by expert soil scientists for site-specific project-related activities or projects (USDA: Soil Science Division Staff, 2017).

Soil survey reports, which include the soil survey maps and the names and descriptions of the soils in a report area, are published by the USDA NRCS and are available online through Web Soil Survey (NRCS, n.d.-b). The soil survey mapping of Hot Springs County has been completed and is located on Web Soil Survey (NRCS, n.d.-a). The general soil map units for Hot Springs County are depicted in *Map 6*.

Ecological Sites

Ecological Sites provide a consistent framework for classifying and describing rangeland and forestland soils and vegetation. Ecological Site Descriptions (ESDs) are reports that provide detailed information about a particular type of land. ESDs are described using the soil mapping for a landscape and each 'site' has multiple characteristics that are tied to the soil traits present. ESDs are used for assessing vegetation states and are often used when designing reclamation and rehabilitation of an area. ESDs are also used by federal agencies to manage grazing and assist in renewing grazing permits when looking at rangeland health. ESDs help determine how a site will react to disturbances and potential vegetation that could be used in reclamation of the site (Natural Resource Conservation Service, n.d.).

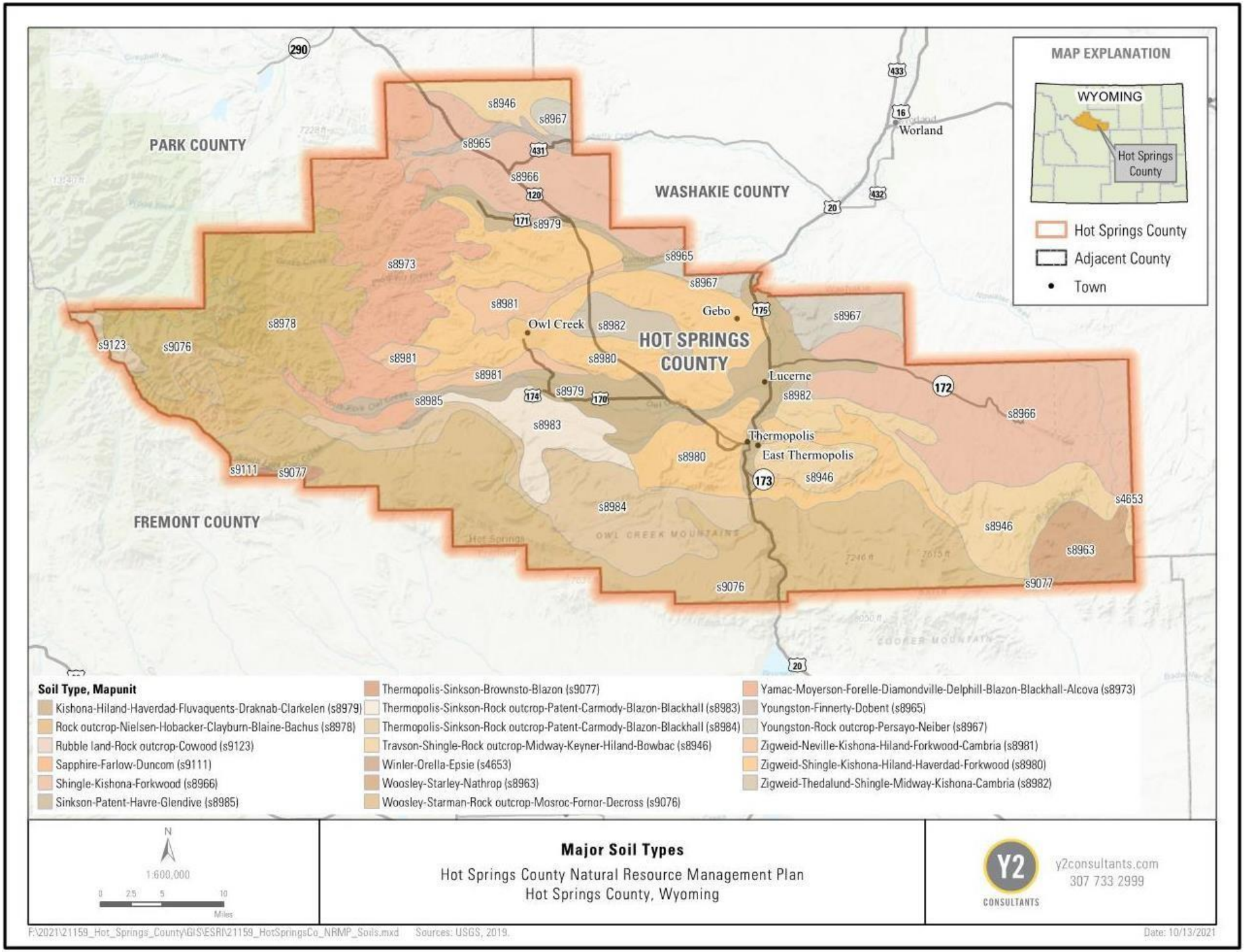
4.2.3 Soils Resource Management Objectives:

A. Soil quality and health are maintained and conserved through best management practices in coordination with Hot Springs County.

B. Soil resources are protected from wind and water erosion to sustain a viable agricultural economy, wildlife populations, and high levels of air and water quality within Hot Springs County.

4.2.4 Soils Priority Statements:

1. When available, the Natural Resource Conservation Service soil survey should be the basis for all public land soils related activities.
2. Any deviation from using soil survey data should only be done with the support of the Natural Resource Conservation Service.
3. Federal and state agencies should support projects and policies which improve soil quality and ecology on public lands within Hot Springs County.
4. Federal and state agencies should use erosion control as a means of flood control.
5. For new soil disturbing projects, support implementation of best management practices to manage runoff and stabilize soils on site.
6. Natural processes, including livestock grazing should be utilized as a key to site reclamation for soil health and biodiversity.
7. All proposed projects on public lands within Hot Springs County that will likely disturb topsoil should implement a plan to separate and protect topsoil.
8. All ecological site descriptions (ESDs) used for land management decisions should be based on ESDs created from Hot Springs County's soil and site potentials. If local ESDs are not complete, the completion should be a priority for the agency.
9. Federal and state agencies should consult with existing surface users and the appropriate county agencies when developing reseeding and reclamation requirements for permittees conducting soil disturbing or degradation activities.



Map 6. Soil type and map units for soils in Hot Springs County (data from NRCS Web Soil Survey in 2015).

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4.3 MINING AND MINERAL RESOURCES

4.3.1 History, Custom, and Culture

Mineral production has and continues to play one of the most significant roles in the culture and economy of Hot Springs County. It started with the discovery of coal in the late 1800s and of crude oil in the early 1900s when Hot Springs County was still a part of Fremont County (Hot Springs County was established in 1911). It is known today that substantial amounts of crude oil, natural gas, coal, and bentonite are present in the County. Further, geological evidence suggests there are remaining deposits of undiscovered minerals in the County.

Although the production of minerals, and associated economic and cultural activity, have waxed and waned with demand and pricing over the past; it has been, and remains the most significant portion of Hot Springs County's tax base. Crude oil production alone has accounted for the majority of assessed County valuations since 1977.

Two unincorporated coal company towns, Gebo and Crosby, were laid out in the north-central part of the County after the turn of the century. Oil camps included Hamilton Dome, Grass Creek, and Black Mountain. Due to major litigation between the federal government and Sam Gebo and his partners over mining claims, coal mining got off to a slow start at Gebo after it was discovered in 1906. Work at Crosby started about the same time. Minor strip mining has been ongoing since the 1970s.

Lumbering was an important adjunct to the coal mining industry for timber support within the mines. In the earlier days, both cottonwood and pine were used in mining, construction of homes, outbuildings, and business structures.

Besides coal, mining in the County has included rock quarrying, bentonite, and sulfur. Much of the building in downtown Thermopolis was done with native rock. Sulfur was mined west of Thermopolis from the turn of the century until just after World War I.

4.3.2 Resource Assessment and Legal Framework

Hot Springs County has 2,430 records of mining claims managed by the BLM, 11% (265 claims) of which are active claims. *Map 7 shows the mineral ownership within Hot Springs County.*

It is paramount that the federal agencies within Hot Springs County support the production of minerals in an environmentally safe manner through the political process as well as physically, by working with the County to provide infrastructure and services such as roads, bridges, medical services, and law enforcement. The administrative and regulatory processes have proven to be cumbersome due to interaction with government agencies such as the Wyoming Oil and Gas Conservation Commission (WYOGCC), BLM, USFS, and State of Wyoming Department of Environmental Quality (WDEQ). These agencies are critical to the development of hydrocarbon reserves but can potentially hinder the development of these resources. Improved relations with these agencies are a crucial element for increasing access to new reserves. To secure the economic longevity and prosperity of the County, these challenges and interface issues need to be streamlined.

The Congressional Act of July 26, 1866, and the General Mining Act of 1872 granted all American citizens the right to go into the public domain to prospect for and develop minerals. Every mining law or act enacted since then has contained a "savings clause" that guarantees that the originally granted rights will not be rescinded. These laws are applicable in Hot Springs County.

Coal

Coal played a significant role in the early years of the County's development. Gebo was the largest town in the County with several thousand residents during the early 1900s. Shallow sources of coal in the Cenozoic formations have been exploited Coal is not a significant mining resource currently within the County but the opportunity remains into the future.

Bentonite

Bentonite is a mineral that has increased in importance in recent years. Mined in small open pit operations, often using "cast-back" techniques that minimize exposed areas and stockpiled topsoils. Bentonite is typically found on BLM lands requiring a lengthy permit process that makes it difficult to anticipate market and supply factors. Cast-back mining simplifies reclamation efforts and minimizes the potential for soil erosion.

Fossils

The discovery of significant fossilized dinosaur remains in the Jurassic Morrison Formation has provided a new economic force for the Town of Thermopolis. Based on a major fossil locality being dug just southeast of town, the Wyoming Dinosaur Center has been developed as both an academic and tourist attraction to the area. Private funding of this enterprise has resulted in the creation of local jobs and is a magnet for tourists as both a destination target and for tourists passing through the county on their way to Yellowstone National Park. This geologic horizon, located about twenty feet below the Cloverly Formation, should be considered prospective for additional discoveries in the area. In the event of discovery on public lands, it would be important that this economic resource be utilized in a controlled but logical manner for the economic good of the County.

Split Estate

A unique form of federal land ownership in the west comes from split mineral estates. Hot Springs County has a large amount of split mineral estate. A split mineral estate occurs when the ownership of the minerals (or subsurface rights) in a certain area is different from the ownership of the surface estate. Generally, and as set forth in Wyoming law, mineral rights often take precedence over other rights and the owner of the mineral estate has an overriding right to use the land to explore for and develop minerals (43 U.S.C. §§ 291 and 299; *see also Watt v. Western Nuclear Inc.,* 462 US 36, 53-55 (1983)). Thus, the federal government owns the minerals of any lands in which the patent is after 1916.

A split estate can be formed when an original sovereign makes a land grant, but reserve the mineral estate. This occurred in the U.S. under several land grant or homesteading acts when the federal government sold or gave away vast quantities of land to encourage western migration. The Stock Raising Homestead Act of 1916 devised over 70 million acres in the west, reserving the

minerals for the federal government. A split estate may also be created when a landowner sells their mineral rights or sells the surface estate while retaining the minerals. There are many forms of split estate where the surface/mineral split may be private/federal, private/state, private/private (different owners), state/federal, state/private, federal/state, or federal/federal (where different federal agencies control).

Wyoming has its own state statute regarding split estate. Wyoming Statute §§ 30-5-401 to –410 that holds key provisions to conduct oil and gas operations within the State. Those key provisions include:

- Codification of reasonable use and accommodation
- Predevelopment notice of entry
- Requirement of good faith negotiations for surface use agreement
- Damage bond required if no surface use agreement reached
- Two-year statute of limitations for damages to surface (from discovery)
- Compensable damages include loss of production, income, land value, and improvements for land directly affected
- Does not foreclose common law tort actions or contract rights
- Regulatory violation is *per se* negligence under the Act

For federal split mineral estates, the BLM manages all minerals owned by the federal government. Whenever an operator acquires a BLM lease to produce minerals from a split estate, they must negotiate a surface use agreement in good faith with the surface estate owner. (Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development BLM, 2007). The surface use agreement is confidential but must provide enough information in a Surface Use Plan to allow for the BLM to conduct NEPA review of the project. If the operator is unable to negotiate a surface use agreement with the landowner, they may elect to file a bond with the BLM to cover compensation for damages to the surface estate. Fossils are a part of the surface estate, thus are owned by the surface owner (*See Earl Douglass*, 44 Pub. Lands Dec. 325 (D.O.I. 1915)).

Withdrawal

Federal lands can be withdrawn from mineral eligibility of development under the mining laws (30 U.S.C. Ch. 2). Mineral withdrawal prohibits the location of new mining claims. Withdrawal may also require that any preexisting mining claims in the area demonstrate that valuable minerals have been found before the withdrawal before any activities can commence on those preexisting claims. Withdrawal of minerals cannot prohibit the use of a valid existing right. A valid existing right exists when the mining claim contains the discovery of a valuable mineral deposit that satisfies the “Prudent Person” test, as defined in Castle v. Womble (US v. Cole, 390 U.S. 599, 602 (1968)). To pass the “Prudent Person” test a person must demonstrate that “the discovered deposits must be of such a character that “ person of ordinary prudence would be justified in the further expenditure of his labor and means, with a reasonable prospect of success, in

developing a valuable mine." Id. However, these minerals cannot be considered "of common variety" to be a considered a valuable mineral under the mining laws (See id.; 30 U.S.C. § 611).

Congress can withdraw lands from new mineral claims or leases by passing legislation withdrawing said lands (See North Fork Watershed Protection Act of 2013). Additionally, FLPMA gives the Secretary of Interior the authority to withdraw federal lands (43 U.S.C. § 1714). Secretarial withdrawals of over 5,000 acres may only last 20 years at most, but withdrawals may be renewed (43 U.S.C. § 1714(c)). The Secretary of Interior must inform Congress of any secretarial withdrawal of over 5,000 acres. Id. The withdrawal will expire after 90 days if both bodies of Congress draft concurrent resolutions that they do not approve the withdrawal within 90 days of being notified by the Secretary of Interior. Id. In order to allow for public involvement in the withdrawal process, public hearings and opportunities for public comment are required of all new secretarial withdrawals (43 U.S.C. § 1714(h)).

Locatable Minerals

Locatable minerals are a legal term that, on federal lands, defines a mineral or mineral commodity that is acquired or staked through the General Mining Law of 1872, as amended. Examples of locatable minerals include, but are not limited to, gold, silver, platinum, copper, lead, zinc, magnesium, nickel, tungsten, bentonite, barite, feldspar, uranium, and uncommon varieties of sand, gravel, and dimension stone. Hot Springs County has an extensive history of mining locatable minerals, such as uranium. The BLM manages the mining law program on the federal mineral estate including authorizing and permitting mineral exploration, mining, and reclamation actions.

Uranium

BLM is responsible for administering the laws and regulations regarding the availability of all locatable minerals on federal lands, including uranium, as specified under the General Mining Law of 1872, as amended, 43 CFR Parts 3700 and 3800, and the FLPMA. Under these laws and regulations, the BLM is obligated to allow claim holders to develop their claims subject to reasonable restrictions including the restriction that unnecessary or undue degradation may not occur [43 CFR § 3809.411(d)(3)].

BLM authority for land management is derived from the FLPMA. General BLM regulations are described in 43 CFR Subtitle B - Regulations Relating to Public Lands, Chapter II - BLM, USDOI. The BLM regulations for the management of mining are included in 43 CFR Subpart 3809, Surface Management, and derive their mandate from Sections 302 and 303 of the FLPMA. Subpart 3809 established procedures and standards for mining claimants to prevent public land degradation and requires reclamation of disturbed areas. It also requires coordination with applicable federal and state agencies. For operations on public lands other than casual use, 43 CFR 3809 requires BLM approval of a Plan of Operations, a full environmental review, and reclamation bonding.

Uranium mines in Wyoming are permitted through the WDEQ Land Quality Division and licensed through the WDEQ Uranium Recovery Program.

Salable Minerals

Salable minerals, also known as mineral materials, include common variety materials such as sand, gravel, stone (e.g., decorative stone, limestone, and gypsum), clay (e.g., shale and bentonite), limestone aggregate, borrow material, clinker (scoria), and leonardite (weathered coal). Sand and gravel provide raw materials for most construction and paving activities. Many of these materials are used frequently in construction and road improvement projects.

4.3.3 Mining and Mineral Resource Management Objectives:

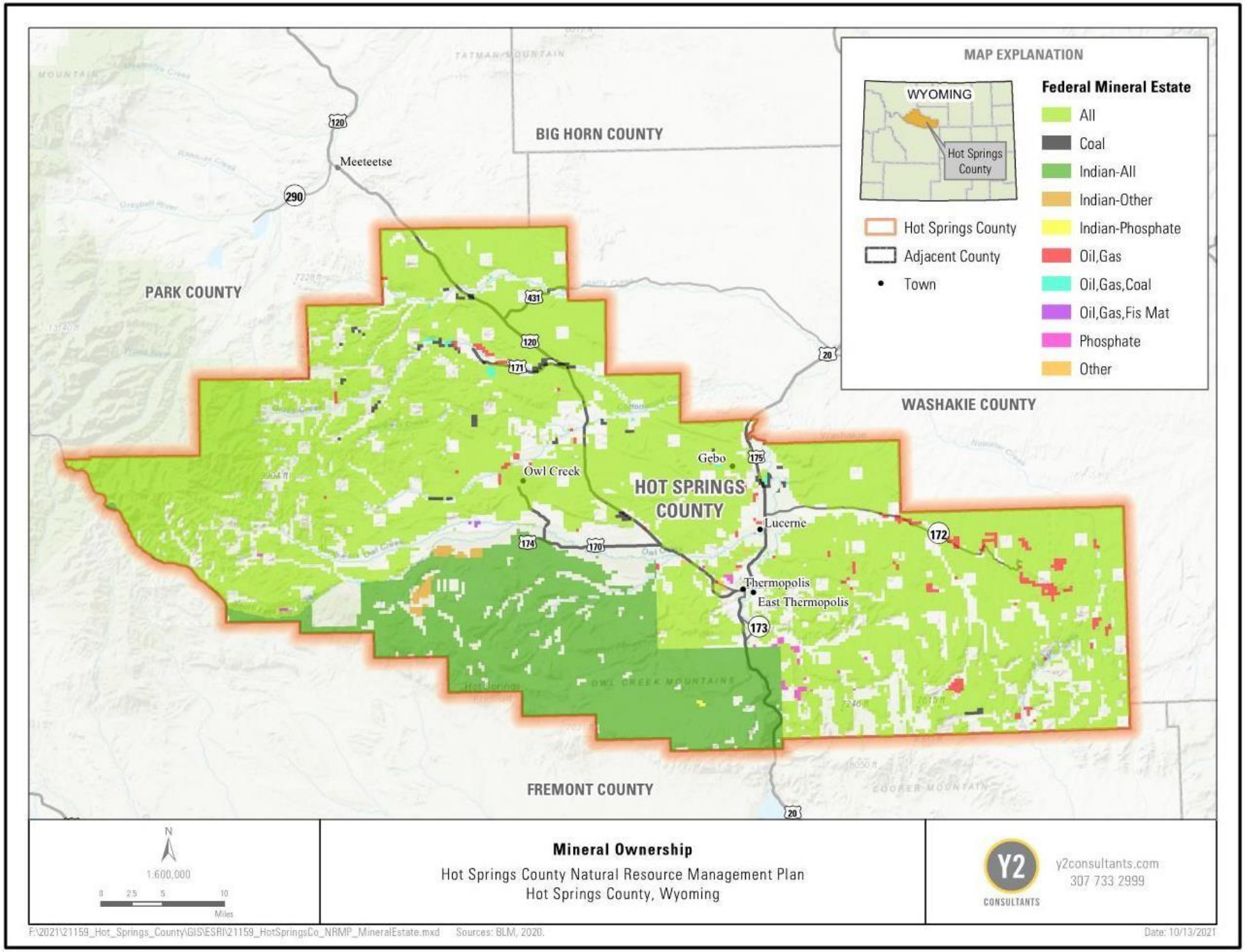
A. Mineral resources are located and produced to the maximum extent economically feasible and in an environmentally responsible manner that protects other multiple uses within Hot Springs County.
B. Mineral resource development, closure, withdrawal, or use restriction is done in coordination with Hot Springs County.
C. Hot Springs County establishes partnerships with mineral industries and federal and state agencies, to increase and share knowledge of the mineral estate, and to develop and foster trust among partners to encourage the development of mineral and energy production within the County.

4.3.4 Mining and Mineral Resource Priority Statements:

1. Federal and state agencies should support and encourage the extraction of oil, gas, coal, bentonite, and other minerals within the County.
2. Federal agencies should hold mineral producers accountable to surface owners and encourage cooperation between mineral producers and surface owners to mitigate adverse impacts on surface uses.
3. Mineral producers should reach mutually acceptable written surface use agreements with surface owners before entering upon the land.
4. All applicable land use and management plans should contain a thorough discussion and evaluation of coal bed methane and mineral development, and the implications such development has on surface land uses.
5. When determining whether an action or policy is compliant with the Federal Land Policy and Management Act (FLPMA), federal agencies should follow FLPMA's guidance that "The public lands will be managed in a manner which recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber from the public lands, including implementation of the Mining Minerals Policy Act of 1970."
6. Decisions to close lands to mineral exploration or extraction should be coordinated with Hot Springs County prior to closure to consider the impact such closure will have on the County's economic viability.
7. Federal agencies should give regular (where regular is defined as bi-annually or as necessary) updates on current and proposed projects within Hot Springs County's jurisdiction and provide reasonable timelines and explanations for issuance of delays from permitting agencies.
8. All lands not lawfully withdrawn from mineral exploration and development should remain available for their designated use. These lands should be developed in an orderly

manner to accommodate exploration, development, and production. These activities will be performed in a manner consistent with the Mining and Mineral Policy Act of 1970.

9. Federal and/or state agencies shall protect the rights of access, occupation, and property of anyone prospecting and/or developing minerals within Hot Sprigs County as required by federal and state law. Federal agencies should integrate mineral resources programs and activities with the planning and management of renewable resources through the Land and Resource Management planning process to ensure efficient policies are implemented.
10. Federal and/or state agencies should encourage safe simultaneous or sequential mineral development with other resource uses in accordance with multiple use management principles in Hot Springs County, giving precedence to current permit holders.
11. Federal agencies should allow permittees to use Best Management Practices (BMPs) instead of requiring restoration to as near the same condition as original when approving mining reclamation plans. Nonnative seeding should be considered where beneficial.
12. Federal and state agencies should coordinate with other surface users and neighboring landowners regarding mining reclamation. Reclamation should be conducted in a timely manner, protecting other multiple uses.
13. Federal agencies should provide a justification whenever deferring lease applications.
14. Mitigation of surface disturbances should be accomplished on an adjoining site of the disturbance. No off-site mitigation should be considered until onsite opportunities have been exhausted or if proper analysis shows that habitat losses cannot be mitigated on-site.
15. Hot Springs County supports releasing bonds for oil and gas development once bonding requirements and procedures have been met.
16. Hot Springs County encourages proper mitigation of closed mines and reclamation practices throughout the County using existing ecological site descriptions to help determine mitigation and reclamation methods.



Map 7. Mineral ownership mapped for Hot Springs County (data from BLM in 2020).

4.4 ENERGY RESOURCES

4.4.1 Oil and Gas

4.4.1.1 History, Custom, and Culture

The oil and gas industry has been and continues to be the dominant economic factor in Hot Springs County providing 65-75% of the entire tax base. The geologic formations of most importance are the Paleozoic Madison, Tensleep, and Phosphoria formations which produce black asphaltic oil, and the Mesozoic Frontier Formation which produces green sweet crude oil. Primary production, relying on native reservoir pressures for flowing and pumping wells have largely been exhausted. Primary techniques recover only about 25% of oil in place leaving up to 75% behind. Virtually all of the County's oil fields are on secondary recovery using waterflood techniques to maintain reservoir pressures and flush the oil to producing wells. Secondary recovery can produce up to 45% of oil in place at higher production costs. Tertiary techniques have not been widely used in the county but could play a major role in the future recovery of oil.

The oil industry started five miles east of Thermopolis in 1904 at what is now the Warm Springs field. Through careful management in the last 25 years, this field is still operating today. The discovery well was sunk at Grass Creek in 1908. Again, litigation over State and Federal leases held up production until 1914; however, since then the field has been a major producer.

Hamilton Dome's "discovery" well was the first Chugwater oil discovery in Wyoming. The well broke loose and shot oil 150 feet into the air in November of 1919. It broke out three times altogether before they got the "gusher" stopped. The field is still producing. Other oil fields in the County, including but not limited to, Black Mountain, Waugh Dome, Corley, Gebo, Little Sand Draw, Murphy Dome, Wagon Hound, Wild Horse, Zimmerman Buttes, Kirby, Enos, Lake, Little Grass Creeks, Golden Eagle, and Little Buffalo Basin.

Oil/gas production is still the number one industry in the county. Support services to the oil/gas industry have played important roles in the county. Agriculture and tourism are the next two largest industries. To date, no other major industries have started to replace the tax base of oil/gas/mineral production and agriculture in the County.

4.4.1.2 Resource Assessment and Legal Framework

Oil and gas production has contributed greatly to Hot Springs County's taxable income for over 100 years. The county has seen fluctuating oil and gas production over the past 35 years. Oil production peaked at 11.3 million barrels (BBL) prior to 1980 and has gradually declined to 1.3 million BBL range in 2020. Conversely, gas production peaked in 1992 at 1.2 million MCF (million cubic feet). Gas production in the county has fluctuated between 1995 and 2020, gradually declining from 640,00 MCFto 160,000 MCF. (Drilling Edge, 2020)

These trends in decline and growth are tied to existing economic conditions at the County, state, and national levels (**Error! Reference source not found.**, , and).

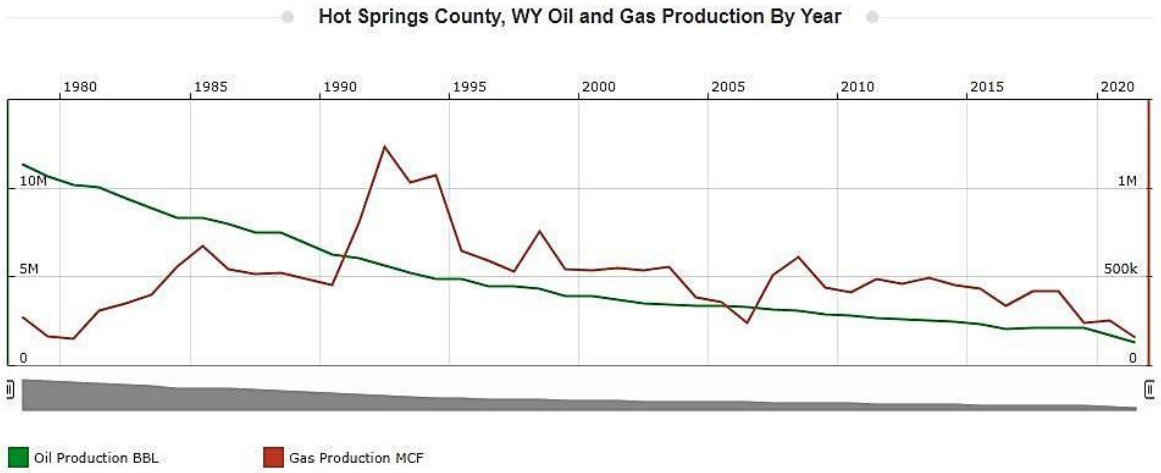


Figure 1. Oil and gas production in Hot Springs County between 1980 and 2020 (Drilling Edge, 2020).

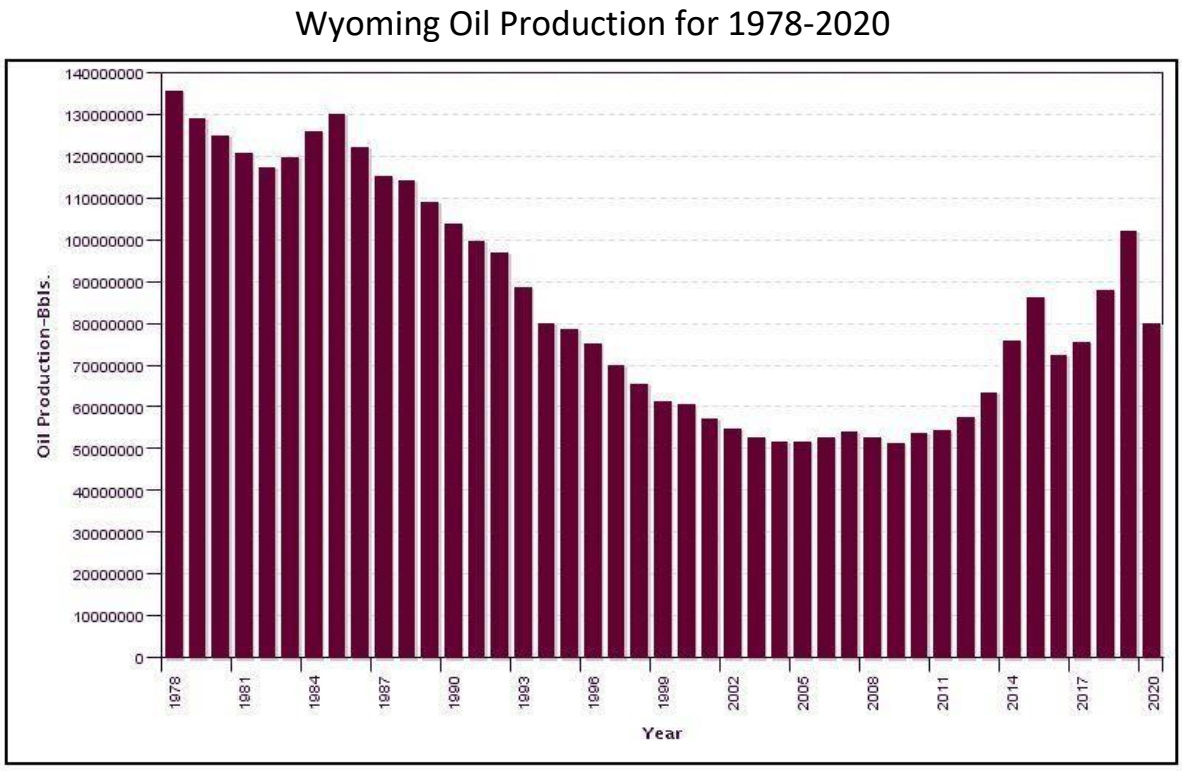


Figure 2. State of Wyoming oil production trends (1978-2020) (WOGCC, n.d.-a).

Wyoming Gas Production for 1978-2020

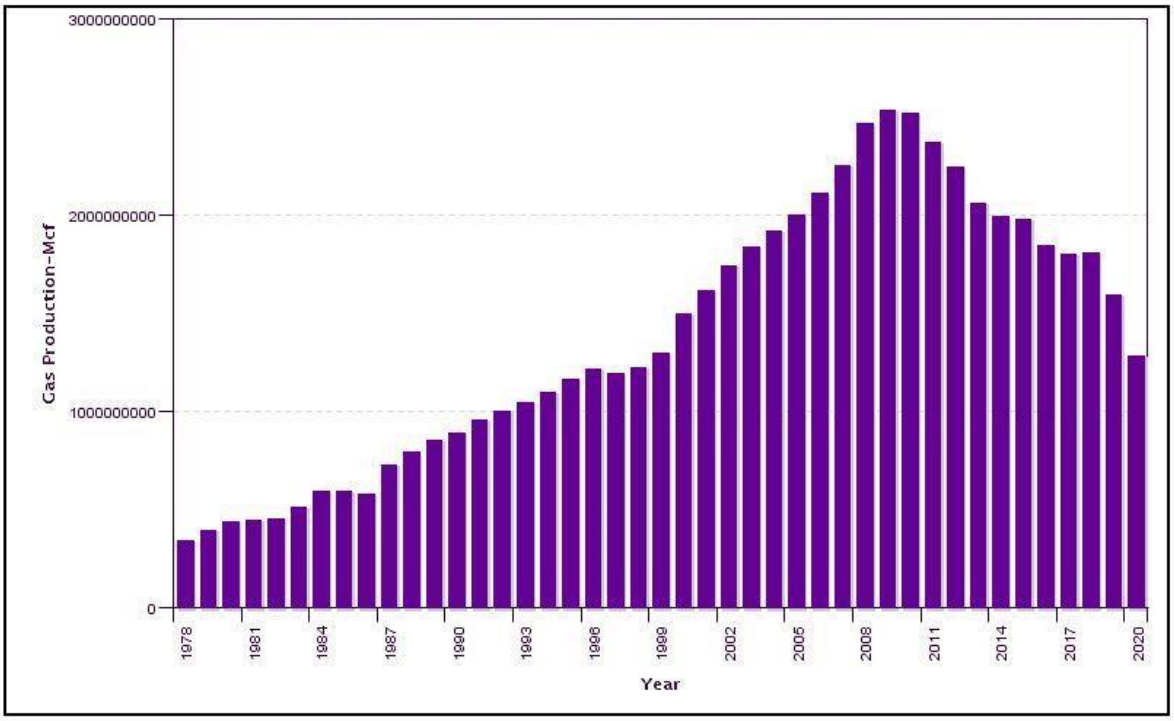


Figure 3. State of Wyoming gas production trends (1978-2020) (WOGCC, n.d.-b).

Natural Gas Production

Hot Springs County is not a large producer of natural gas and has lost production in the period from 1999-2013. Gas production in 2010 was a mere 0.32% of the production in 1980.

Limited production, lack of deep plays, lack of transmission lines, and commodity prices have all influenced declining production. Until such time as the major gas/oil companies invest in exploratory deep drilling, the county will have insignificant production plagued by various problems. A natural gas threshold is difficult to establish and would best be related to the number of exploratory wells drilled in the county.

The Grass Creek RMP/EIS of June 1996 projected a +5.87% increase in gas production across a four-county management area. However, Hot Springs County is not the primary gas producer in the region, and the projected increase may not be valid for the county.

Oil Production

The Final Grass Creek EIS/RMP of June 1996 summarized predicted oil production at a minus 2.74% per year decline when in fact the actual decline has been somewhat greater than the projected decline rate. During the monitoring period of 1990 through 2004, Hot Springs County increasingly lost population and tax revenue.

In 2010, oil production accounted for 72.33 percent of the total assessed valuation of the county. This is down from the previous year (which was 81.24 percent), but an increase over 6 to 8 years before. It is important to note that the county's total assessed valuation also increased by 124 percent from 2000 to 2010.

Oil Production in Hot Springs County:

- 1980 9,031,753 bbl
- 1990 6,683,978 bbl
- 2000 3,671,203 bbl
- 2010 2,892,959 bbl
- 2020 1,724,769 bbl

The production numbers listed above demonstrate that 2010 production is only 32 percent of that in 2000. Production in Hot Springs County peaked in 1978 and 1979 and has been declining ever since. Aging oil fields have contributed substantially to the decline in production, however the county supports mitigation of declining fields by relaxation of drilling stipulation requirements, nominating more leases for sale, sustaining access, encouraging secondary and tertiary recovery methods, utilization of 3-D seismic technology, horizontal drilling, fracking, and coordination among the various agencies to facilitate oil production permits in a timely manner.

Another new technology for reviving older wells is the injection of CO2 and other substances to increase production. This often requires the availability of additional pipeline transmission corridors across public lands. Hot Springs County strongly supports the efforts of the Wyoming Governor's Office to study and implement new technologies.

The county recommends a threshold level for oil production in the Grass Creek planning area of 4,200,000 barrels per year which requires the recovery of recently lost production during the course of the next RMP period, approximately 2006-2020. Thus, an increase in production is required in order to re-establish the socio-economic base of the county. It should be once again noted that the 4,200,000 barrel threshold level is combined figures for all counties in the planning area.

For the BLM administered Washakie Resource area precise production records were not readily available. However, the Final RMP provided good information on Minerals Management such as:

- Approximately 117,800 acres, or 7% of the federal mineral estate, would be leased with a "no surface occupancy" restriction to protect important wildlife habitat, and cultural and recreation sites.
- Approximately 953,500 acres, or 60% of the federal mineral estate, would be leased with seasonal restrictions to protect important wildlife habitat.
- Approximately 520,500 acres, or 33% of the federal mineral estate would be leased with other standard surface protection restrictions applied.

The county has been experiencing steadily declining oil/gas production, population loss, aging in place and is a distressed community. The threshold which the county establishes for the

Washakie Resource area and the potentially combined Washakie/ Grass Creek RMP is intended to reduce the total lease restrictions and land withdrawals as a mechanism of sustaining and/or reestablishing the all-important mineral base of the county's economy. Therefore, the following goal is proposed:

For purposes of the Washakie/Grass Creek Resource Management Plan revision(s), a net reduction of 20% in lease restrictions and land withdrawals is deemed essential by the county in order to sustain the custom, culture, general welfare, and socio-economic structure of Hot Springs County.

Wyoming Oil and Gas Conservation Commission

The Wyoming Oil and Gas Conservation Act was established in 1951 and through this act, the Wyoming Oil and Gas Conservation Commission (WOCGG) was established with the role to regulate oil and gas. WOGCC is charged primarily with preventing the waste of oil and gas and protecting correlative rights for Wyoming. The WOGCC works with many other agencies in the state that play a role in providing a balanced approach for the oil and gas industry and Wyoming. WOGCC's mission is to regulate oil and gas activities in a manner that ensures responsible development and management of Wyoming's oil and gas resources and provides appropriate environmental stewardship for Wyoming citizens (WOGCC, n.d.).

4.4.1.3 Oil and Gas Resource Management Objectives:

A. The responsible extraction of oil and gas within Hot Springs is encouraged by the agencies and done so efficiently.
B. Federal and state agencies coordinate with Hot Springs County ensuring the county is a part of any decision-making process regarding oil and gas development which impacts its cultural and economic stability.
C. Reclamation is completed in a timely manner and protects existing uses on the land.
D. Oil and gas resources within Hot Springs County are developed in a manner that protects other preexisting multiple uses.

4.4.1.4 Oil and Gas Priority Statements:

1. Hot Springs County should be informed of all potential uses of county roads and resources from oil and gas activities and associated impacts to those resources on an annual basis.
2. Coordination among the various federal and state agencies should occur to facilitate hydrocarbon production permits in a timely manner, as prescribed in federal law.
3. Federal agencies should pursue opportunities to encourage the nomination of more leases for sale and continue holding lease sales and awarding leases on Hot Springs County lands at least quarterly as is required by the Mineral Leasing Act.
4. Federal and state agencies should prioritize approval of secondary and enhanced (tertiary) recovery methods where possible (e.g., fluid, gas, and steam injection) to extend the production life of a field while maintaining air quality and available water for agricultural and domestic use.

5. Federal and/or state agencies should support the use of enhanced oil recovery and transportation infrastructure (e.g., carbon dioxide pipelines, processing plants, steam flood facilities).
6. Federal and/or state agencies should allow nonnative seeding where appropriate and beneficial in reclamation plans for oil and gas areas.
7. Federal and/or state agencies should coordinate with Hot Springs County and other surface land users regarding the development and reclamation of oil and gas infrastructure to maintain preexisting uses.
8. Federal and/or state agencies should support mitigation plans for energy projects that will minimize habitat loss and fragmentation or degradation of habitat values. The amount and location of mitigation should correspond to the quantity and quality of the habitat at risk and should be conducted locally.
9. In instances of split estate minerals, federal agencies should ask for input from the surface owner and take the surface owner's requests into great consideration when developing a surface use plan.
10. There should be clear standards when setting forth "good faith negotiations" when an operator is negotiating a surface use agreement with a surface owner.
11. Baseline water testing should be completed before a proponent is issued a permit for development within Hot Springs County.
12. Federal and/or state agencies should work with local agricultural producers, Conservation Districts, and Hot Springs County to ensure mitigation for oil and gas development is done properly and locally.
13. Federal agencies should coordinate with the Wyoming Oil and Gas Conservation Commission in the designation of drilling and spacing units.
14. Road use agreements should be made with Hot Springs County for all oil and gas permits within the county.
15. Federal agencies should facilitate reclamation and mitigation of lost or decreased forage resources that occur because of surface disturbance from oil and gas, utilities, and recreation.
16. Hot Springs County encourages minimization of conflict between surface owners and mineral owners/lessees and supports the process for entry upon land for oil and gas development as required by Wyoming Statute § 30-5-402.
17. Hot Springs County encourages negotiation of surface use agreements on split estates and support siting of oil and gas facilities off private land, unless otherwise agreed by surface user.

4.4.3 Renewable and Alternative Energy

4.4.3.1 History, Custom, and Culture

Hot Springs County does not have an extensive history or culture associated with renewable energy. The county understands that the development of renewable energy is a component of energy infrastructure development. Wyoming does not have a renewable portfolio standard goal to generate a certain amount of the state's electricity from renewable energy (National Conference of State Legislatures, 2019).

Renewable energy is defined as "an energy source that is not depleted when used, such as wind or solar power; useful energy that is collected from renewable resources which are naturally replenished on a human timescale, including carbon-neutral sources like sunlight, wind, rain, tides, waves, and geothermal heat." (Oxford Dictionary)

Scientific studies from groups like the United States Department of Energy's National Renewable Energy Laboratory (NREL) and The Solutions Project indicate Wyoming's most prevalent sources for renewable energy include, wind, solar and geothermal energy. These studies only concern large-scale commercial wind farms, solar fields, and geothermal heat development. They are not intended, nor should they be interpreted, to address private property issues or rights of private property owners.

Wind Energy

Wind power is the use of wind energy to provide mechanical power through wind turbines to turn electric generators for a sustainable, renewable source of electric power. Wyoming has the eighth highest wind power potential of any state in the United States, at an estimated 472,000 MW. As of 2019, Wyoming's installed wind capacity was only 1,589 MW (generating 9.85% of electricity production) with an additional 3,752 MW under construction.

Wyoming's geography of high-altitude prairies with broad ridges makes the state an ideal site for the development of wind resources. Additionally, Wyoming's development potential includes transmission capabilities, the high energy needs of nearby population centers, high public support of wind power development in the state, and the historical significance of energy sectors to the state's economy.

In a 2014 study conducted for the Wyoming Infrastructure Authority, NREL found the economic benefit of transmitting wind energy from Wyoming to California energy markets was likely to exceed the cost. Wyoming wind energy capacity nearly doubled in 2020, ranking second nationwide behind Texas in new wind capacity added in that year's fourth quarter. The potential for additional revenue to Hot Springs County from royalties and taxes could help diversify and stabilize the county's economy.

At its discretion, Hot Springs County expects to be an equal cooperating agency in any state and federal process relating to large-scale wind farm development. Issues to be considered that may be affected by renewable energy development may include, but not be limited to: siting (aesthetic and wildlife concerns); technologies to prevent wildlife collisions and other harms; restoration of developed areas, including the use of native plants; and other concerns. The County requires all proposed wind farms to abide by Audubon Society siting recommendations, in addition to federal and state regulatory requirements and mitigation. There are currently no existing commercial wind farms or proposals in Hot Springs County.

Solar

Solar power is radiant energy (light and heat) emitted from the sun that is converted into thermal or electrical energy.

At its discretion, Hot Springs County expects to be an equal cooperating agency in any state and federal process relating to solar development. County requires all proposed solar projects to abide by to federal and state regulatory requirements and mitigation. There are currently no existing commercial solar fields or proposals in Hot Springs County.

4.4.3.2 Resource Assessment and Legal Framework

New development of renewable and alternative energy in Hot Springs County needs to be considered on the basis of expanding existing available energy infrastructure.

The BLM authorized renewable and alternative energy projects on public lands using a right-of-way grant under Title V of FLPMA. The BLM requires project developers to submit bonds in an amount that the agency has determined will be adequate to cover the potential costs for hazardous liabilities, decommissioning, and reclamation of the project site, should the developer be unable or unwilling to conduct those activities. Currently, the BLM requires a minimum bond of $2,000 per wind energy test site and $10,000 per wind turbine. There are currently no minimum bond amounts for solar energy projects. (BLM, 2015a)

Hydrogen Power

Hydrogen is another alternative energy source that provides a lot of opportunity in Wyoming and Hot Springs County. Hydrogen is a naturally occurring element and can be produced from a variety of sources including fossil fuels, water, and biomass and is used as an energy or fuel source with zero greenhouse gas emissions. There are two methods for producing hydrogen, “green hydrogen” is hydrogen that is produced from water via electrolysis using renewable energy sources, whereas “blue hydrogen” refers to hydrogen sourced from a fossil fuel base combined with technology that captures carbon released in the production process. Extracted hydrogen can have a variety of uses including fuel cell technology; zero-emission fuel for vehicles, airplanes, water transport, and space rockets. It can be blended with natural gas to reduce greenhouse gas emissions; feedstock for ammonia and urea production; long-duration energy storage; and zero-emission process fuel for industrial applications like steel and cement manufacturing. (Wyoming Energy Authority, 2021)

Hot Springs County has the opportunity to expand into the hydrogen power market if it made sense both from an economic and custom and culture standpoint in the county. The natural resources in the county along with the fossil fuels provide an opportunity for Hot Springs County to provide both green and blue hydrogen should they wish.

Carbon Capture

Carbon capture is a process that involves capturing, transporting, and storing greenhouse gas emissions from fossil fuel power stations, energy-intensive industries, and gas fields by injecting the captured greenhouse gases back into the ground. Carbon capture is not a zero-emissions solution, however it does reduce emissions. (Climate Council, n.d.)

New technology for carbon capture has been proposed as a pilot in Wyoming. The desire is that improved carbon capture technologies will make it more likely that Wyoming coal can be an important supply for electricity into the future. As coal has been a Wyoming staple for many years.

4.4.3.3 Renewable and Alternative Energy Resource Management Objectives:

A. Renewable energy resources within Hot Springs County are developed in a manner that protects other preexisting multiple uses and is done in coordination with Hot Springs County.
B. Reclamation is completed in a timely manner and protects existing uses on the land.

4.4.3.4 Renewable and Alternative Energy Priority Statements:

1. Federal and/or state agencies should consider the development of renewable and alternative energy in coordination with Hot Springs County and stakeholders.
2. The development of renewable and alternative energy projects should not use eminent domain and should protect private property rights.
3. Federal and/or state agencies should support renewable and alternative energy to further develop energy infrastructure and energy independence without encumbering the underlying mineral estate.
4. Reclamation should be planned and reviewed in coordination with Hot Springs County before projects are approved.
5. When evaluating renewable and alternative energy development and permitting agencies should consider possible effects on neighboring land uses and resources.
6. Wind and solar farms should be located on lands with high energy potential and low-value habitats such as previously disturbed lands or areas where impacts on native plant or wildlife species are minimal.
7. Solar farms should be located in areas where soil sterilization can be mitigated and in areas that do not affect agricultural production.
8. Federal and/or state agencies should consider the effects of renewable and alternative energy developments on other land uses and neighboring properties before approving any proposed projects.

4.4.4 Pipelines and Transmission Lines

4.4.4.1 History, Custom, and Culture

Due to the development of oil and gas within Hot Springs County, there has been significant development of oil and gas transmission pipelines throughout the County, primarily across the north-eastern portion of the county. Hot Springs County has long been a proponent of pipeline development. (WSGS, 2020)

For an interactive map of the county's pipelines refer to the Interactive Oil and Gas Map of Wyoming located https://main.wsgs.wyo.gov/

4.4.4.2 Resource Assessment and Legal Framework

Pipeline infrastructure plays a crucial role in the development and transmission of hydrocarbons at the national, state, and County levels. It is crucial that these avenues for transmission can thrive and develop within Hot Springs County. Pipelines offer a safe and effective means for delivering large amounts of hydrocarbons across extended distances with minimal risk for spills (Global Energy Institute, 2013).

There is very little federal regulation of most pipelines. Permitting for interstate natural gas pipelines and interstate liquified natural gas (LNG) pipelines fall under Section 7 of the Natural Gas Act and are reviewed by the Federal Energy Regulatory Commission (FERC), which also gives pipeline companies their national condemnation authority. However, the Natural Gas Act does not regulate oil or natural gas liquid (NGL).

The federal government has explicitly avoided drafting regulations concerning pipeline land-use issues. "Congress has failed to create a federal regulatory scheme for the construction of oil pipelines and has delegated this authority to the states" (*Sisseton-Wahpeton Oyate v. U.S. Dep't of State*, 659 F. Supp. 2d 1071, 1081 (D.S.D. 2009)("Generally, state and local laws are the primary regulatory factors for construction of new hazardous liquid pipelines.")). Even for gas pipelines, the FERC requires gas pipeline companies to comply with state and local regulations as a condition of their federal certificates (*See NE Hub Partners, L.P. v. CNG Transmission Corp*., 239 F.3d 333, 339, 346 n. 13 (3d Cir.2001) (concluding that the field of natural gas regulation was occupied by federal law, but that FERC required the gas company to comply with local regulations through conditions in certificate)). Thus, unless pipelines cross federal lands and trigger NEPA review, most interstate pipelines remain mostly unregulated by the federal government.

One aspect of pipelines that is federally regulated outside of federal lands is pipeline safety. In 1994, Congress passed the Pipeline Safety Act "PSA," 49 U.S.C. § 60101–60137, recodifying without substantive changes the Natural Gas Pipeline Safety Act of 1968 and the Hazardous Liquids Pipeline Safety Act of 1979. Among other things, the PSA expressly preempts state law concerning "safety standards for interstate pipeline facilities or interstate pipeline transportation" and delegates the authority to draft pipeline safety regulations to the Pipeline and Hazardous Materials Safety Administration (49 U.S.C. § 60104(c)).

However, regulations that concern a county's purview (the general welfare of its constituents) are not necessarily preempted if they indirectly affect pipeline safety (*See, e.g., Tex. Midstream Gas Svcs., LLC v. City of Grand Prairie*, 608 F.3d 200, 212 (5th Cir. 2010) (holding a setback requirement for compressor stations was primarily motivated to preserve "neighborhood visual cohesion, avoiding eyesores or diminished property value")). So that the regulations are not preempted by the PSA, the regulations must affect aesthetics or other non-safety police powers. *Id*. at 212; *see also, e.g., Am. Energy Corp. v. Tex. E. Trans., LP*, 701 F. Supp. 2d 921, 931 (S.D. Ohio 2010) ("The PSA does not preempt Ohio property or tort law."). Regulations directly

affecting reclamation, water crossings, cleanup, or other similar matters important to landowners that affect their environment would likely not be preempted by the PSA.

On January 19, 2021, the Wyoming State BLM Office finalized a decision for the Wyoming Pipeline Corridor Initiative. The decision neither analyzes nor authorizes any pipeline development or construction, rather it amends several Resource Management Plans to identify a pipeline corridor network. If a proponent submits a proposal to construct a pipeline within the corridor, the BLM would then do site-specific environmental analysis with further opportunity for public involvement (BLM, 2021).

The initiative designated almost 2,000 miles of corridors across private, state, and BLM-managed lands in Wyoming for potential pipeline development associated with carbon capture, utilization, and storage, as well as pipelines and facilities associated with enhanced oil recovery. The BLM's decision only applies to 1,111 miles located on public lands managed by the agency (BLM, 2021).

4.4.4.3 Pipeline and Transmission Line Resource Management Objectives:

A. Pipelines and transmission lines are developed within Hot Springs County efficiently without the use of eminent domain authority when possible and in coordination with Hot Springs County.
B. Federal and state agencies enforce that reclamation occurs in a timely manner.

4.4.4.4 Pipeline and Transmission Line Priority Statements:

1. Future and existing pipeline infrastructure for the transmission of materials in and through Hot Springs County should be developed and improved when it will not harm valid existing, and/or pre-existing uses or rights.
2. Hot Springs County supports efficient and timely decisions regarding pipelines and transmission lines so long as it does not harm pre-existing uses or rights.
3. Pipeline and transmission line development should be in the most appropriate route, avoiding sensitive habitats and conflicting existing uses, avoiding the use of eminent domain, and protecting future planned uses, regardless of land ownership, with a preference that pipelines and transmission lines are placed on public lands.
4. Reclamation should follow best management practices and be coordinated with surface users to maintain preexisting uses.
5. Hot Springs County should be regularly updated regarding all pipeline and transmission line right-of-way permitting by the managing federal agency.
6. Federal agencies should work with local agricultural producers, Hot Springs Conservation District, and Hot Springs County to ensure mitigation and reclamation is done properly and locally.
7. So long as expansion will not harm property rights, federal agencies should consider expanding pipeline and transmission line corridors when existing corridor limits are met.
8. All opportunities for exporting products out of the state (e.g., natural gas, oil, CO_2, etc.) should be considered to the maximum extent possible and allowed as a compatible use within the Wyoming Pipeline Corridor Initiative corridors.

9. Transmission lines should be routed around irrigatable agriculture lands and be adjacent to existing access routes where applicable and appropriate.

4.5 AIR QUALITY

4.5.1 History, Custom, and Culture

Air quality has always been of the highest standards in Hot Springs County, except for incidents such as fire. Most residents of the County have gone on record at various times as being opposed to cultivating any type of industry which would affect this quality. It is not only important to the health of the citizens but to the economy due to the aesthetic values sought by locals, tourists, and visitors.

Hot Springs County's air quality is of particular concern. Both natural and man-made sources of degradation can exist. Atmospheric inversions sometimes occur, especially in the Big Horn River valley. Dust from winds though minimal, can occur especially during times of drought. Smoke from natural and controlled fires occurring in forests, hills, and prairies have been of concern, and have been exacerbated by drought.

4.5.2 Resource Assessment and Legal Framework

Under the Federal Clean Air Act, the U.S. Environmental Protection Agency has the responsibility for setting and enforcing air quality standards. Much of the local enforcement is delegated to the Wyoming Department of Environmental Quality.

Open burning of field stubble and trash vegetation is a cultural tradition in the agricultural community. Controlled burning of standing vegetation for range improvement purposes is both traditional and sometimes an economic necessity. Smoke and dust created as a result of these activities intermittently degrade air quality. The County has a number of oil and gas production facilities, animal feedlots, other agricultural operations, and some light industry. Air quality can be affected by dust, smoke, and gases from these traditional and necessary operations.

The County relies upon a network of unpaved roadways on lands of many ownership types. These range from seldom-used unimproved "two-tracks" to improved gravel roads that carry significant traffic. Dust generated from these roadways can negatively affect air quality. Weed and pest management activity such as chemical spraying by both ground and aerial means may affect air quality and have human health consequences.

In Wyoming, local enforcement of many air pollutant regulations is delegated to the WDEQ (EPA, 2014). DEQ's Air Quality Division has established standards for ambient air quality necessary to protect public health and welfare; ambient air refers to that portion of the atmosphere, external to buildings, to which the general public has access (WDEQ, 2018b). WDEQ has also established limits on the quantity, rate, and concentration of emissions of various air pollutants from various sources.

4.5.3 Air Quality Resource Management Objectives:

A. Air quality is maintained at a high level to ensure the health and well-being of Hot Springs County's residents without the need for regulations or restrictive management decisions that would act as an impediment to economic development.
B. Air quality decisions are coordinated with Hot Springs County.

C. Protection of existing air quality is a major consideration in the review of plans for new industrial, commercial, and large-scale residential or agricultural projects within Hot Springs County.

4.5.4 Air Quality Priority Statements:

1. Harmful air pollution should be prevented without hampering normal family agricultural operations.
2. Hot Springs County encourages coordination with the Wyoming Department of Environmental Quality to pursue accurate scientific measurements for air quality.
3. Federal agencies should coordinate with Hot Springs County and the county's Road and Bridge Department to identify roads and road segments that have a dust problem and pursue dust control efforts which may include paving of roads.
4. Hot Springs County supports incentives for mitigating sources of air pollution over regulatory restrictions.
5. Should regulatory restrictions be deemed necessary, Hot Springs County expects those regulations to be implemented on terms and conditions that will not be invasive of the rights of individual property owners, but only for the public's health, safety, and welfare.
6. New uses or changes in existing land uses, which would tend to cause a significant deterioration of existing air quality, without satisfactory mitigation, shall be discouraged.
7. Existing activities shall be encouraged to improve management and practices in support of higher air quality.
8. Federal, state, and local agencies should coordinate with Hot Springs County to educate the public on the value burning plays in agricultural operations and wildlife enhancement and to develop best management practices concepts and applications for controlled burning of vegetation.
9. Hot Springs County encourages state and federal agencies to use prescribed burns as a means of weed and pest control.
10. Hot Springs County expects to be involved in planning for prescribed burns to mitigate potential wildfire threats and degradation of air quality and will work to enhance interagency communication.
11. Hot Springs County will mandate that all of its entities and departments work with and communicate with both private and public interests regarding air quality.
12. Air quality degradation should be protected from non-area sources.
13. Field development plans should provide for air quality monitoring and data development should be coordinated with, and the findings provided to Hot Springs County.
14. All agencies should coordinate all air quality studies undertaken by or on behalf of a public land management agency or the Wyoming Department of Environmental Quality-Air Quality Division with Hot Springs County.
15. Hot Springs County does not support the designation of any Class 1 Air Sheds. If congressionally mandated, the air shed should not exceed beyond the boundary of the land designation.
16. Federal and state agencies should acknowledge that wood-burning is necessary for the welfare of Hot Springs County's citizens and should be maintained as an acceptable activity.

4.6 CLIMATE CHANGE

4.6.1 History, Custom, and Culture

Hot Springs County relies heavily upon agriculture and livestock to support the local economy. Climate change, including increased temperatures, reduced precipitation, and changes in airflow have the potential to drastically affect agriculture and the economy of Hot Springs County. The increased occurrence of severe fires over the past decade has led to reduced air quality and various health issues across Wyoming. Hot Springs County is committed to preserving the health of its citizens and its economy and, as such, is calling for cooperation and open communication with federal agencies when assessing the effects of proposed federal actions within Hot Springs County.

4.6.2 Resource Assessment and Legal Framework

Climate change has been defined as a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods. Climates are defined by long-term patterns of temperature, humidity, atmospheric pressure, precipitation, and airflow generally over years, decades, and/or centuries.

NEPA-compliant documents may include the following analyses of the proposed action regarding climate change: (1) the extent to which the proposed action and all reasonable alternative(s) contribute to climate change through greenhouse gas (GHG) emissions; (2) the effect of a changing climate over the life of the project on the proposed project including flooding considerations and changes in precipitation; and (3) implications of climate change on the proposed project including cumulative impacts to resource availability.

Under NEPA, federal agencies are required to consider direct, indirect, and cumulative effects when analyzing any proposed federal action and its environmental consequences. When assessing direct and indirect climate change effects, agencies must reasonably account for "connected" actions, subject to limits based on feasibility and practicality. In addition, federal agencies are required to analyze emissions from activities that have a reasonable nexus to the federal action (e.g. cumulative actions), such as those activities that may be required either before or after the proposed action is implemented (National Environmental Policy Act 1969, 1969).

4.6.3 Climate Change Resource Management Objectives:

A. Hot Springs County is coordinated and consulted with when analyzing the climate effects of proposed actions within the county and its impacts on the economy, environment, and health of the citizens of the county.
B. Climate change analysis is conducted on a regional level that does not give deference to potential long-term effects of climate change compared to immediate harms that the decision may have to the community including economic impacts.

4.6.4 Climate Change Priority Statements:

1. When analyzing the impact, a decision may have on climate change, federal and state agencies should include quantitative scientific data that meet the credible data criteria, even if the data were not produced by a federal or state agency.
2. When making decisions based on climate change analysis, the data relied upon by the federal or state agency should be cited to and made available for public review.
3. The costs and benefits of any regulatory changes adopted to address climate change should be quantified.
4. Management decisions that are proposed primarily to regulate greenhouse gases through climate change analysis that could harm the local economy are not supported.
5. The collection, review, and evaluation of the economic effects of climate science data should be viewed and evaluated on a regional level rather than at a national level.
6. No project restriction for climate change should occur unless a direct link to global climate alteration is quantified through credible data.

CHAPTER 5: WATER RESOURCES

5.1 WATER RESOURCES OVERVIEW

5.1.1 History, Custom, and Culture

Hot Springs County is made up of arid to semi-arid terrain with all surface drainages tributary to the Big Horn River which flows north through the mid-section of the county. Various small creeks flow into the river from the east and west. These creeks originate from the Big Horns to the east, the Owl Creeks to the south, and the Absarokas to the west. The Wind River, becoming the Big Horn River just south of Thermopolis, provides water for valley irrigation and the communities of Thermopolis, East Thermopolis, Hot Springs State Park, Red Lane, Lucerne, and Kirby. The quantity of these waters is limited. The Wind River/Big Horn provides recreational use of boating/rafting, photography, hiking, fishing, and hunting in some areas.

Water is the key to agricultural pursuits–it is the key to life. Wyoming water rights are based on a first-come, first-served plan. The earliest water right, 1880, in the Big Horn Basin was filed at what is now the Ray Shaffer Ranch on lower Owl Creek. The hot mineral springs used for health and recreation and the federal dam projects of Anchor and Boysen have all affected the economy of the county. The Owl Creek, Lucerne, and Dempsey Canal irrigation districts were soon formed, with others to follow.

The semi-arid to arid climate (with 9-11 inches of rain annually) has made adequate water supplies extremely important to Hot Springs County. These supplies have affected the historical settlement and will determine future development.

5.1.2 Resource Assessment and Legal Framework

Hot Springs County's watersheds are diverse and dynamic. They consist of a variety of vegetation and topography, including uplands, floodplains, wetlands, channels, springs, lakes, and reservoirs. These watersheds continue to evolve under the influence of climate, floods, landslides, erosion, and human land use. Healthy watersheds contain forests that are in good health, have minimal weed infestations, functioning riparian areas, rangelands and forests with a variety of vegetation, and valleys that support agricultural operations and urban developments. Healthy watersheds provide recreation opportunities for residents and visitors, serve cultural needs, and provide habitat for native plants, wildlife, and fisheries.

Adequate water supplies have affected the historical settlement of the county and will also determine future settlement. Although not enough precipitation falls in the warmer months for adequate natural growth of crops, most of the county’s water supply is accumulated in the mountains in the form of winter snow. The Big Horns, Owl Creeks, and Absaroka mountains contribute water to Hot Springs County. Hot Springs County is within the Wind/Bighorn River Basin (Wyoming State Geologic Survey, 2020). Refer to Map 8 below for watersheds in Hot Springs County.

Preservation of watersheds remains a crucial issue in Hot Springs County. The construction of the Boysen and Anchor dams has played an important role in the economy of the county. Although Anchor has not lived up to its full potential, it has changed the agricultural usage of water on Owl Creek and the Lucerne Valley. Water availability has historically been the driving force for homesteading and development in the county.

In 2011 construction began on a water line bringing Big Horn Regional domestic water service to the Town of Kirby and the Lucerne Water & Sewer District. Construction of this Element 10 project was completed in 2012.

A number of entities participate in water resource issues impacting Hot Springs County. Some of them are as follows:

- Wyoming Department of Environmental Quality
- Wyoming Water Development Commission
- Wyoming State Engineer's Office
- Wyoming Game and Fish Department
- Wyoming Oil and Gas Commission
- U.S. Bureau of Reclamation
- U.S. Bureau of Land Management
- United States Forest Service
- U.S. Department of Agriculture
- U.S. Bureau of Indian Affairs
- Hot Springs County Conservation District
- Owl Creek Irrigation District
- Lucerne Pumping Plant Canal Company
- Lucerne Water & Sewer District
- Hot Springs County Natural Resources Planning Committee
- Kirby Ditch Irrigation District
- Owl Creek Water District
- Town of Thermopolis
- South Thermopolis Water & Sewer District
- Town of Kirby

5.1.3 Water Overview Resource Management Objective:

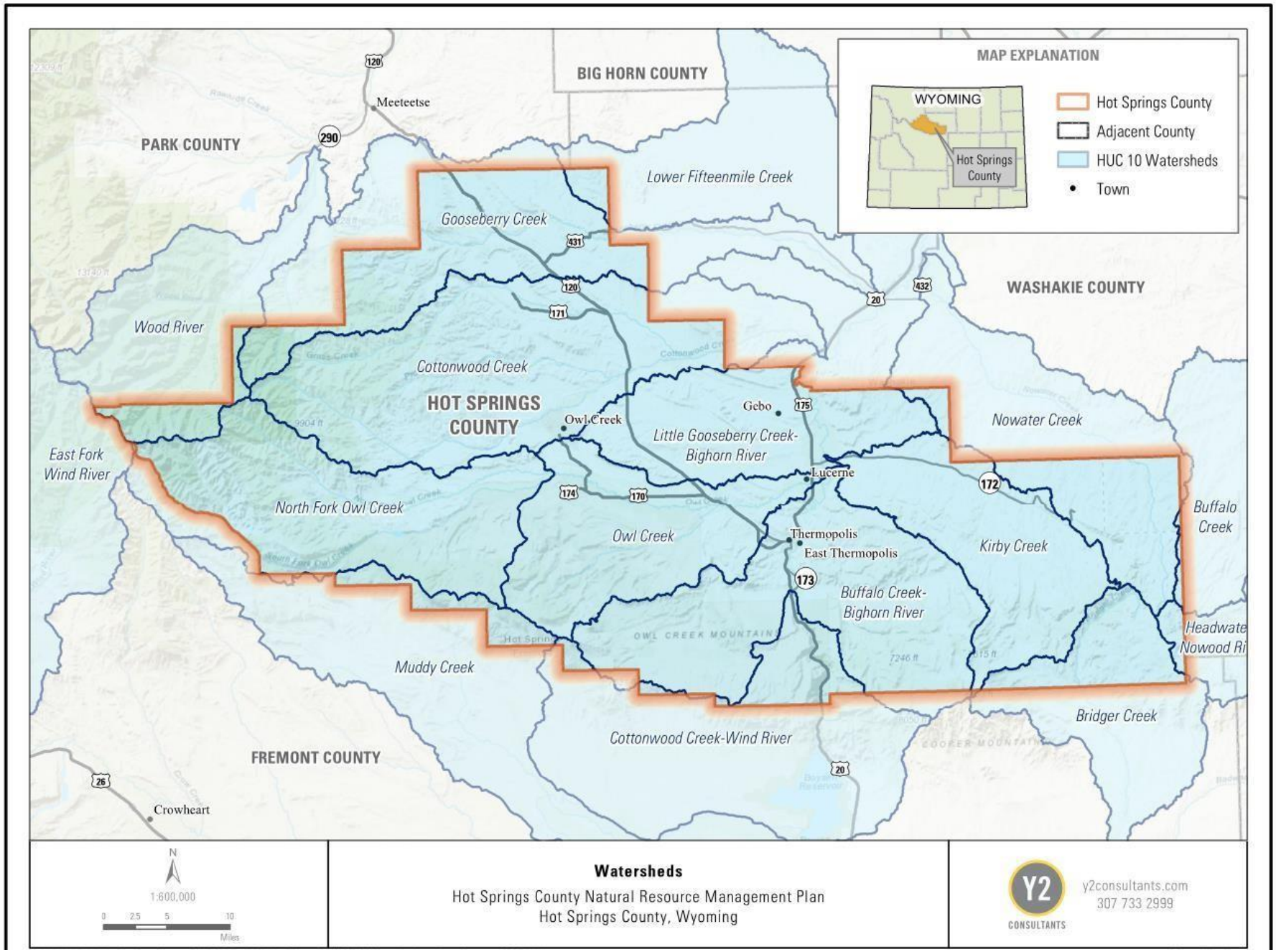
A. Hot Springs County water resources are protected and existing and future uses are preserved.
B. Hot Springs County is consulted and coordinated with regarding water resources within the County.

5.1.4 Water Overview Priority Statements:

1. Hot Springs County supports monitoring programs for water quantity and quality.

2. Hot Springs County supports the development and construction of water storage, treatment, and transportation infrastructure on public lands.
3. Hot Springs County supports the better usage of water, and the development of more economical means of recycling water for municipal, industrial and agricultural uses.
4. When applicable, federal agencies should encourage and allow consumptive water right owners to improve water quality and water-use efficiency to provide additional water for economic development and agriculture.
5. Federal and/or state agencies should support the recreational and consumptive use of water to support the local economy.
6. Federal and/or state agencies should support policies to improve groundwater health for consumptive use.
7. Any policies or management decisions that will restrict water rights holders from accessing or using their water right is not supported by Hot Springs County.
8. When making management or regulatory decisions, federal agencies should consider Wyoming's Constitution which declares that the waters of all natural streams, springs, lakes or other collections of still water within the boundaries of the State are the property of the State which can be appropriated by individuals and corporations.
9. Hot Springs County requests to be a cooperating agency in any regulatory determination or process involving water resources, surface and subsurface, within its borders.
10. Hot Springs County expects that any regulatory agency which may lawfully require rules, without county involvement, inform the County as to any impact it may have; e.g., suspension of a water discharge permit as a by-product of oil production.
11. Hot Springs County encourages the efforts of the U.S. Bureau of Reclamation and the Owl Creek Irrigation District to solve the sinkhole problems at Anchor Dam.
12. Protecting and supplying potable water to Hot Springs County residents should be a top priority for agencies in the county.
13. Federal agencies should help to preserve the quantity and quality of water in cooperation with local, state, regional, and other federal authorities.
14. Federal agencies should enter into mutual cooperative agreements and memorandums of agreement with Hot Springs to assure that changes in land use brought about by water projects sustain local custom and culture, while enhancing the economic and aesthetic quality of life of county residents.
15. Proposals or efforts to modify the watersheds, natural vegetation, or prevailing climate patterns as a means of transferring and increasing water supplies to the detriment of county residents, wildlife, vegetation and quality of life are opposed by Hot Springs County.
16. Any future well drilling, including but not limited to agricultural, road construction, drainage projects, and mineral projects on public lands in Hot Springs County must take into consideration their effects on public as well as private water sources.
17. Hot Springs County encourages the Wyoming Water Development Commission to develop water storage on the Big Horn River and its tributaries on lands of the least beneficial use. Prime irrigated "bottom lands" are to be avoided even at additional cost.
18. Permitting agencies should coordinate with the Hot Springs Conservation District when making determinations as to when groundwater should be considered a point source

19. The Wyoming DEQ should hold primacy in determining whether groundwater is a point source.
20. Pollution sources traditionally exempt from regulations under the Clean Water Act should not be regulated when it enters groundwater that may be determined to be a point source



Map 8. Watershed boundaries within Hot Springs County (WWDC, 2018).

5.2 WATER RIGHTS

5.2.1 History, Custom, and Culture

Early water rights permit for uses of water in Hot Springs County were for irrigation, livestock watering, and domestic use in homes of ranchers and farmers. It is those industries that generated most of the early settlement in the county and started the development of much of the custom, culture, and growth and development within the county.

5.2.2 Resource Assessment and Legal Framework

Wyoming water laws and statutes are governed by Article 8 of the Wyoming Constitution and Title 41 (Wyo. Stat. § 41-1-101 et. sec. and WY CONST Art. 8). By Wyoming law, all surface and groundwater belong to the State of Wyoming (WY CONST Art. § 8). The Wyoming State Engineers Office (WSEO) is responsible for the management of these waters and protecting existing water rights and resources.

Wyoming is a Prior Appropriation Doctrine state, meaning that water rights are established by actual use of the water, and maintained by continued use and need (Wyo. Stat. § 41-3-101). Wyoming prioritizes water uses as "preferred uses" and all other uses (Wyo. Stat. § 41-3-102.). Preferred uses include "rights for domestic and transportation purposes, steam power plants, and industrial purposes." *Id*. Preferred uses have the right of condemnation against all other water uses and those lesser preferred uses. *Id.* Wyoming ranks uses in the following order: (1) water for drinking purposes for both man and beast; (2) water for municipal purposes; (3) water for the use of steam engines and for general railway use, water for culinary, laundry, bathing, refrigerating (including the manufacture of ice), for steam and hot water heating plants, and steam power plants; and (4) industrial purposes.

In Wyoming, a water right is a right to use the water of the State of Wyoming, when such use has been acquired by the beneficial application of water under the laws of the state relating thereto, and in conformity with the rules and regulations dependent thereon. Beneficial use shall be the basis, the measure, and limit of the right to always use water. Thus, in Wyoming, a person must (1) obtain a permit; (2) demonstrate a beneficial use; and (3) use the water in conformity with the permit to have a valid water right (Wyo. Stat. § 41-3-101). Wyoming case law also generally holds that water rights are appurtenant to the land and the means of conveyance of the water (i.e., ditches, pipes, and conduits) pass with the transfer of the land (*Toltec Watershed Improvement Dist. V. Associated Enterprises, Inc.*, 829 P.2d 819 (Wyo. 1992); *Frank v. Hicks*, 35 P. 475 (Wyo. 1894)). Wyoming also allows for a temporary change in water use of a currently valid water right for up to two years with approval from the WSEO, so water right users may transfer their water rights for other uses on a temporary basis (Wyo. Stat. § 41-3-110.). Although all surface and groundwater in Wyoming belong to the state, water rights are considered a property right that can be conveyed or reserved in the same manner as real property. Thus, water rights are widely accepted as property of the holder and can be protected under the 5th and 14th Amendments of the United States Constitution when taken through regulation (*See Klamath Irrigation Dist. v. United States*, 113 Fed. Cl. 688, 691 (2013)).

Instream Flow

Instream flow refers to water flowing in streams. An instream flow water right refers to the legal means to protect water in streams for the benefit of fish based on the same laws used for other kinds of water rights. In 1986, legislation was passed that managed water in stream channels for fish as had been allowed for uses of water out of the stream. Wyoming Statute §§ 41-3-1001 to 41-3-1014 identifies instream flow as a beneficial use of water and requires the Wyoming Game and Fish Commission to identify opportunities to protect or restore flows. The WGFD has not filed instream flow water rights on waters within Hot Springs County. Those stream segments that have been filed for across the state can be found on the map provided here along with additional information. Most instream flow filings have been on important recreational streams, as well as streams harboring habitat for populations of brown trout and cutthroat trout. More recently, priorities have been on streams in the Yellowstone and Snake River cutthroat trout groups (Robertson, 2011).

5.2.3 Water Rights Resource Management Objectives:

A. Existing water rights are protected within Hot Springs County.
B. Federal and state agencies coordinate with Hot Springs County whenever a management decision or regulation seeks water rights for agency use or could harm existing water rights.
C. Beneficial and preferred uses under Wyoming statute are maintained and protected and Wyoming State water law and policy are supported for all Wyoming waters.

5.2.4 Water Rights Priority Statements:

1. Wyoming State water law is the legal basis for all water use within Hot Springs County.
2. Hot Springs County does not support any new interstate water compacts, trans-basin diversions, or interstate water transfers.
3. Water rights should be recognized as a private property right that may be owned by the water user separately from the federal agency.
4. Federal and/or state agencies should notify and coordinate with Hot Springs County if the agency plans to apply for an in-stream flow permit.
5. All instream flow designation filings by any entity should provide notice to Hot Springs County in a timely manner as per State Statute.
6. Hot Springs County supports collaborative processes between water rights holders to improve the entire system and federal agencies should participate in these processes when applicable.
7. Federal agencies should never attempt to condition an exaction of water rights. It is the position of Hot Springs County that requiring a water user to allow in-stream flows or not fully utilize their water right in exchange for a right of way, ditch permit, or maintenance access, or as a condition precedent of any permit, is an exaction.

5.3 IRRIGATION AND RELATED INFRASTRUCTURE

5.3.1 History, Custom, and Culture

Only 15% of the State of Wyoming has a positive water balance, where the average annual precipitation exceeds the annual evapotranspiration. This climatic characteristic of the state has driven the need for and development of irrigation infrastructure over the years. Irrigation has been and will continue to be an important resource for the development of agriculture and the county (States West Water Resources Corporation & WWDC, 2001; WWDC, 2006).

Unfortunately, Hot Springs County is characterized by very limited sources of drinking and irrigation water. The use of surface water represents much more than a historical footnote. For many years, the fortunes of the local economy turned on how much water was in the Big Horn River.

5.3.2 Resource Assessment and Legal Framework

Within Hot Springs County, there are two major irrigation districts: Owl Creek and Kirby Ditch (MWH Americas et al., 2010). The 2017 Agriculture Census listed 14,809 acres of the County as irrigated (NASS, 2017).

According to the USGS Water Resources Report, irrigation influences the flow rates and timing of both perennial and ephemeral streams in the County. Return flow from irrigation can maintain flow for longer periods in naturally ephemeral streams. During non-irrigation seasons both perennial and ephemeral streams in irrigated areas can experience low flows or no flow at all. The use of reservoirs for retaining irrigation water can lower peak flow rates in systems downstream. This water retention can also extend how long spring and early summer runoff is held in the system before being released downstream. This can extend the season prior to low flow and increase low flow rates during the non-irrigation season for downstream systems. An example of this is how the dam at Boysen Reservoir regulates the Bighorn River flow for irrigation supply. The result is peak and low flows that are more moderated; this decreased flow fluctuation can influence the ecology of downstream fisheries and habitats. (Plafcan et al., 1993)

Additional information regarding irrigation acres, conveyance, and capacity can be found in the Wyoming Water Development Commission Irrigation Survey System Reports (Wyoming Water Development Office, 2019).

5.3.3 Irrigation and Related Infrastructure Resource Management Objectives:

A. Irrigation and water systems are developed and managed to ensure future access to irrigation, water, and to promote the health and longevity of Hot Springs County's water systems and supply.
B. Current and future irrigation rights-of-way are protected and considered a property right to ensure that irrigation infrastructure is maintained.
C. Federal and/or state agency mandates and management actions governing or affecting water or water systems are developed in coordination with Hot Springs County.

5.3.4 Irrigation and Related Infrastructure Priority Statements:

1. Support the development, improvement, maintenance, and continued use of efficient irrigation methods and related infrastructure.
2. Hot Springs County supports working with appropriate partners and agencies to promote the efficient delivery and use of irrigation water to maintain quality, improve quantities, and protect historic uses.
3. Hot Springs County supports the development of downstream and off-stream storage facilities that would allow excess spring runoff to be captured and used later in the growing season.
4. Historical irrigation ditch rights-of-ways through federal and/or state lands, whether permanent or requiring periodic renewal should be continued and protected and any renewal of rights-of-ways for irrigation ditches should be done expeditiously with little impact to the historical use as allowed by law.
5. Federal and/or state agencies should allow ditch users to access and maintain their ditches unimpeded.
6. Federal and/or state agencies should coordinate with Hot Springs County and affected water rights users if it intends to enact rules, regulations, or management decisions that may interfere or affect a Federal Land Policy Management Act or 1986 Ditch Bill ditch right-of-way.
7. Hot Springs County supports the efforts of federal and state governments to investigate and promulgate more efficient types of irrigation.

5.4 DAMS AND RESERVOIRS

5.4.1 History, Custom, and Culture

Dams and reservoirs are located across Hot Springs County and are used for various functions, including storage for irrigation, recreation, municipal, flood control, stock water, wildlife, and fish propagation. The Wyoming Water Development Office's (WWDO) Dam and Reservoir Planning division works to promote dam and reservoir maintenance and improvement. Funding from the Dam and Reservoir Division account is available for the development of new reservoirs that are 2,000 acre-feet or larger, or the enlargement of currently existing reservoirs (minimum of 1,000 acre-feet increased capacity). Funding, when available through the State legislature, can also be used for Level I and Level II feasibility studies identifying possible water storage projects (WWDC, n.d.).

5.4.2 Resource Assessment and Legal Framework

The Wind/Bighorn River Basin Plan evaluates all reservoirs considered 'major reservoirs' within the surface water assessment. Major reservoirs are defined as reservoirs with equal to or greater storage capacity than 500-acre feet. Below is a description of the major reservoirs across the basins influencing Hot Springs County (WWDC, n.d.). The table below lists the WBB reservoirs within subbasins that fall within the County (Table 3) (MWH Americas et al., 2010).

Boysen Reservoir

Boysen Reservoir lies to the south of the County in Fremont County with significant water storage from the Wind River. The reservoir is a Bureau of Reclamation, Missouri River Basin project. Its primary purposes were to provide irrigation water, retention of silt during floods, make possible increased farm and home use of electrical power, and provide surplus power for industrial expansion. Over the years, Boysen Reservoir has produced additional benefits, including, improving fish and wildlife habitat, expanding recreational facilities, providing water for municipal and domestic use, and providing power for pumping irrigation water. By law, the Bureau of Reclamation manages the water in Boysen Reservoir in accordance with Wyoming water law. The operating agreement entered into at the time the reservoir was built, provides for the allocation and distribution of water for downstream interests which necessarily includes canals and ditches across public lands.

Water stored in Boysen Reservoir is conveyed through the Wind River Canyon and the Big Horn River. Irrigation works are under the jurisdiction of various agencies and local districts, which are responsible for conveying the water from the river to the farm fields through ditches and sprinkler irrigation units. One concern during drought years has been the habitat for fish when the river has become very low. This can have a detrimental effect, not only on resident fishermen but on the economics of the town due to the absence of non-residents who come here to fish the canyon and the Big Horn River.

Anchor Dam

Anchor Dam was constructed on the south fork of Owl Creek in the western portion of the county by the Bureau of Reclamation. The gates were closed on November 21, 1960. Its current effective capacity is approximately 1/3 of its design capacity because of sinkholes. It was built primarily to serve the agricultural needs in the Owl Creek Valley, with those users in the lower valley "trading" their rights to those in the upper and middle valley in exchange for water pumped from the Big Horn River. The Owl Creek irrigation project has not reached its full benefit due to the sinkholes and leakage in Anchor Reservoir. Currently, a means to alleviate this problem is being sought.

Table 3. Wind-Bighorn Basin reservoirs within Hot Springs County with more than 500 acre-feet permitted storage capacity (MWH Americas et al., 2010).

Sub Basin	Reservoir Name	Source	Use*	Permitted Capacity (ac-ft)
Owl Creek	Anchor Reservoir	S.F. Owl Creek	irr	17,412
	Thompson No.1 Reservoir	Owl Creek	irr	920

(*) dom - domestic, fis - fish propagation, flo - flood control. Ind - industry, irr - irrigation, mfg - manufacturing, mil - milling, mun - municipal, pwr - power, rec - recreation, RR - railroad purposes, sto - stock, wil - wildlife

5.4.3 Dams and Reservoirs Resource Management Objectives:

A. The integrity and safety of all dams and reservoirs within Hot Springs County are preserved.
B. Dams, reservoirs, and associated water sources are maintained, expanded, and/or developed within Hot Springs County, in coordination with the County, to enhance

beneficial uses of water within the State (e.g., agricultural, drinking water, wildlife, and recreational uses).

5.4.4 Dams and Reservoirs Priority Statements:

1. Federal and/or state agencies should coordinate with Hot Springs County before making any proposed change to reservoir or dam use that is different from the original design.
2. The primary use, as designated, for all reservoirs within Hot Springs County should be maintained so long as that primary use is consistent with Wyoming Statute preferred uses.
3. Federal and/or state agencies should proactively manage dams and reservoirs within Hot Springs County to maintain and enhance capacity and use.
4. Hot Springs County supports efforts to create new hydroelectric power plants where appropriate.
5. Privately held reservoir water rights shall be protected from federal and/or state encroachment and/or coerced acquisition or exaction, including but not limited to acquisition through exactions as a condition precedent of any permit.
6. Federal and/or state agencies should coordinate with Hot Springs County whenever new dams or water storage projects are being proposed which could affect existing water uses.
7. Hot Springs County should be coordinated in advance to any decision made regarding the regulation of water that comes out of Boysen Reservoir.

5.5 WATER QUALITY

5.5.1 History, Custom, and Culture

Water quality across Hot Springs County is important to the health and wellbeing of residents and those resources and communities downstream. Protection of water quantity and quality has enjoyed an elevated concern level in the County to such an extent that the Hot Springs Conservation District initiated the "Hot Springs County Groundwater Study" – Phase I in 1999. The June 2000 Final Report established the Hot Springs Protection Area Map and recommended ten (10) Best Management Practices (BMPs) which can be employed to protect groundwater resources. The protection area was established in order to monitor and protect the hot springs for which Hot Springs State Park and the Town of Thermopolis are widely known.

In 2012, the State of Wyoming pursued a Total Maximum Daily Load (TMDL) study for the Big Horn River and its designated tributaries, implementing an EPA mandate to determine the maximum amount of dissolved pollutant a stream can handle without exceeding the requirements of the Clean Water Act. This study was completed in late 2012 and adopted in late 2013.

Sanitation and private water well use have always been historic and cultural issues. Any future drilling for agricultural, road construction, drainage projects, or mineral purposes on public lands must take into consideration their effects on public and private water sources.

The Town of Thermopolis provides treated water from its Big Horn River water rights, including reserved storage capacity in Boysen Reservoir. Generally, household water for rural Hot Springs County, except for private wells, is currently served by the Town of Thermopolis treatment plant. This is either obtained by individuals through a pay station near the water plant, via the South Thermopolis Water and Sewer District, or via the Owl Creek Water District. The Lucerne Water and Sewer District and the Town of Kirby obtain treated domestic water from the Big Horn Regional Water System. Thermopolis also provides potable (treated) water to the Town of East Thermopolis, which draws its untreated irrigation water from the Big Horn River. Hot Springs State Park also receives treated water from the Town of Thermopolis. In 2012 the Town of Kirby and the Lucerne Water District were connected to the Big Horn Regional Rural Water Project Pipeline, bringing treated water from Worland to a point several miles north of Thermopolis.

5.5.2 Resource Assessment and Legal Framework

The EPA and WDEQ establish, administer, and monitor standards, policies, rules, and regulations for ground and surface water quality. Hot Springs County is in the northwest WDEQ District and EPA Region 8.

Clean Water Act

The Clean Water Act (CWA) is the federal regulatory mechanism that regulates surface water quality. The CWA gives the EPA and U.S. Army Corps of Engineers (USACE) regulatory jurisdiction over all "navigable waters" also known as "Waters of the United States or WOTUS." The CWA makes it illegal to discharge a pollutant from a point source into a navigable water unless a permit is obtained. The definitions surrounding what a "navigable water", or WOTUS has been of

controversy in the past several years and there is still some uncertainty as to what bodies of water constitute as WOTUS and what qualifies as a "point source." From the earliest rulemaking efforts following the adoption of the CWA in 1972 to the agencies' most recent attempts to define WOTUS in 2020, the lack of a tangible statutory definition has generated hundreds of cases spanning dozens of courts to ascertain the span of the EPA's jurisdiction (Federal Register Vol. 85, No. 77 22255 (April 21, 2020)).

Several changes have occurred to the CWA in recent years, a summary of those changes can be found in Appendix B.

Surface and Ground Water Quality

Surface Water

Wyoming surface water quality standards (WDEQ, Water Quality Rules and Regulations, Chapter 1) are developed within the sideboards of the CWA and the Wyoming Environmental Quality Act (WEQA). These standards include water quality criteria, antidegradation provisions, and designated surface water uses (WDEQ, 2018a). Policies for antidegradation were last updated in September 2013 and Surface Water Quality Standards were last updated in April 2018 and are reviewed triennially as per the requirements of the CWA (WDEQ, n.d.-c).

Surface water designated uses are assigned to Wyoming's surface waters through a hierarchical classification system. The uses that are protected on Wyoming waters include agriculture, fisheries, aquatic life other than fish, industry, drinking water, fish consumption, recreation, scenic value, and wildlife (Wyoming Water Quality Division, 2020). Designated uses assigned to surface waters and site-specific water quality criteria are revised on an ongoing basis. Changes to designated uses and site-specific criteria are based on a scientific evaluation, known as a use attainability analysis (UAA), considers public input, and is finalized through a formal determination by the Administrator of the WDEQ Water Quality Division (WQD) or formal adoption in Chapter 1. The UAA can be found at Wyoming DEQ/AQD website. Recreational designated uses have a Categorical UAA for recreation to identify low flow channels in the state where swimming or similar water contact activities are not attainable. The final determinations for recreation designated use changes were made final on September 1, 2016 (WDEQ, n.d.-c).

The surface water quality study entitled "Final Report: Owl Creek Water Quality Study" was submitted in July 2004. According to the document: "The purpose of this water quality study was to assess baseline water quality in the middle and lower Owl Creek drainage basin, particularly for fecal coliform bacteria levels at various sites." This study also sought to obtain additional water quality data for Owl Creek for parameters such as total suspended sediment (TSS), turbidity, total dissolved solids (TDS), dissolved oxygen, and select cations and anions during the sampling year 2003-2004.

Surface water runoff should be managed, including its use, deceleration to reduce erosion, storage, etc. This management of surface water must be in accordance with Wyoming Statutes.

The county has many producing oil wells, any number of which produce substantial quantities of water as a by-product. In some instances, the water by-product is discharged at the surface, and in other instances, it is re-injected in subsurface strata. The county also has oil fields in which water supply wells are drilled for source water in water-flood applications.

Groundwater Quality

There are significant subsurface water aquifers that provide water for domestic, agricultural, and industrial use throughout the county. The Wyoming Water Development Commission, in conjunction with the Town of Thermopolis, is exploring and testing water from a well drilled into the Madison formation southeast of Thermopolis. It is necessary to recognize that even deep wells are reliant on aquifers recharging from miles away and that these sources are entirely dependent upon weather/climate conditions.

More recently, Phase II of the Hot Springs County Groundwater Study was completed in June of 2004, it was prepared for the Hot Springs Conservation District, submitted to the Board of County Commissioners and the DEQ. It entailed a thorough sampling of 52 domestic use water wells in various parts of the County.

The WQD Groundwater Program works to protect and preserve Wyoming's groundwater by permitting facilities to prevent contamination, investigating, and cleaning up known releases.

The WQD Groundwater Pollution Control (GPC) Program tracks potential impacts to Wyoming's groundwater through evaluation of activities permitted at federal, state, and local levels. The GPC Program assists federal agencies with the NEPA process on large projects. This program assists private landowners with suspected contamination of their wells. The GPC Program evaluates the adequacy of water supply sources and wastewater collection and treatment facilities during subdivision applications to ensure groundwater will not be impacted (WDEQ, n.d.-a).

The Supreme Court recently opined that groundwater can be a point source to transfer pollutants to Waters of the United States when the groundwater is a "functional equivalent of a direct discharge..." (*County of Maui, Hawaii v. Hawaii Wildlife Fund,* 140 d. 1462, 1468 (2020)). To determine whether groundwater is a functional equivalent of a direct discharge, the Supreme Court clarified that "distance and time" to surface water are major factors in determining if a CWA permit is required for any groundwater discharges. *Id*. at 76-77. Thus, there can be some circumstances in which some groundwater discharges may require CWA permitting.

Impaired Waters

The CWA requires each state to submit a report to the EPA every two years that describes the status of its surface and ground waters. This report is known as the 305(b) Report, which includes an assessment of existing water quality in the state and an overview of past and proposed water pollution abatement efforts. Each state is also required under Section 303(d) of the CWA and 40 CFR part 130 to submit a Section 303(d) report which is a list of waters that are not attaining water quality standards and are not expected to meet state water quality standards even after application of technology-based controls for point sources or other control requirements, such

as BMPs for nonpoint sources of pollution. The 303(d) list is a subset of all the impaired waters listed in the comprehensive 305(b) report. Section 303(d) also requires that states develop a total maximum daily load (TMDL) for all waters on the 303(d) list. Waters must be prioritized for TMDL development based on the severity of each listing. Each state must submit a 303(d) list to EPA by April 1st of each even-numbered year, which then EPA reviews and approves or disapproves the 303(d) list within 30 days of submittal (WDEQ, n.d.-d). The most current 305(b) and 303(d) reports can be found on Wyoming DEQ/AQD website. The Conservation District within Hot Springs County actively works with stakeholders to achieve water quality improvements.

Hot Springs County has two reaches that are classified as impaired. Within the Wind/Bighorn Basin sections of the Owl and Kirby Creeks are listed. Refer to Table 4 below for details on impaired reaches within the County.

Table 4. Impaired waters listed for Hot Springs County (WDEQ, 2020).

River Basin	Waterbody	Class	Location	Miles	Impaired Use	Causes
Big Horn	Owl Creek	2AB	From the confluence with the Bighorn River to a point 3.8 miles upstream	3.8 Miles	Recreation	Fecal Coliform
Big Horn	Kirby Creek	2C	From the confluence with the Bighorn River to a point 21.9 miles upstream	21.8 Miles	Recreation	Fecal Coliform

Subdivision Review

Subdivision reviews are governed by Water Quality Rules and Regulations, Chapter 23 and Wyoming Statutes 18-5-301 to 315. The WQD Water & Wastewater Program (W&WP) works to ensure safe and adequate supplies of drinking water and the proper disposal of wastewater. Subdivision review requires that all WQD, W&WP, and GPC standards are complied with during the review, for approval, and during the construction of subdivisions. The Conservation Districts within Hot Springs County are mandated to review subdivisions within the unincorporated areas within the district boundaries. A subdivision review provides recommendations to planning and zoning staff, Commission, and County Commissioners of natural resource concerns specific to the development. The review is also an educational tool for land developers and future homeowners and can provide information from other agencies including Weed and Pest, Game and Fish, Office of Historic Preservation, and others. According to statute 18-5-306(b) a subdivision review should include soil suitability, erosion control, sedimentation, flooding concerns, septic systems, and other issues that are a concern to the District (i.e. noxious weeds, small acreage grazing/livestock management, wildlife concerns) (Star Valley Conservation District & WDA, 2020; WDEQ, n.d.-b).

5.5.3 Water Quality Resource Management Objectives:

A. Water quality management ensures the protection of water quality while balancing and protecting economic opportunities, existing uses, and the customs and culture of Hot Springs County.

B. Hot Springs County is consulted and coordinated with regarding water quality in the County.

5.5.4 Water Quality Priority Statements:

1. Federal agencies should recognize the experience other counties in the State of Wyoming had regarding the exploitation of coal bed methane, and the water used by coal bed methane operations and other water consumptive operations needs to be considered in any planning process to assure local health, safety, and general welfare considerations are protected.
2. Surface water runoff should be recognized on Bureau of Land Management lands as a resource available for livestock, wildlife, irrigation and domestic use (as per the Wyoming State Constitution) belonging to the State.
3. Federal and/or state agencies should create watershed best management practices (BMPs) to mitigate water pollution caused by heavy erosion and sedimentation from public lands under their management, and to work with local conservation districts in accomplishing these BMPs.
4. Hot Springs County opposes any action, inaction, or permitted use that results in a significant or long-term decrease in water quality or quantity.
5. Federal and/or state agencies should support projects that improve water quality and increase the quantity and dependability of the water supply.
6. Federal and/or state agencies should assist in protecting watersheds with respect to water quality with the assurance that water yield will not be decreased but improved.
7. Properly managed livestock grazing, timber harvesting, and other managed uses of watersheds should be supported that can positively impact water quality.
8. Hot Springs County should be consulted with regarding federal and/or state land management decisions that potentially impact on water quality, yields and timing of those yields; impacts on facilities such as dams, reservoirs, delivery systems, or monitoring facilities; and any other water-related proposal.
9. Land management actions and practices that contribute to or maintain healthy drainages and watersheds should be implemented.
10. Hot Springs County should be coordinated with to ensure that the management of watersheds, including municipal watersheds, meets the multiple use needs of residents and promotes healthy forests and rangelands.
11. Federal and/or state agencies should support reclamation activities on mined lands that improve soil productivity and water quality and the function of stream channels, floodplains, and wetlands for better productivity.
12. Roads, bridges, culverts, cut slopes, fill slopes, and artificial surfaces should be constructed and managed to minimize water concentration, erosion, and delivery of polluted water and sediment to streams.
13. All water quality plans and/or data undertaken by or on behalf of a federal and/or state agency should be coordinated with Hot Springs County and/or the Conservation District.

14. Only credible data that, at a minimum, meet the standards set forth in this Plan and meet the Federal Data Quality Act and legally collected should be recognized when assessing data and making any management decisions within Hot Springs County.
15. Federal and/or state agencies should be transparent in their decision-making and provide the source for all data relied upon for their analysis.

5.6 FLOOD PLAINS

5.6.1 History, Custom, and Culture

Flooding and floodplain management are important to the safety, economy, and ecological health of Hot Springs County. Flooding is a significant natural hazard within the state of Wyoming and can cause significant damage. From 1905 to the present there have been approximately $126.7 million in damages across the state from flood damage (University of Wyoming, n.d.). Between 1960 and 2015 Hot Springs County experienced seven flood events that incurred $2,097,906 in property damage. Hot Springs County's flooding risk category is listed as 'No Plan' in the Wyoming State Mitigation Plan. (Wyoming Office of Homeland Security, n.d.).

5.6.2 Resource Assessment and Legal Framework

Federal Emergency Management Agency

Multiple municipalities within Hot Springs County participate in the National Flood Insurance Program (NFIP). At the time this document was written the participating municipalities include Thermopolis, East Thermopolis, and Kirby (FEMA, 2020). Communities that participate in NFIP, and implement the floodplain management regulations, are eligible for the FEMA Community Assistance Program – State Support Services (CAP-SSE) (FEMA, n.d.-a)). The CAP-SSE provides support and funding for strategic planning, ordinance assistance, technical assistance, mapping coordination, state program and agency coordination assistance, and general outreach and training (FEMA, n.d.-a). Where CAP-SSE provides general preparedness funding, planning, and management the Risk Mapping and Assessment Planning (Risk MAP) projects develop high-quality maps and data to assess the factors contributing to increased risk of flooding in an area, and then develops plans to reduce risk (FEMA, n.d.-d). There are currently completed Risk MAP projects within Hot Springs County (FEMA, n.d.-c). For more information on flood hazard mapping within Hot Springs County refer to FEMA's National Flood Hazard Layer (NFHL) viewer (FEMA, n.d.-b).

The Executive Order 11988-Floodplain management, signed in 1977, was implemented to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative. Further information on this Executive Order can be found here.

5.6.3 Flood Plains Resource Management Objective:

A. Flood plains are managed proactively in coordination with Hot Springs County to ensure the health, safety, and welfare of all residents within Hot Springs County.

5.6.4 Flood Plains Priority Statements:

1. Support projects and encourage policies that manage stormwater, run-off, and flooding on public lands.
2. Hot Springs County shall be notified where potential flooding and stormwater run-off could impact the county, and on projects that could reduce or change the risk and impact of flooding in the county.
3. Federal agencies should coordinate with Hot Springs County when designating federal flood plains.
4. Emergency response regarding flooding should be coordinated with the Hot Springs County Emergency Response Coordinator.

5.7 RIVERS AND STREAMS

5.7.1 History, Custom, and Culture

Rivers and streams are important surface water resources for Hot Springs County. The county's surface water quality and health are integral to multiple industries, including livestock and crop production, recreation, and tourism. Surface waters are especially integral to forage irrigation and municipalities in the county.

The rivers within Hot Springs County have an extensive history associated with the development of the county. Early settlements and developments within Hot Springs County were focused along rivers and streams. These areas were important to the fur trappers as both areas for trapping and trade areas. Many rendezvous, yearly gathers of trappers, traders, Indigenous Peoples, and fur company men, were held in the Wind River Basin. (Tyrrell & States West Water Resources Corporation, n.d.).

5.7.2 Resource Assessment and Legal Framework

There are two major perennial rivers present within Hot Springs County. These are the Wind River and the Bighorn River, joined at Thermopolis. Refer to for a map of the major rivers and tributaries in Hot Springs County (National Wild and Scenic Rivers System, n.d.-b)

There are several ephemeral and intermittent streams within the county that are characterized by extended periods of no flow. Perennial streams, which originate in the mountainous regions, have sustained streamflow as a result of precipitation, low evapotranspiration, ground-water storage, and water stored as snowpack.

Wind River

Located in the Wind/Bighorn River Basin, many of the river's tributaries are located in Fremont County. The Wind River emerges from the Boysen Reservoir. After passing the Boysen Dam the river enters Hot Springs County and flows north through the Wind River Canyon. It becomes the Bighorn River at the Wedding of the Waters near Thermopolis.

Bighorn River

The Bighorn River emerges from the Wedding of the Waters at Thermopolis from the Wind River and continues flowing north. The river passes through Hot Springs County and continues flowing northward across Wyoming. The Owl, Cottonwood, Kirby, and Gooseberry Creek systems all merge into the Bighorn River within or just north of the county.

Interstate Water Compacts

An interstate water compact is an agreement between two or more states that is approved by those states' legislators and by the U.S. Congress. An interstate compact that receives the approval of Congress counts as federal law (*Kansas v. Nebraska,* 574 U.S. 445, 455 (2015)).

Yellowstone River Compact

Wind/Bighorn River is part of the Yellowstone River Compact. The Yellowstone River Compact divides waters of the tributaries of the Yellowstone River (Clarks Fork, Bighorn, Tongue, and Powder) among the States of Wyoming, Montana, and North Dakota. The compact was negotiated in 1950 and includes the following provisions:

- Existing rights as of January 1, 1950, maintain their status quo.
- Existing and future domestic and stock water uses, including stock water reservoirs up to a capacity of 20 acre-feet, are exempted from provisions of the Compact.
- Devices and facilities for the control and regulation of surface water are exempted from the provisions of the Compact (USGS, n.d.).

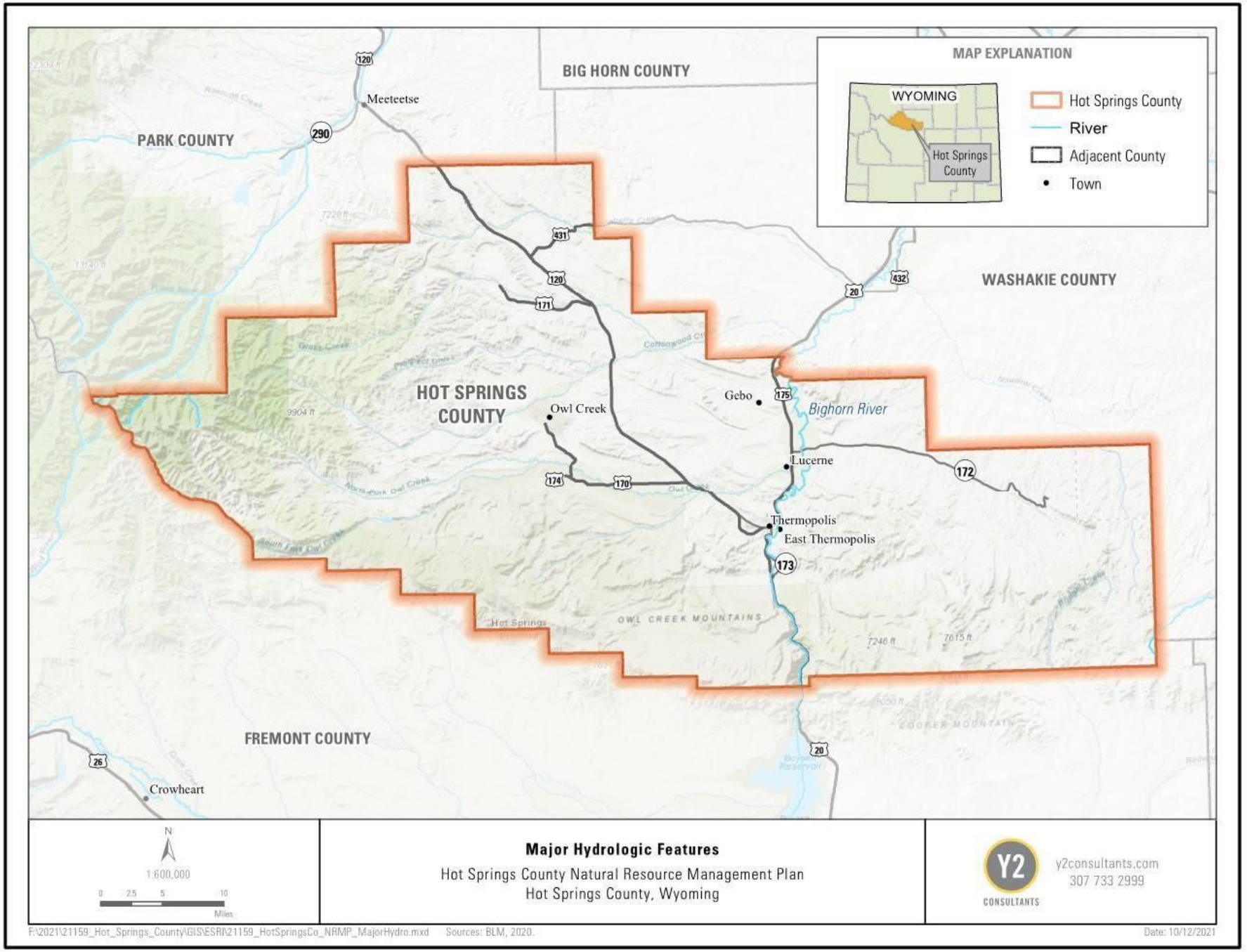
5.7.3 Rivers and Streams Resource Management Objective:

A. Rivers and streams are managed in coordination with Hot Springs County to maintain water quality, proper ecological functions, provide multiple use, control of flooding, preserve established water rights, recreation, agriculture, and industrial use.

5.7.4 Rivers and Streams Priority Statements:

1. Federal and/or state agencies should coordinate with Hot Springs County on projects and policies which improve or maintain the current ecological function of rivers and streams within the county.
2. Work with other river compact states and other federal agencies on developing, funding, and implementing a long-term water augmentation program.
3. Existing local water supply plans, land use plans, water quality plans, and other related documents adopted by local governments should be respected and federal agencies should closely review these documents when conducting consistency review.
4. Supplying and protecting water obligated to fulfill existing interstate water compacts and decrees should be prioritized.
5. Hot Springs County does not support any new interstate water compacts, changes to current compacts, proposed trans-basin diversions, or interstate water transfers that would divert water away from Hot Springs County.

6. Federal and/or state agencies should consult and coordinate with Hot Springs County if there are any plans for new interstate water transfers or trans-basin diversions that would affect Hot Springs County.
7. Federal and/or state agencies should help protect the recreational use and consumptive use of water to support the Hot Springs County economy.
8. Hot Springs County should be consulted on the Wyoming Department of Environmental Quality classification of waters within the county.



Map 9. Major hydrology of Hot Springs County.

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5.8 WETLANDS AND RIPARIAN AREAS

5.8.1 History, Custom, and Culture

Riparian and wetland areas only make up 4% of the state, however, they support over 80% of Wyoming's wildlife (Bureau of Land Management, 2016b). These areas are very important to the health and quality of watersheds and their ecological function. Riparian areas are characterized by vegetation that is adapted to the wetter environments along bodies of water and in seep/spring areas. These areas provide a buffer between open water and upland sites, protecting stream banks from erosion, maintaining stream channel morphology and water table access, filtering runoff sediment and nutrients, and improving stream habitat through lowering stream temperatures and increasing oxygen levels. Wetland areas filter sediment and nutrients, improve water quality, and play an important role in maintaining habitat. Riparian and wetland areas play large roles in a stream's ability to release energy from floods onto surrounding floodplain areas, greatly reducing flood damage downstream (WDEQ, n.d.-e).

5.8.2 Resource Assessment and Legal Framework

Riparian and wetland areas are an integral part of the health and resilience of water resources within Hot Springs County. Multiple anthropogenic processes can harm riparian and wetland areas. A few examples of activities that can degrade these ecosystems and their ability to function properly are urban and road development along streams and on floodplains, diversion of water, improper timber harvest, and improper grazing practices (WDEQ, n.d.-e; WGFD, n.d.-c). There are also multiple processes that if done correctly can have a positive impact on wetlands. Livestock grazing managed properly and in the right time of year can provide benefits to wetland areas by thinning vegetation to allow new growth and could be used as a weed treatment option (Clary et al., 1989; NRCS et al., 2006). Wetlands found within Hot Springs County can be found on the National Wetlands Inventory data map.

The Executive Order 11990 – Protection of Wetlands of 1977 was implemented to avoid, to the extent possible, the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. Further information on the Executive Order can be found here.

The Association of State Wetland Managers maintains resources regarding voluntary wetland restoration work, wetland programs, and law and policy. Federally, some wetlands are considered "Waters of the United States" and are protected under the CWA. The definition of wetlands protected under CWA have been specified further through the Supreme Court rulings in 1985 *Riverside Bayview*, 2003 *SWANCC* and 2008 *Rapanos* (ASWM, n.d.-a, n.d.-b). The EPA and USACE published CWA regulations in 2020 which established that only those wetlands adjacent to non-wetland jurisdictional waters fall under the CWA (40 C.F.R. § 120.2).

Monitoring and Management

Federal managing agencies monitor riparian-wetland areas using methods such as proper functioning condition (PFC), Winward Greenline, Rosgen Stream Classification, Stream Visual

Assessment Protocol, Rapid Stream-Riparian Assessment, PACfish/INfish Biological Opinion Monitoring Program, Geomorphic Road Analysis and Inventory Package, and modified Multiple Indicator Monitoring. All these methods assess the condition and health of riparian and wetland areas and give federal agencies an indication of the change of species composition, streambank alterations, woody species present and available, along with other riparian health considerations.

5.8.3 Wetlands and Riparian Areas Resource Management Objective:

A. Wetlands and riparian areas are maintained in a healthy and properly functioning condition in coordination with Hot Springs County.

5.8.4 Wetlands and Riparian Areas Priority Statements:

1. When the law requires mitigation of impacts projects, the creation of artificial wetlands should be considered only after all other mitigation possibilities have been analyzed.
2. The management goal of existing naturally occurring wetland areas should be to proper functioning condition.
3. Hot Springs County supports the use of responsible grazing and vegetation management as a tool to manage wetlands and riparian areas.
4. Federal and/or state agencies should manage riparian areas damaged by non-native species to decrease the impact of these species on the watershed, including water quality, and to restore the areas to proper functioning condition.
5. Irrigation-induced wet areas should not be classified as new jurisdictional wetlands.
6. Appropriate methods and practices to maintain and restore riparian areas to proper functioning condition should be used.
7. Credible data and scientific standards for wetland designation should be used by all managing agencies.
8. Only credible data that, at a minimum, meet the standards set forth in this Plan and meet the Federal Data Quality Act and legally collected should be recognized when assessing data and making any management decisions within the county.
9. Federal and/or state agencies should only use the guidance set forth in the 1987 Army Corps of Engineers Wetland Delineation Manual to determine whether an area is considered a "wetland."

CHAPTER 6: WILDLIFE AND FISHERIES RESOURCES

6.1 WILDLIFE MANAGEMENT AGENCIES

6.1.1 Wyoming Game and Fish Department

The Wyoming Game and Fish Commission acts as the policy-making board of the Wyoming Game and Fish Department (WGFD). The Commission is responsible for the direction and supervision of the Director of the WGFD. Through the relationships with the Director, WGFD personnel, and citizens, the board provides a flexible system of control, propagation, management, protection, and regulation of all wildlife in Wyoming. The Commission is a board of seven citizens where not more than five can be from the same political party (WGFD, n.d.-b). The WGFD's mission is 'Conserving Wildlife, Serving People'. Wildlife in Wyoming not listed under the Endangered Species Act (ESA) are managed by the WGFD. In 1899, the Wyoming State Legislature created the office of the State Game Warden. The Wyoming Game and Fish Commission was created in 1921 but did not receive the ability to actively manage Wyoming's game populations until 1929. The Wyoming Game and Fish Department was created in 1973. Prior to this time, all Game and Fish personnel were employed by the Wyoming Game and Fish Commission (WGFD, n.d.-a).

The WGFD utilizes a State Wildlife Action Plan (SWAP), revised in 2017, to provide a strategy for managing various wildlife groups including mammals, birds, reptiles, amphibians, fish, and mussels. The SWAP is not a legal document, a regulatory document, or a recovery plan under the ESA, nor is it a NEPA decision document (WGFD, 2017b). The SWAP is designed to complement existing and future planning and management programs. Wyoming's SWAP was partially funded by the State Wildlife Grants Program, which was created through federal legislation to provide federal funding to states to create a list of wildlife species that have the greatest conservation need. The state plan is built upon eight essential elements, identified by Congress, and implemented by the state game agency, with an overall focus on "species of greatest conservation need." The eight essential elements are:

1) Information on the distribution and abundance of species of wildlife including low and declining populations.
2) Descriptions of locations and relative condition of key habitats and community types.
3) Problems affecting species and priority research, or survey efforts needed.
4) Conservation actions needed to conserve the identified species.
5) Plans for monitoring species and the effectiveness of conservation actions.
6) Plans for reviewing the strategy.
7) Coordinating with federal, state, and local agencies and Tribal governments on the development and implementation of the strategy; and
8) Involvement of broad public participation.

The species list includes 229 total species including 80 birds, 9 amphibians, 24 reptiles, 51 mammals, 28 fish, 8 crustaceans, and 29 mollusks, each with a specific priority designation based on the essential elements listed above (WGFD, 2017b).

Wyoming's List of Species of Greatest Conservation Need is divided into three tiers: Tier 1 – highest priority, Tier 2 – moderate priority, and Tier 3 – lowest priority. The Wyoming Game and Fish Commission has six approved variables to evaluate the conservation priority of each species. These variables include:

1. The Wyoming Game and Fish Department Native Species Status (NSS);
2. Wyoming's contribution to the species' overall conservation;
3. Regulatory/monetary impacts of the species' listing under the ESA;
4. The urgency of conservation action;
5. Ability to implement effective conservation actions; and
6. The species' ecological or management role as keystone, indicator, or umbrella species.

The consideration of these variables in the species' priority tier designations are made by WGFD biologists who have considerable knowledge about the species. Individual designations may be reviewed annually if warranted by changing circumstances or new data. State Wildlife Grant Program funds are appropriated annually by Congress. In the appropriation process, individual states are evaluated based on their population and total geographical area. From these evaluations, states receive their apportioned funding amounts. Federal grants cover up to 75% of planning grants and 65% of plan implementation grants (USFWS, n.d.-b; WGFD, 2017b).

The WGFD updates the species on the Conservation Priority List in conjunction with the SWAP. The Wyoming Species of Conservation Priority List can be found on the WGFD website(WGFD, 2017a).

6.1.2 U.S. Fish and Wildlife Service

The U.S. Fish & Wildlife Service (USFWS) is the agency within the Department of the Interior dedicated to the management of fish, wildlife, and their habitats, and charged with enforcing federal wildlife laws, including the ESA. In addition to managing threatened and endangered species, the USFWS manages migratory birds, restores significant fisheries, conserves and restores wildlife habitat including wetlands, and distributes money to state fish and wildlife agencies. The USFWS also manages the National Wildlife Refuge (NWR) System (Wilson, 2014).

There are eight administrative regions for the USFWS and approximately 700 field offices across the country. Wyoming is in the Mountain Prairie Region which consists of eight states - Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming. The regional office for the Mountain Prairie Region is in Denver, Colorado. The closest field office in Wyoming is in Cheyenne. There are 7 National Wildlife Refuges totaling 86,681 acres in Wyoming, as of the 2018 Annual Lands Report (USFWS, 2018a). There are no Wetland Management Districts and no Waterfowl Production Areas in the state (USFWS, 2018a). Hot Springs County does not contain any of the wildlife refuges.

6.2 WILDLIFE HABITAT MANAGING AGENCIES

6.2.1 Bureau of Land Management

The BLM's Wildlife Program manages wildlife habitat to help ensure self-sustaining, abundant, and diverse populations of native and desired non-native wildlife on public lands and federal

mineral estate. To carry this out, the BLM must formally identify priority species; BLM-sensitive species; and other species. BLM then considers applicable conservation measures for these species and their habitats as part of their land-use planning process.

6.2.2 U.S. Forest Service

The Shoshone and Big Horn National Forests provide important habitat to numerous wildlife species. The USFS is tasked with restoring wildlife habitats, conserving threatened and endangered species, maintaining wildlife habitat connectivity, and connecting people with nature through wildlife events and viewing activities (USFS, n.d.-a).

The 2012 Planning rule direction (36 CFR § 219) sets out the planning requirements for developing, amending, and revising land management plans for the National Forest System, as required by the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended by NFMA. The regulations in 36 CFR § 219.9 explain that the Forest Plan components must provide for the diversity of plant and animal communities and support the persistence of most native species in the plan area; contribute to the recovery of federally listed threatened and endangered species; conserve proposed and candidate species; and maintain a viable population of each species of conservation concern within the plan area.

6.3 WILDLIFE RESOURCES IN HOT SPRINGS COUNTY

6.3.1 History, Custom, and Culture

Hot Springs County citizens traditionally used public lands and waters, according to the land use and land disposal acts of State and Federal government. Subsistence hunting, fishing, and trapping from the earliest occupation of man, have evolved into continued subsistence and sport hunting and trapping, sport fishing and major recreational activities such as trail riding, camping, nature appreciation activities and vehicular recreation on public and private lands in the county, providing support for the commerce base of the county.

6.3.2 Resource Assessment and Legal Framework

Big game found in Hot Springs County in huntable populations include elk, bighorn sheep, mule and whitetail deer, and pronghorn. Moose are found in the western end of the County. Further descriptions of these big game animals can be found below. Large predatory animals include, but are not limited to the following animals, coyotes, weasels, mink, bobcats, grizzly and black/brown bears, fox, mountain lions, and wolves. Small animals range from beaver and rabbits to skunks, white-tailed prairie dogs, and raccoons.

The area provides habitat for a large number of birds of prey, many of which are migratory. Year-round raptors include bald eagles, golden eagles, prairie falcons, and a variety of hawks and owls. Upland game birds include both the native sage and blue grouse and imported species such as chukar, Hungarian partridge, turkey, and pheasants. Canada geese have been increasing rapidly in the County and ducks winter over on the Big Horn River, especially below the hot springs. Ravens, crows, and blackbirds are resident predatory and scavenging birds. Crows are among the rapidly increasing bird species migrating and/or wintering in the county.

Fishing is found in mountain streams, the Big Horn River, and a few small reservoirs. Although it is not within the boundaries of Hot Springs County, Boysen Reservoir contributes greatly to the fishing resources in the area.

In recent years, movement out from traditional grounds has taken place by various species of wildlife. Rock chucks (yellow bellied marmots), formerly found only in rural areas are now commonly seen in Thermopolis and Hot Springs State Park. Raccoons, fox, and squirrels, at one time rare in the County, are now common.

Common Wildlife

Big-game species are common throughout much of Hot Springs County. There are diverse and abundant habitats ranging from deserts to high mountains with rich valleys in between. Big-game species are important to the County as they provide recreational opportunities for both residents and visitors through wildlife viewing and hunting opportunities. The Cody Region of the WGFD spans Hot Springs County and into portions of surrounding counties and is responsible for the management of big game species throughout Hot Springs County. It is important to note that population objectives for big game species are based on herd areas in a WGFD region and that portions of these areas may cross into neighboring counties. Drought can negatively impact wildlife populations and cause variations in population movements, habitat use, and numbers. Drought has the most impact to habitat as it can reduce forage and cover for wildlife and cause harm to their life cycles or cause them to move to other areas where resources are more available.

Elk

Elk habitat is mostly concentrated along the western, and south-eastern borders of Hot Springs County. However, elk can be found throughout the county depending on the time of year and weather conditions. Elk are primarily grazers, or bulk foragers, though they will occasionally browse on willows and aspen. See Map 14

Table 5 for acres of elk habitat acres within the County.
Map 10 for seasonal range and migration corridors

Hot Springs County recognizes elk hunting and viewing as a major socio-economic factor well established in the resident's and non-resident's custom and culture. Therefore, the County's management goal is to sustain elk populations at or near historically high numbers. As with the other ungulates, the County recognizes predator control as a valid method of increasing and/or sustaining elk herd populations.

Moose

Small family groups of moose have been attempting to establish themselves in the western portion of Hot Springs County; however, predation has threatened their ability to become reestablished. Therefore, the County's goal is to manage moose, and the predators which prey upon them, at a level which will allow the moose population to attain 50-75 animals. Hot Springs County asserts moose are among the most visible and well liked of wild animals and have the potential to benefit the County's eco-tourism industry. In order to accomplish this goal, the

County supports predator management control methods, and forage improvement projects. See

Table 5 for acres of moose habitat within the County.
Map 11 for seasonal range and migration corridors.

Mule Deer

Mule deer are found throughout large portions of Hot Springs County. Mule deer have readily adapted to the urban environment and can be found in developing areas within the county. Mule deer are primarily browsers but will use forbs as well. Mule deer will consume grass early in the season while the nutritive value is high, but senescent grasses do not meet their dietary requirements.

Table 5 for acres of mule deer habitat within the County.
Map 12 for seasonal range and migration corridors

The most recent population numbers, from 1990-2012, within the Cody region of the Game and Fish which covers most of Hot Springs County, show that mule deer populations have declined from an estimated 79,406 deer in 1990 to 52,500 deer in 2012. Game and Fish is working on an updated study as they look at populations trends over 10-year periods. In 2021, wildlife managers observed that deer overwinter survival appeared to be at or below average throughout the Cody region and that the region observed below average fawn production for a majority of the deer herds. Most deer herds within the Cody region are currently below their population management objective. The current population objective for the Owl Creek/Meeteetse Herd Unit is 5,000 deer. (WGFD, 2021b)

Populations within the Thermopolis and East Thermopolis town limits have increased human-wildlife conflict over the years. Hot Springs County recognizes that deer hunting and viewing is an integral part of the County's recreational/tourism base and supports long term herd management objectives which sustain the County's herds. The County recognizes that hunting license numbers, weather, disease, and predator control are the factors playing the largest role in establishing herd numbers. The County supports predator control as a mechanism of sustaining the herd population and increasing the beneficial take of deer.

Pronghorn

Pronghorn are common throughout most of Hot Springs County. Pronghorn prefer the open shrublands that the county provides. They are intermediate foragers, eating grasses, forbs, and shrubs.

Table 5 for acres of pronghorn habitat within the County.
Map 13 for seasonal range and migration corridors.

As with other ungulates, the County supports the sale of hunting licenses in order to manage for health herd sizes. The Cody Region of the Wyoming Game and Fish, which encompasses Hot Springs County, reported in 2021 that wildlife manager observed lower adult female survival rates over the 2021 summer season and predicted that recruitment would be impacted by poor doe: fawn ratios. Pronghorn fawn production in 2021 appears to be below average for much of the

Bighorn Basin. (WGFD, 2021b)

White-tail Deer

White-tailed deer prefer riparian habitats often associated with irrigated lands. Whitetail, like mule deer, are browsers, supplementing their diet with forbs and occasionally grass. In agricultural areas they will feed more on field and hay crops. There is some habitat overlap with mule deer. See

Table 5 for acres of habitat designations within the County.
Map 14 for seasonal range and migration corridors

The overall trend in the number of white-tail deer over the last decade has been observed to have a small increase and is probably a growing population. In 2018, the white-tail license availability jumped up by 225 licenses in the Bighorn Basin. However, there is not a lot of population information known on white-tail deer in the Cody region. (Freedman, 201

Table 5. Mapped wildlife seasonal range acreages across Hot Springs Count

Wildlife Species	Seasonal Range (acres)				
	Crucial Winter	Crucial Winter/Yearlong	Winter	Spring/ Summer/ Fall	Yearlong
Elk	124,422	51,907	76,095	29,326	172,466
Moose	12,158	0	29,595	139	78,682
Mule Deer	0	488,045	219,921	81,231	269,554
Pronghorn	0	155,283	0	42,006	351,461
White-tail Deer	0	0	0	0	98,412

Greater Sage-Grouse

There are approximately 419,770 acres of designated core habitat for the Greater sage-grouse (sage-grouse) within Hot Springs County. Sage-grouse are a state-managed species that is dependent on sagebrush steppe ecosystems. These ecosystems are managed in partnership across the range of the sage-grouse by federal, state, and local authorities. Efforts to conserve the species and its habitat date back to the 1950s. Over the past two decades, state wildlife agencies, federal agencies, local governments, and many others have been collaborating to conserve sage-grouse and their habitats.

The BLM has broad responsibilities to manage federal lands and resources for the public benefit. Nearly one-half of sage-grouse habitat is managed by the BLM. Habitat is managed based on the designation of Priority Habitat or General Habitat. Priority Habitat spans areas that have a high probability of use or are more critical to populations and therefore are managed with higher priority and restrictions than general habitat. General habitat spans areas of isolated habitat with low use (USFS, 2016).

Wyoming began sage-grouse management efforts in 2000, forming the Wyoming Sage-Grouse Working Group (WSGWG). In 2003, WGFD released the Wyoming Greater Sage-Grouse Conservation plan, and the 'core area' strategy for population and habitat management was released via executive order in 2008 (later updated in 2011, 2015, and 2019). Local working groups were established throughout the early 2000s to facilitate and implement conservation plans for the sage-grouse. There are eight local sage-grouse working groups in the state. The Wind River/Sweetwater River basin working group spans the majority of Hot Springs County, though there are small inclusions of the Southwest and South-Central working groups. Further information on the projects and meetings for the local working groups can be found at the following websites Wyoming Game and Fish Department, UW Extension Office and Bureau of Land Management

The Sage-Grouse Implementation Team (SGIT) is also a group that was formed to help conserve sage-grouse. The SGIT is comprised of representatives from state and federal agencies, industry, and non-governmental organizations. The SGIT members are appointed by the Governor and this group works together to collaboratively protect the sage-grouse under the State of Wyoming's Sage-Grouse Executive Order (2019-3). The group meets six times a year to discuss current sage-grouse related issues under the direction of a chairman and the public is invited to attend these meetings.

In September 2015, the USFWS determined that the sage-grouse did not warrant listing under the ESA. In its "not warranted" determination, the USFWS based its decision in part on regulatory certainty from the conservation commitments and management actions in the BLM and USFS Greater Sage-Grouse Land Use Plan Amendments (LUPAs) and revisions, as well as on other private, state, and federal conservation efforts. Since 2015 the BLM, in discussion with partners, recognized that several refinements and policy updates would help strengthen conservation efforts, while providing increased economic opportunity to local communities.

In March 2019, the BLM issued its Record of Decision for the Wyoming Greater Sage-Grouse Approved Resource Management Plan Amendment to update greater sage-grouse management. This document partially supersedes the 2015 Wyoming Greater Sage-Grouse Land Use Plan Amendment. The 2019 Plan Amendment is currently being litigated in the United States District Court for the District of Idaho and is being blocked from implementation under an injunction issued by that court. Revisions to the 2015 and 2019 sage-grouse plans are currently under scoping and anticipated to have revisions done in 2022. The Biden Administration issued a notice of intent to amend land use plans regarding sage-grouse (86 FR 66331).

The USFS developed standards and guidelines for sage-grouse conservation in 2015. After two years of monitoring amendments were developed; the new EIS spans Colorado, Idaho, Nevada, Utah, and Wyoming. The Final EIS and Draft Record of Decision was released in the fall of 2019 and went through an extensive objection resolution process. Following the objection resolution process, including a resolution meeting, the USFS released an objection response incorporating several edits to the Greater Sage-Grouse Plan Amendments. The final decision and resolution outcomes were released in August 2020. Monitoring reports on sage-grouse populations and habitat within USFS Region 2 and 4 are released annually (USFS, 2020).

In 2019, the Wyoming Governor's Office issued Sage-Grouse Executive Order 2019-3. The Executive Order is the State of Wyoming's primary regulatory mechanism to protect sage-grouse and its habitat. The order outlines procedures that seek to minimize disturbance and incentivize development outside of designated core population areas. The 2019 Executive order can be found on the Wyoming Game and Fish website.

One of the tools the State of Wyoming developed to help minimize disturbance to sage-grouse habitat is the Density and Disturbance Calculation Tool (DDCT), known as OneSteppe. This tool is a sage-grouse habitat disturbance tracking spatial application operated by WGFD. OneSteppe calculates the average number of disturbances per square mile and the total amount of disturbance within the DDCT assessment area. Proposed disturbance activities within sage-

grouse core areas must submit project footprints to the DDCT as a part of the permitting process. The OneSteppe application can be viewed here (WGFD, 2021a).

The WGFD has established habitat improvement, predator control, and if necessary, hunting season suspension as its primary methods of improving and sustaining sage-grouse populations. It is the County's belief that too many restrictions on grazing and oil and gas activities have already been imposed due to sage-grouse concerns; and therefore, the County desires to reduce the present restrictions and implement an increase in habitat improvement and predator control. The County recognizes that a portion of the oil and gas production decline is related to restrictions, stipulations, special land designations, seasonal withdrawals, etc. and expects State and federal land managers to utilize sage-grouse management techniques which benefit the economy not suppress the economy. Therefore, habitat improvements and predator control are the County's preferred strategies for sage-grouse – not additional regulations.

Recently, Wyoming passed a statute that allows sage-grouse farms (W.S. §23-5-111) to be authorized. The Game and Fish Commission promulgated rules and regulations to allow game bird farm-certification to raise greater sage grouse under certain provisions. The rules and regulations establish a system to certify game bird farm licensees to possess, propagate, breed, raise, sell, gather eggs of and release greater sage grouse and to take greater sage grouse within the boundaries of the game bird farm.

Wild Turkeys

Merriam's wild turkey (*Meleagris gallopavo merriami*) are not native to Hot Springs County but were introduced by the WGFD in the late 1950's. This subspecies of wild turkey is endemic to ponderosa pine forests of the Rocky Mountain west, and has thrived in similar forested habitats in the county since being introduced. The largest game bird in the state, wild turkeys are a generalists foraging on a variety of grasses, forbs, hard & soft mass, as well as invertebrates depending on season and availability. These game birds are often associated with farm and ranch compounds in the winter, relying heavily on direct or indirect feeding from agricultural operations.

Wolf

Wolf reintroduction and management has met many challenges across the western states. The reintroduction of wolves in Wyoming was controversial and met resistance across many western states, including from residents of Hot Springs County. Currently wolves prove to be an issue to agricultural operations and sportsman as they affect livestock and ungulates.

Wyoming's Wolf Management Plan was approved by the U.S. Department of the Interior in 2012, and the State subsequently prepared its regulations for the management of the species. This Management Plan designates the western portion of Hot Springs County as a Trophy Game Area where wolves may be hunted seasonally, and the eastern portion of the county as a Predator Control Area where wolves may be killed on sight throughout the year without a permit. In Hot Springs County, the division between these two areas is the Shoshone National Forest boundary.

State of Wyoming Migration Corridor Protections

In February 2020, Wyoming released the Wyoming Mule Deer and Antelope Migration Corridor Protection Order, Executive Order 2020-1 that can be found on the Wyoming States website, outlining the State's strategy for managing migration corridors and habitats for mule deer and antelope. Executive Order 2020-1 promotes counties to revise or update land use plans to be consistent with the State's designated migration corridor protections. The Executive Order designated three separate mule deer corridors and a process by which to designate additional corridors in the future. The Executive Order addresses surface disturbance, state-permitting, and recreation activities within designated mule deer and antelope migration corridors, as well as the cooperation between WYDOT and WGFD (and other related state agencies) to minimize roadway collisions and facilitate big game movement across roadways. (State of Wyoming, 2020)

There are no migration corridors designated within Hot Springs County. Other undesignated migration corridors are mapped as part of habitat mapping for all big game species and are shown on the maps below, these areas however are only migration habitat mapped and not part of the designations of the Executive Order 2020-1.

Wildlife Diseases

Chronic Wasting Disease

Wildlife diseases, some introduced and some natural to the area, are of great concern both economically and as human health issues. Chronic Wasting Disease (CWD) is a fatal disease of the central nervous system that is known to occur in mule deer, white-tailed deer, and elk. Chronic Wasting Disease has been found throughout most of the state of Wyoming and is one of several diseases known as transmissible spongiform encephalopathies that are thought to be caused by abnormal proteins or "prions". Ungulates affected by CWD experience progressive loss of body condition, reluctance to move unless approached closely, increased drinking, depression, and eventual death. As of present, CWD is not known to transfer to or affect humans. Many federal and state agencies have been working on research to learn more about CWD and its effects on ungulate populations. For additional information on the monitoring and management of CWD in Wyoming refer to the Wyoming Game and Fish website for a map of areas that have had CWD detections.

Chronic wasting disease is a grave concern for ungulates in Hot Springs County and across the State of Wyoming both economically, ecologically, and for human health issues. The continued research of this disease to understand its affects and possible ways to reduce it is important to Hot Springs County.

Brucellosis

Brucellosis is a highly contagious bacterial disease that can occur in wildlife, cattle, and humans. The primary management concern for brucellosis is the potential spread from elk or bison to cattle. Brucellosis can also be spread to humans, particularly hunters while field dressing an infected animal. Symptoms of brucellosis in humans include recurring low-grade fever, joint or back aches, night sweats, and depression. Symptoms can occur weeks or months after exposure

and often are related back to the handling of an infected animal. Brucellosis in humans can be treated with a long course of antibiotics but failure to treat can result in lifelong debilitation.

There are several *Brucella* species but *Brucella abortus* is the bacterium that infects elk, bison, and cattle and can be transferred to humans. Infection in ungulates affects the reproductive tract and in females results in abortion but can also affect the male reproductive tract. Bone or joint membranes can also be infected and result in lameness that may make animals more susceptible to predation. The most common route of transmission is orally through licking or ingestion (WGFD, 2004). Counties and states with confirmed brucellosis infection in cattle herds can suffer economically. Brucellosis has been found and confirmed within Hot Springs County and is becoming more and more prevalent. Further information about brucellosis can be found on the Wyoming Game and Fish website.

Special Status/Sensitive Species

Bureau of Land Management

Special Status Species are designated by the BLM and include species that are federally listed or proposed for listing as threatened or endangered, candidate species, state protected and sensitive species, and other special-status species including federal and state "species of concern". The BLM designates special-status species where there is credible scientific evidence to document a threat to the continued viability of a species population. Moreover, Special Status Species are typically designated as sensitive by a BLM state director in cooperation with state agencies that are responsible for managing the species. State natural heritage programs are typically involved as well, where applicable. Species are usually those that fall in the following criteria:

- Could become endangered in or extirpated from a state or within a significant portion of its distribution;
- Are under status review by the USFWS;
- Are undergoing significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution;
- At federal listed, proposed, candidate, or state-listed status may become necessary;
- Typically have small and widely dispersed populations;
- Inhabit ecological refugia or other specialized or unique habitats; or
- Are state-listed, but may be better conserved through the application of the BLM Sensitive Species Status (Bureau of Land Management, 2015)

The Wyoming State BLM Office identifies 82 species as sensitive; this list can be found here.

U.S. Forest Service

Under USFS policy, Regional Foresters identify native plants and animals (sensitive species) that show evidence of decline and potential sensitivity to national forest and national grassland activities and management. The USFS provides special management attention to these species to conserve them on the lands and watersheds that the USFS manages with the goal to avoid

contributing to their continued decline and potential for listing. The current Regional Forester sensitive species list for Region 2 of the USFS can be found here.

The USFS also manages for management indicator species and species of conservation concern. Management indicator species help indicate habitat suitability for other species with similar habitat needs and are used as planning tools to guide and monitor wildlife diversity on National Forest System lands. There are four management indicator species identified for the Shoshone National Forest: stream trout (aquatic/riparian habitat), ruffed grouse (aspen), red-breasted nuthatch (mature conifer forests with snags), and Brewer's sparrow (sagebrush). A species of conservation concern is a plant or animal for which we have concerns about its ability to remain on a landscape for a long time. A species of conservation concern is a USFS specific classification that comes from the 2012 Planning Rule (USFS, 2016). The species of concern list for the Shoshone National Forest can be found here.

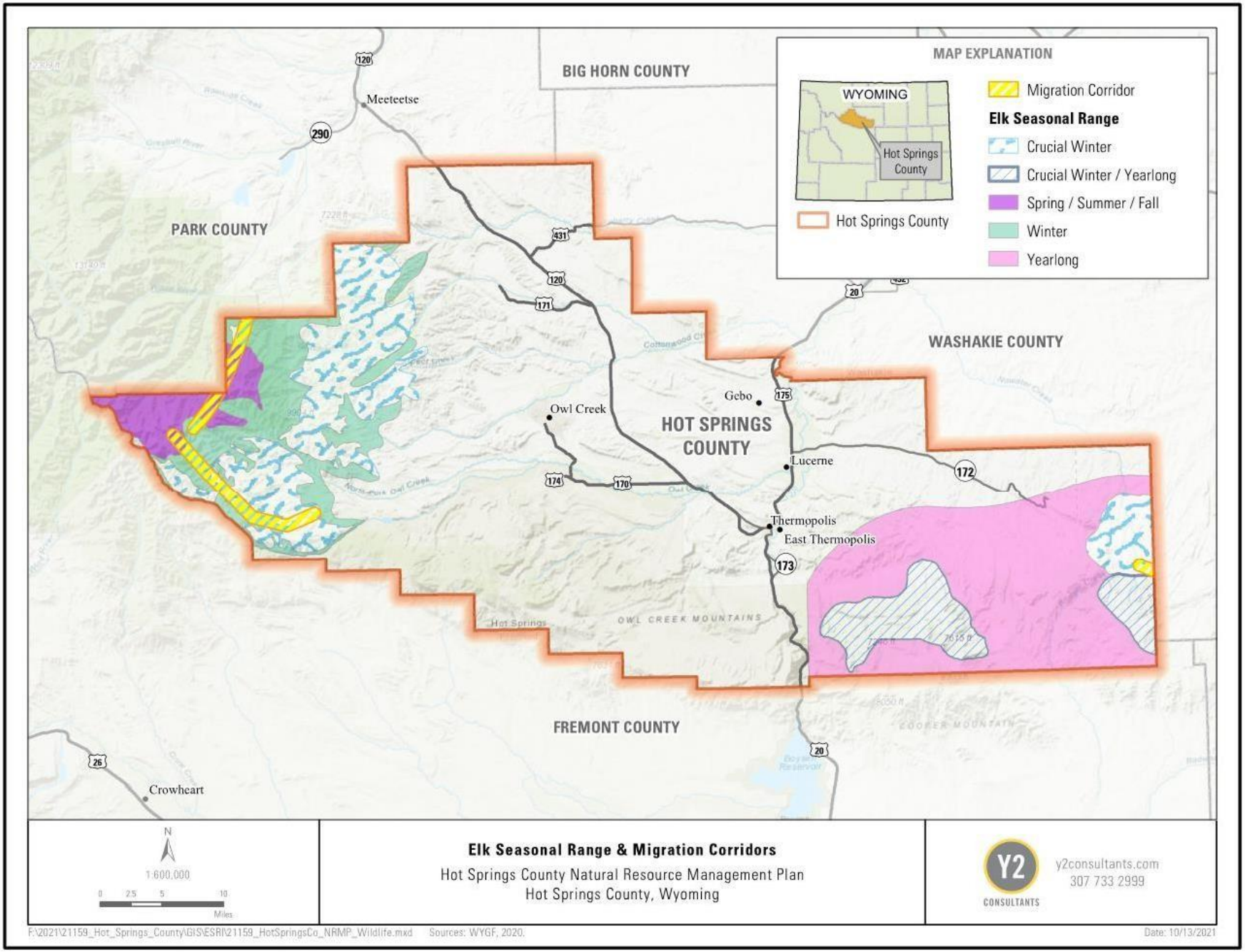
6.3.3 Wildlife Resource Management Objectives:

A. Wildlife resources and their habitats are managed for healthy, sustainable, and biodiverse populations and habitats that support recreation, tourism, and other multiple uses on public lands within Hot Springs County.
B. Any plan regarding wildlife within Hot Springs County is developed in coordination with Hot Springs County and other stakeholders.
C. Wildlife issues are managed to balance the health, safety, and general welfare concerns of the citizenry against needs of wildlife.
D. Multiple use principles of the public lands are used as a method of sustaining wildlife populations within Hot Springs County.
E. Wildlife target populations reflect the true holding capacity of their habitat.

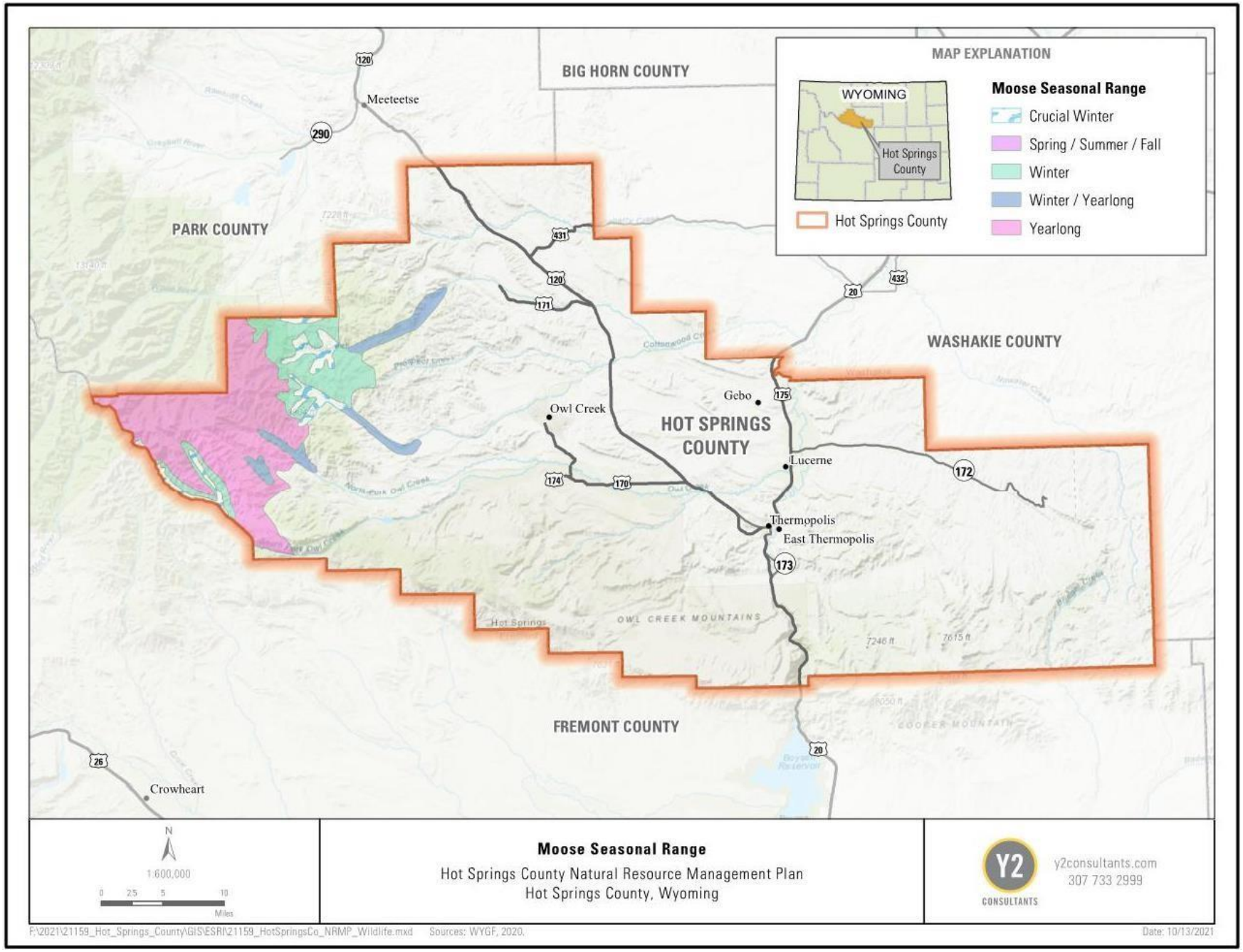
6.3.4 Wildlife Priority Statements:

1. Federal agencies should coordinate with Hot Springs County and Wyoming Game and Fish Department to support long-term integrated wildlife management.
2. Any wildlife management planning process should account for both consumptive and non-consumptive management strategies and tactics addressed in an environmentally responsible manner from the perspective of impacts on economic and human environment, based on sound science.
3. Hot Springs County encourages fencing techniques, which enhance the ability of permittees and other agricultural interests to keep their operations financially viable, facilitate wildlife management, and reduce or otherwise mitigate risks to the health, safety and general welfare of the public.
4. Hot Springs County supports compensation for private property losses and damages from wildlife in a timely manner.
5. Dangerous animals, such as wolves, mountain lions, and grizzly bears, found on private land should be euthanized rather than moved.
6. Hot Springs County is strongly opposed to any increase in the county's resident wolf populations.

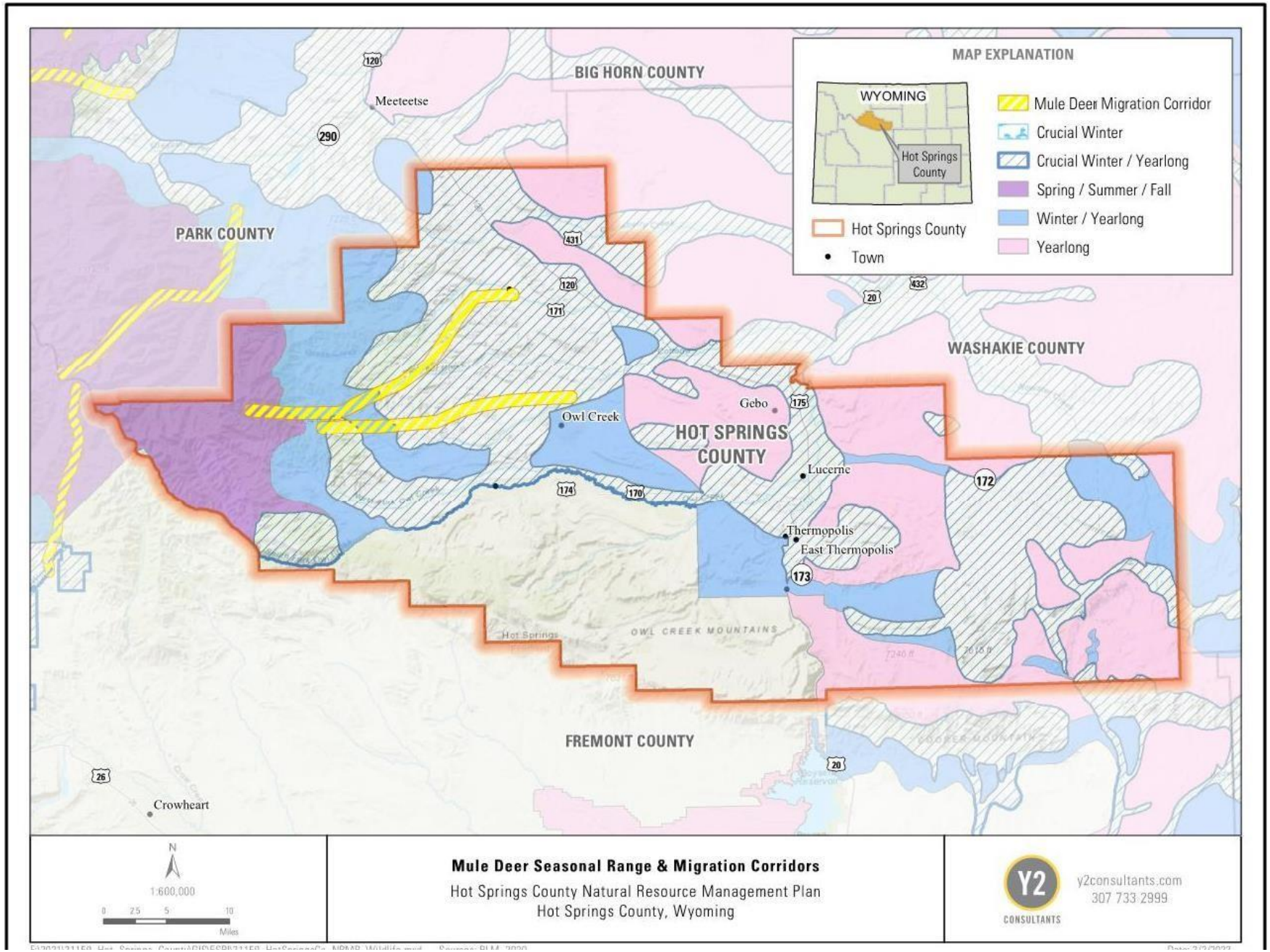
7. Hot Springs County supports the new state legislation that would allow sage-grouse farms.
8. Turkey populations within Hot Springs County should be managed appropriately to protect populations and reduce the risk of spreading disease.
9. Hot Springs County supports that the State of Wyoming has primacy over wildlife management.
10. Hot Springs County requests to be informed annually of the health, status, and trends of its wildlife populations by both federal and state agencies.
11. Management plans shall be generated to protect the overall health of natural resources, not specifically managed for one individual species.
12. Whenever requested, federal and state agencies should partner with Hot Springs County to create plans and programs that address wildlife resource concerns, local wildlife management plans, and management of sensitive, candidate or listed species in the county.
13. Wildlife habitat management plans must use independent scientific data, peer-reviewed science, and/or those data meeting the 'credible data' agency specifications to generate plans.
14. Hot Springs County shall be consulted and coordinated within the development of management plans, population objectives, wildlife introduction, migration corridors, sage-grouse, or other decisions that may affect the health, safety, and economic welfare of communities within Hot Springs County.
15. If wildlife is the cause of an area not meeting BLM Rangeland Health Standards or USFS Desired Conditions, the appropriate wildlife management agency should manage that wildlife to reduce degradation to the resource rather than reduce other multiple uses in the area.
16. Hot Springs County encourages federal and/or state agencies to support habitat enhancement projects that include chaining, logging, seeding, burning, and other direct soil and vegetation prescriptions.
17. Hot Springs County supports continued research and management of big game herds for chronic wasting disease, brucellosis, and any future wildlife diseases.
18. Federal plans and actions related to the greater sage-grouse should be consistent with State of Wyoming Executive Orders on Greater sage-grouse.
19. Species of conservation concern, special status species, sensitive species, and management indicator species should be consistent with listings from the Wyoming Game and Fish Department and should not be managed as a candidate or listed species or otherwise used to restrict permitting.
20. Any permitting or production restrictions for non-listed species of concern should be fully justified by credible data and subject to valid existing rights.
21. Hot Springs County does not support new designations of Areas of Critical Environmental Concern as a means to preserve sage grouse habitat in the county.
22. Hot Springs County opposes the designation of migration corridors unless supported by the County.



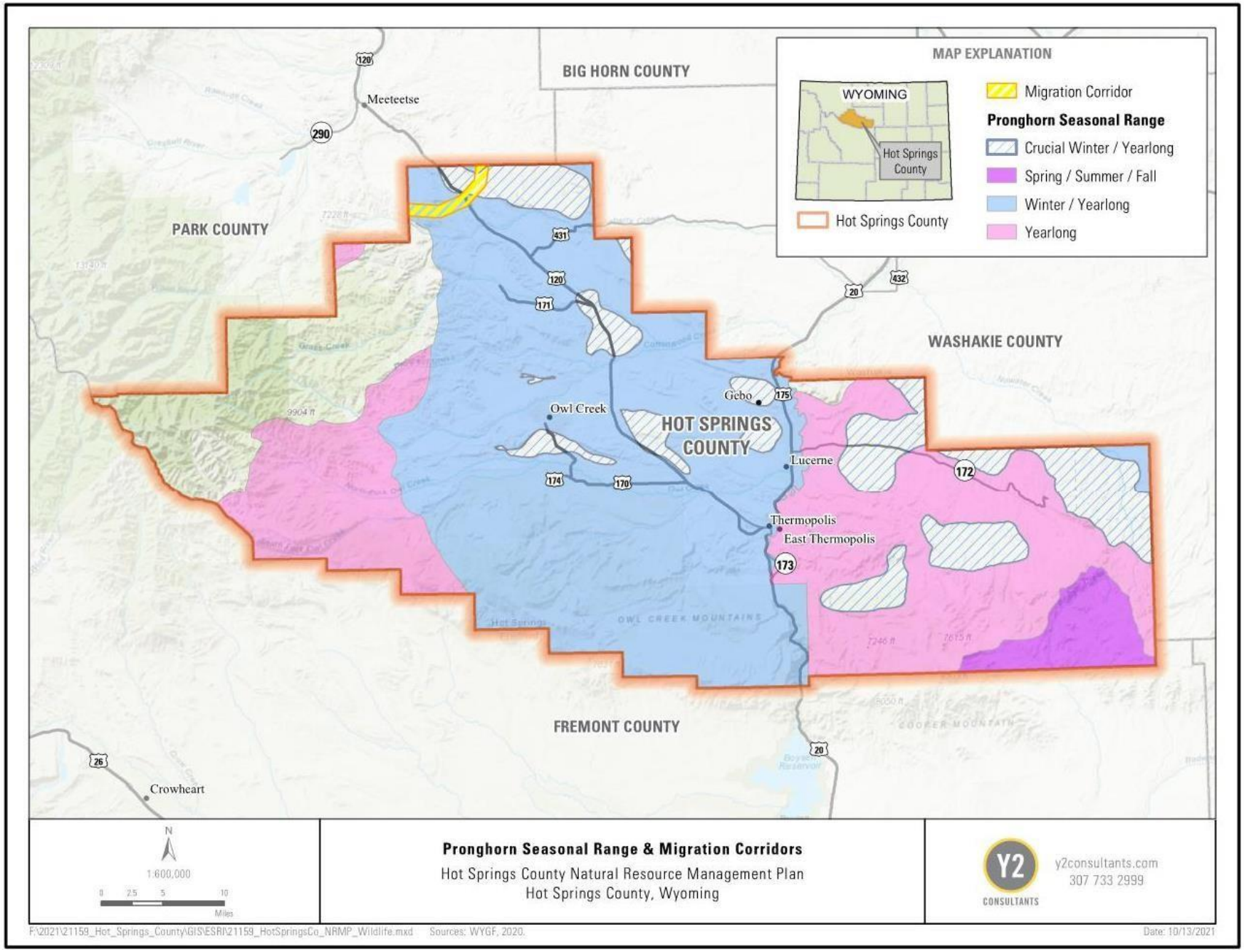
Map 10. Elk seasonal range and migration corridors mapped in Hot Springs County.



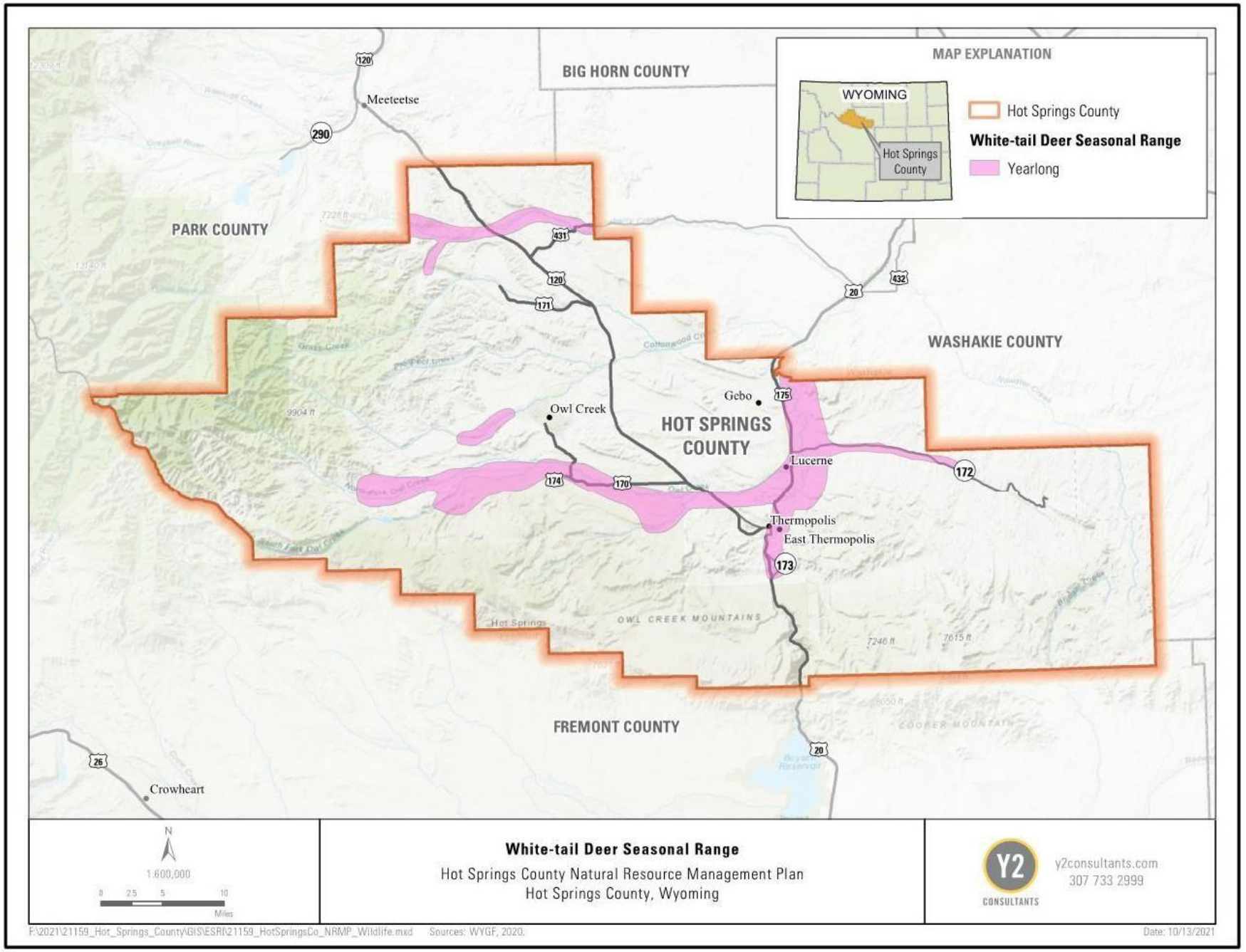
Map 11. Moose seasonal range and migration corridors mapped in Hot Springs County.



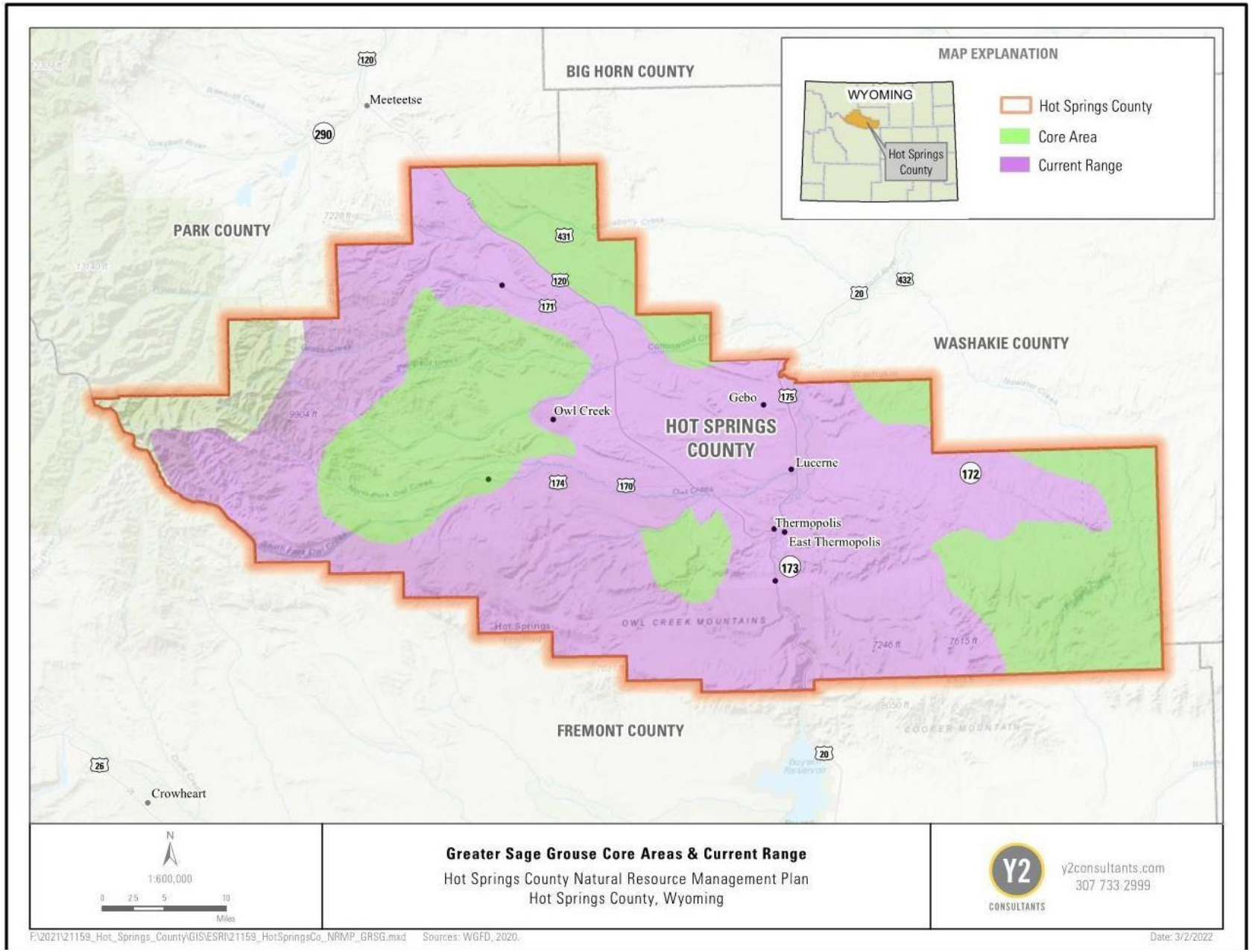
Map 12. Mule deer seasonal range and migration corridors mapped in Hot Springs County.



Map 13. Pronghorn seasonal range and migration corridors mapped in Hot Springs County.



Map 14. White-tail deer seasonal range and migration corridor mapped in Hot Springs County.



Map 15. Greater sage-grouse mapped habtiat and core area within Hot Springs County.

6.4 THREATENED AND ENDANGERED SPECIES/SENSITIVE SPECIES

6.4.1 History, Custom, and Culture

Threatened and endangered species have been a part of Hot Springs County since the early days of the ESA. Species, such as the grizzly bear which is found in Hot Springs County, were first listed as threatened in 1975 and many still are currently listed.

Limited access to federal lands and resources and potential fines or enforcement actions because of federal species protection actions and regulations have caused hardships on county residents. Large predators can be dangerous to those recreating and cause economic harm to livestock producers as attacks occur on their livestock. The impacts of the ESA have also financially periled some families in the county who rely on resource production from federally managed lands.

6.4.2 Resource Assessment and Legal Framework

Endangered Species Act

The USFWS administers the Endangered Species Preservation Act, passed by Congress in 1966, which provided limited protection for species listed as endangered. The Departments of the Interior, Agriculture, and Defense were to seek to protect listed species and to the extent possible, preserve the habitats of listed species. In 1969, Congress amended the Act to provide additional protection for species at risk of "worldwide extinction" by prohibiting their import and sale in the United States. This amendment called for an international meeting to discuss the conservation of endangered species and changed the title of the act to the Endangered Species Conservation Act. In 1973, 80 nations met to sign the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Commission of the European Communities, 1986). As a follow-up, Congress passed the ESA of 1973. The ESA:

- Defined "endangered" and "threatened" species;
- Made plants and all invertebrates eligible for protection;
- Applied "take" prohibitions to all endangered animal species, and allowed the prohibitions to apply to threatened animal species by special regulation; such "take" prohibitions also include "adverse modification" of critical habitat;
- Required federal agencies to use their authorities to conserve listed species and consult on "may affect" actions;
- Prohibited federal agencies from authorizing, funding, or carrying out any action that would jeopardize a listed species or destroy or adversely modify its "critical habitat";
- Made matching funds available to States with cooperative agreements;
- Provided funding authority for land acquisition for foreign species; and
- Implemented protection in the United States (USFWS, 1973).

The ESA was amended in 1976, 1978, 1979, 1982, 1988, and 2003. Funds are annually appropriated for the implementation of the ESA and have been since 1993.

The USFWS is responsible for the identification of critical habitat. Critical habitat is a specific geographic area that contains features essential to the conservation and recovery of a listed

species and may require special management or protection. Critical habitat can only consist of areas that qualify as "habitat." *Weyerhaeuser Co. v. US Fish and Wildlife Service,* 139 S. Ct. 361, 368 (2018). The ESA does not define "habitat." *Id*. Thus, in order to be designated as critical habitat, the area must first **be** habitat for the species. *Id*. The use of the word "be" indicates a present tense that both occupied and unoccupied critical habitat must exist in its current state, and not in state that requires some undefined and unidentified "degree of restoration. However, the USFWS regulations define "habitat," for the purpose of designating critical habitat only, as "the abiotic and biotic setting that currently or periodically contains the resources and conditions necessary to support one or more life processes of a species." 50 C.F.R. § 424.02. Thus, only those settings that currently contain the resources may be designated as critical habitat, and those settings that would require additional modification could not qualify as habitat. *See Id*.; 85 FR 81411. Thus, under the USFWS's regulatory definition, "habitat" may only exist under the ESA when a listed species could currently survive within the habitat as of the day of the listing. *Id*. Land not currently occupied by an endangered species can only be designated as critical habitat when the Secretary of the Fish and Wildlife Service determines that the land is "essential for the conservation of the species." 16 USC 1532(5)(A). "Essential for the conservation of the species" is also not defined in either the ESA or USFWS regulations. 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. The USFWS may choose to exclude any area from critical habitat if the agency determines that the benefits of such exclusion outweigh the benefits of designating the area, unless such exclusion would result in the extinction of the species. 16 U.S.C § 1533(b)(2). A decision not to exclude critical habitat for economic reasons is reviewable by courts under an abuse of discretion standard. *Weyerhaeuser*, 139 S. Ct. at 370.

In response to the *Weyerhaeuser* Court's decision allowing decisions not to exclude critical habitat to be reviewed under the Administrative Procedure Act, the Fish and Wildlife Service promulgated rules regarding the exclusion of critical habitat. There are five major items developed in those regulations.

1. The rule gives local governments expert status when discussing the economic and other nonbiological local impacts of critical habitat designation within their jurisdiction.
2. The rule also allows federal land to be excluded from critical habitat designation.
3. The rule sets a meaningful standard as to when critical habitat should be excluded.
4. The rule encourages the USFWS to exclude critical habitat for more than just economic consideration, including whether the critical habitat may harm community development and;
5. The rule allows lands that have proven conservation agreements to be excluded from critical habitat. These agreements can even be agreements created by local governments or the state and not just the USFWS. 50 C.F.R. § 17.90.

The ESA created several additional planning tools, including:

- Recovery plans (population and viability goals; define when delisting may be possible; what is required for delisting to begin).

- Reintroduction plans.
- Habitat conservation plans (define when "take" may occur, defines mitigation options).
- Conservation plans or agreements.
- Candidate Conservation Agreements (CCA) and CCAs with Assurances (CCAA) (private landowner arrangements for the protection of Candidate species that provides the landowner with protection if the species is listed) and Species of Concern. (USFWS, 2018c)

Section 6

Section 6, also known as Cooperation with the States, recognizes the key role that states play in conserving our native wildlife and plants. Section 6 provides funding to States and Territories for species and habitat conservation actions on non-federal lands. Through cooperative agreements, States can receive funding from the USFWS for a variety of conservation actions that contribute toward listed species recovery. Section 6 funds are awarded through four programs:

1. Conservation Grants,
2. Habitat Conservation Planning Assistance Grants,
3. Habitat Conservation Plan Land Acquisition Grants, and
4. Recovery Land Acquisition Grants (USFWS, n.d.-a).

10(j) Rule

Section 10(j) of the ESA allows reintroduced experimental populations of endangered species to be managed as if they were only threatened. These reintroduced populations are nonessential and experimental which increases USFWS management flexibility and indicates that the loss of the experimental population will not threaten the continued existence of the species. Most of the added flexibility is applied to circumventing Section 9 of the ESA and its prohibitions against "taking" endangered species (Cribb, 1998).

Current Listed Species

Currently listed threatened and endangered species can be found on the USFWS Information for Planning and Consultation (IPaC) database. At the writing of this report there are five endangered, threatened, candidate, or proposed species identified as species believed to or known to occur within Hot Springs County. Those species are:

- Canada lynx (*Lynx canadensis*)- Threatened
- Grizzly bear (*Ursus arctos horribilis*)- Threatened
- Monarch Butterfly (*Danaus plexippus*) - Candidate
- Ute ladies' tresses (*Spiranthes diluvialis*)- Threatened
- Whitebark pine (*Pinus albicaulis*) – Proposed threatened

Grizzly Bear

Since being listed as "Threatened" under the Endangered Species Act in 1975, growth in grizzly populations has been increasingly dramatic. Human/bear encounters are increasing, as grizzlies are being pushed by wolves onto livestock ranges, cabin sites, and private lands.

The 2015 Big Horn Basin Resource Management Plan recognizes grizzly bears as a threated species and as the only trophy game species in the planning area. There has been an expansion of grizzly bear range due to a steadily growing and expanding Greater Yellowstone bear population over the last 20 years. Grizzlies have ranged to new areas (including BLM-administrated lands) outside of the core population centered in Yellowstone National Park, due to the protected status allowing population growth and expansion. (BLM, 2015b)

In the previous 1996 Grass Creek Resource Management Plan, the BLM recognized grizzlies as an undesirable species and the plan did not allow for grizzly occupancy. This is not the most current BLM Resource Management Plan. Hot Springs County believes that the presence of grizzly bears on public lands within the county represents a threat to the health, safety, and general welfare of the county's residents. The County feels that the grizzly population goals for BLM-administered lands and the non-wilderness portion of the Shoshone National Forest in Hot Springs County should be zero animals. Within the portion of the Washakie Wilderness Area that lies in Hot Springs County, the goal should be 5 to 20 bears. Population numbers in these specific areas are not completely known but there are 1,070 bears estimated in the Greater Yellowstone Ecosystem as of 2021 (Kudelska, 2021).

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) (16. U.S. C 668-668c) was enacted in 1940, with several amendments since. The BGEPA prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald or golden eagles, including their parts, nests, or eggs (USFWS, 2018b).

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) is a federal law that carries out the United States' commitment to four international conventions with Canada, Japan, Mexico, and Russia. Those conventions protect birds that migrate across international borders. The MBTA prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests except as authorized under a valid permit (50 CFR 21.11). The MBTA also authorizes and directs the Secretary of Interior to determine if, and by what means, the take of migratory birds should be allowed and to adopt suitable regulations permitting and governing take (i.e. hunting seasons for ducks and geese) (USFWS, 2020).

6.4.3 Threatened/Endangered Resource Management Objectives:

A. Hot Springs County participates in local, state, and federal rulemaking and planning regarding the designation and management of any species designated in any category or classification for protection or consideration of protection, under the Endangered Species Act in and adjacent to Hot Springs County.
B. Critical habitat exclusion analysis is completed for all lands within Hot Springs County during the Endangered Species Act listing process including a local economic and social impacts analysis and critical habitat is only considered in those lands where the endangered species could currently survive.

6.4.4 Threatened/Endangered Priority Statements:

1. Hot Springs County and other local governments should be notified of all proposed actions and final decisions which affect the County regarding sensitive, threatened, or endangered species; critical habitat designation and exclusion; the reintroduction or introduction of listed species; habitat conservation plans; conservation agreements or plans; and candidate conservation agreements and should be given the earliest opportunity to participate as a cooperating agency.
2. Federal and/or state agencies should comply with the applicable state and federal statutes, including preparation of an environmental impact statement when critical habitat is designated.
3. Should any introductions or re-introductions of threatened or endangered species occur in Hot Springs County or on lands adjacent to the county the population should be designated as non-essential experimental populations.
4. Federal agencies should delist a species once population goals set out in recovery plans are achieved, in accordance with the Endangered Species Act.
5. Federal agencies should work with Hot Springs County to explore alternatives to listing, which may include conservation plans and related conservation agreements with local, state, and federal agencies to address possible threats to species and their habitat and avoid official listing under the Endangered Species Act.
6. Hot Springs County generally supports the use of candidate conservation agreements with assurances (CCAA) for private land and candidate conservation agreements (CCA) for federal lands as a mechanism to provide habitat for candidate species while allowing current land uses to continue. The County expects federal agencies to uphold promises made in the CCAs and weigh their value in federal actions.
7. Species should not be introduced or reintroduced within Hot Springs County except when utilizing the 10J rule for experimental populations and in consultation and approval of the County.
8. Federal agencies should conduct a robust and full local economic analysis of all proposed critical habitat designations in Hot Springs County and should the economic analysis indicate economic impacts to Hot Springs County, the U.S. Fish and Wildlife Service should immediately exclude habitat from critical habitat designation.
9. Federal agencies should create a complete and detailed "extinction analysis" for all particular areas of proposed critical habitat proposed for exclusion by County or Districts.
10. Federal agencies should not "automatically" include federal lands as critical habitat without completion of scientifically based exclusion analysis.
11. Federal and/or state agencies should recognize Hot Springs County's expertise and first-hand knowledge regarding economic and other relevant impacts when analyzing the benefits of inclusion versus the benefits of excluding a particular area from proposed critical habitat.
12. Federal agencies should support cooperation between private landowners and federal agencies (e.g., CCAs and CCAAs) to reduce the risk of listing under the Endangered Species Act. Support "net conservation benefit" standard for CCAAs and CCAs that includes analysis of both the (1) baseline approach of considering the legal status quo of the species with and without the proposed CCAA or CCA and (2) a comparison of the proposed

conservation measures and their future effects and determine whether there is a benefit to the species.

13. Upon conducting an exclusion analysis, if the agency finds that the economic, relevant and/or non-biological impacts of designating certain areas as critical habitat outweigh the biological benefit to the species, the U.S. Fish and Wildlife Service shall immediately exclude such habitat from critical habitat designation, unless it is determined that failure to designate that area as critical habitat will result in the extinction of the species concerned.
14. Federal and/or state agencies should support the development of recovery plans within 18 months of listing that include clear objectives to reach for delisting to occur; for species already listed Hot Springs County supports the development of a recovery plan within 18 months of the adoption of this Natural Resource Management Plan.
15. Recovery efforts for threatened and endangered species should be supported, which consider local interests and impacts and should evaluate, mitigate and support Hot Springs County's custom, culture, economic viability and community stability.
16. Federal and/or state agencies should control predators negatively impacting special status, candidate, or listed species before restricting other multiple uses that could be conflicting.
17. Federal and/or state agencies should support proven and efficient control of zoonotic and vector borne diseases negatively impacting special status, candidate, or listed species before restricting other multiple uses that could be conflicting.
18. Management actions which increase the population of any listed species in Hot Springs County without an approved and specific recovery plan is not supported.
19. Federal and/or state agencies should support the continued use of existing valid permits and lease rights on lands with listed species wherever possible.
20. At a minimum, copies of legal descriptions showing the exact boundaries of all designated critical habitat shall be provided to Hot Springs County.
21. For any species on the Endangered Species Act list, Hot Springs County should be apprised, at minimum, annually of the progress of population recovery objectives for each species.
22. Hot Springs County opposes attempts to expand the original grizzly bear occupancy area beyond the Primary Conservation Area boundary.
23. Grizzly bears within Hot Springs County should be restricted to within the boundaries of the Primary Conservation Area and Washakie Wilderness Area.
24. Hot Springs County expects the state and federal agencies involved in grizzly bear conservation to adhere to the provisions of the current grizzly recovery plans and strategic plans.

6.5 FISHERIES

6.5.1 History, Custom and Culture

Fisheries support recreation and tourism in Hot Springs County. The combination of healthy fisheries and public access throughout the County's reservoirs, lakes, and rivers provide diverse fishing opportunities that attract recreators. Fishing within the county varies from fly fishing

trout species to sport fishing the reservoirs. Though the primary fishery resources used for recreation and tourism are cold-water trout fisheries.

6.5.2 Resource Assessment and Legal Framework

The WGFD manages and monitors fishing activity throughout the state. The State of Wyoming classifies trout streams into four separate designations listed below.

- Blue Ribbon (national importance) - >600 pounds per mile
- Red Ribbon (statewide importance) – 300 to 600 pounds per mile
- Yellow Ribbon (regional importance) – 50 to 300 pounds per mile
- Green Ribbon (local importance) - <50 pounds per mile

Most of the streams within Hot Springs County are classified as Yellow Ribbon streams. A section of the Wind River is classified as a Blue Ribbon. Sections of Jones Creek are classified as Red Ribbon stretches. Mapping of these streams can be found here.

Hot Springs County falls within the Wind River Basin within the Wind/Bighorn River Basin Plan study area. Recreational fishing is one of the most important recreational water uses in the basin. Within the Wind River Basin there are approximately 22 designated public recreational fishing sites. These are sites that are noted to provide substantial recreational fishing opportunities. Across the entire Wind/ Bighorn River Basin study area 37% of the fishing sites are managed by the BLM, 24% of the sites identified are managed by WGFD, and 39% are managed by the State of Wyoming Department of Travel and Tourism (MWH Americas et al., 2010).

Aquatic invasive species (AIS) can harm fisheries. AIS detected within Hot Springs County include the New Zealand Mudsnail (Bighorn River). The zebra mussel and quagga mussel are both invasive species of concern for the area and have been detected in Utah and Colorado. A map of AIS locations can be found here (WGFD, 2020).

6.5.3 Fisheries Resource Management Objective:

A. Aquatic resources within Hot Springs County are managed for healthy and biodiverse fisheries that support recreation and tourism.
B. The introduction and control of aquatic invasive species, that can cause significant harm to an ecosystem if introduced, are managed appropriately.

6.5.4 Fisheries Priority Statements:

1. Federal and/or state agencies should assist in the improvement of irrigation structures to ensure sufficient water flows during critical times for fisheries.
2. Fisheries management plans shall be generated to protect the overall health of all fisheries resources within an area, not specifically managed for one individual fish species.
3. Fisheries management plans will use independent scientific data, peer-reviewed science, and/or those data meeting the 'credible data' as defined in Chapter 1 and as set forth in each agency's manual to generate fisheries plans.

4. Federal and/or state agencies should conduct fisheries habitat monitoring efforts and refine available fisheries habitat data.
5. Federal and/or state agencies should conduct water quality monitoring before, during, and after all projects that may have impacts on aquatic resources.
6. Federal and/or state agencies should support all river restoration, fish passage, and aquatic/riparian area enhancement projects.
7. Hot Springs County encourages interagency and inter-government enhancement projects.
8. Federal and/or state agencies should assist in promotion of boat inspection locations for prevention of aquatic invasive species.

6.6 PREDATORS

6.6.1 History, Custom, and Culture

Predatory wildlife is important to the ecology of an ecosystem. However, predators have negative impacts on livestock operations, developing communities, and other agriculture operations. For these reasons, it is important to properly manage predators to ensure safe communities and stock, and healthy functioning ecosystems. Predator control was historically used to protect livestock resources, but it also helped the growth of game animal herds and bird populations which were very low around the turn of the century.

Predator control became a big issue at the turn of the 20th century. Wolves, bears, mountain lions and coyotes preyed heavily on livestock and wildlife populations.

Under pressure, the mountain lions, grizzly bears and a few remaining wolves generally retreated into the higher country which was wide open until after World War II. Occasionally, one of them would wander through the lower country. The coyote lived up to his name as “Wiley Coyote” and has never disappeared from the scene to the despair of those who have seen flocks of sheep ripped to pieces, or their chicken flocks decimated, and to the delight of those who count seeing and hearing coyotes as part of their western cultural heritage. It is also generally recognized that a remnant population of the original indigenous wolf species was still present in the Northern Rockies when Canadian wolves were introduced to the Greater Yellowstone Region in the 1990s, and that these smaller and less aggressive wolves have subsequently been subdued, killed, genetically mixed, or driven out of the region by the introduced species.

Today, predators continue to play a role in the custom, culture and economics of the County. Not only the bigger predators, but skunks, and the fairly recent addition of foxes and raccoons, have caused problems. Eagles still prey on newborn lambs and calves. In the past, magpies were such a nuisance that bounties were paid on their legs. Today crows come in large enough numbers to be a health hazard. While there are no large flocks of domestic fowls in the county, game birds have probably suffered severely from depredation, not only from coyotes and fox, but raccoons, bobcats, and birds of prey (including ravens, crows, and magpies). Studies in sage-grouse predation, from 1904 to the present, suggest that non-raptor birds of prey are a substantial factor in grouse population dynamics (Fremont County Sage Grouse Study, 2007).

6.6.2 Resource Assessment and Legal Framework

Wildlife population management through sportsman hunting and trapping also occurs throughout the County. Predator control within the County affects the economic stability of the livestock industry, the sport hunting/fishing, and recreation industries. The loss or endangering of any prey species and the thinning of larger ungulate herds caused by uncontrolled predation creates losses of economic opportunities for most sectors of County citizens. Predator control and prevention techniques have also been used to protect the health and safety of the public by reducing human-wildlife conflict and the spread of diseases commonly carried by predators. Hot Springs County does have a predator control board that assists in predator control tactics and solutions throughout the County.

The more common predatory animals in Hot Springs County and the surrounding area include grizzly bears, wolves, mountain lions, black bear, bobcat, birds of prey, coyote, fox, porcupine, skunk, and raccoon which are classified as predators. It is important to recognize that changes in wildlife population dynamics and management in surrounding areas are likely to influence wildlife populations and behavior within Hot Springs County. Larger predators are an increasing problem in Hot Springs County. Wolves have spread to lower elevations, following game herds, and predation of livestock by wolves has increased.

The Wyoming State Legislature established predator control statutes in Title 11, Chapter 6 of The Wyoming Statutes. The statutes provide for general provisions, districts and district boards and the Wyoming State Animal Damage Management Board. Hot Springs County recognizes and utilizes the right to control rodents and predators through the issuance of hunting permits, aerial hunting permits as outlined in Wyo. Stat. § 11-6-105, and the right to pay bounties as provided for in Wyo. Stat. § 11-6-206. All effective means of controlling rodents and predators, including but not limited to airplanes, helicopters, firearms, electronic calling equipment, gases, fire, smoke, dogs, archery, explosives, leg-hold traps, snares, poison, ATVs, and snowmobiles have been authorized in the County to control predation and resource damage. Those predatory animals authorized for control shall be as defined by the Wyoming Weed and Pest Act of 1973 as amended for designated pests, the predatory animal list adopted by the Wyoming Game and Fish Department and the powers granted to the County by the Weed and Pest Act to designate additional weeds and pests as needed. The affected lands within the County include all private, State and Federal lands.

The Animal and Plant Health Inspection Service (APHIS) is located within the U.S. Department of Agriculture and provides a Wildlife Damage Program and a Pests and Diseases Program. The Wildlife Damage Program researches and develops wildlife damage management methods and provides resources to the public (APHIS, n.d.).

State Compensation for Livestock Loss

The Wyoming Animal Damage Management Board Chapter 4: Regulations Governing the Granting of Wolf Compensation Program lays out the regulations for compensation to livestock producers should they have loss of livestock to wolves. In order to qualify for compensation, there must be an application submitted within 60 days after the damage ended or the last

damage was discovered. Once the application is reviewed and determined to be complete and accurate a claim can be issued, and payment can be made based on available funds. Further information on these regulations can be found here.

Grizzly bear damage is controlled by the WGFD and compensation is based on a formula that can be found on their website.

6.6.3 Predator Resource Management Objective:

A. Predator animal populations are managed to minimize impacts on the health, safety and general well-being of Hot Springs County's residents and their livelihood.
B. Federal and/or state agencies coordinate with Hot Springs County in the determination of any impact of management of predator species.

6.6.4 Predator Priority Statements:

1. Selective predator control should be used as a valid means of increasing the productivity of the state and federal lands within the county and as a valid method of attaining sustainability of the wildlife and domestic livestock and domestic fowl populations.
2. Hot Springs County strongly supports that any problem predatory animals should be euthanized, not relocated to another area.
3. Large predators such as wolves, mountain lions, and grizzly bears, found on private land should be euthanized rather than moved.
4. So long as such measures do not harm private property rights, and to the extent allowed by law, predator control measures should be utilized on all private, state, and federal lands within Hot Springs County.
5. Hot Springs County recognizes and supports the predator board's expertise in managing predators in the county.
6. Hot Springs County strongly supports any efforts of the Wyoming Game and Fish Department to adjust its big game seasons to address the impacts of various predator dynamics.
7. Hot Springs County strongly supports pro-active efforts such as aerial hunting, snares, leg traps, etc. to control predator populations; and more especially opposes the spread of predator species such as grizzly bears and wolves from migrating or re-locating to areas that impact the health, safety, and economy of the County.
8. Hot Springs County expects predator control strategies to balance with the economy, health, safety, custom and culture of the County.
9. Hot Springs County expects to be involved in the determination of any impact of management of predatory wildlife species on the economy, culture, custom, and safety of the residents of the county.
10. After desired population numbers for Endangered Species Act listed species are achieved, the species should be managed by the State of Wyoming and hunting should be considered as a method of predator population control and animal's movement outside of their designated range should be managed.
11. Any plan that provides for the introduction, reintroduction, natural repopulation, or the management of any predator must provide for timely compensation to owners for direct

or indirect cost associated with the loss of life, loss or damage to livestock and property rights. Compensation must follow Wyoming State compensation guidelines.

12. Hot Springs County supports selective predator control as a valid means of increasing the productivity of lands within Hot Springs County and as a valid method of attaining sustainability of the wildlife and domestic livestock populations.
13. When addressing a decline in sensitive species, predator control should be employed prior to placing any restrictions on resource-based industries like livestock grazing or energy development.

6.7 WILD HORSES AND ESTRAY LIVESTOCK

6.7.1 History, Custom, and Culture

Under the Wild Free-Roaming Horses and Burros Act (WFRHBA), BLM is required to maintain wild horse and burro population levels "in a manner that is designed to achieve and maintain a thriving natural ecological balance" and to establish appropriate management levels for the herd, considering the relationships with other uses of the public, and adjacent private lands (16 U.S.C. § 1333(a); 43 C.F.R. § 4710.3-1). The WFRHBA was specifically amended, then, to require "immediate" removal of excess horses. 16 U.S.C. § 1333(b)(2).

Wild horses, as they are now perceived, are not native to America's rangelands; they are feral animals. Their vulnerability to predators is limited and their population growth rate is high. BLM estimates the growth rate of the wild horse population to be 20 percent annually.

Once the inventory occurs and the appropriate management levels (AML) has been set, if an overpopulation of wild horses exists, the BLM "shall immediately remove excess animals from the [public] range so as to achieve AML." *See* 16 U.S.C. § 1333(b) (1) and (2) and 43 C.F.R. § 4720.1 ("Upon examination of current information and a determination by the authorized officer that an excess of wild horses … exists, the authorized officer shall remove the excess animals immediately…"). "Excess animals" are defined as those that must be removed in order to preserve and maintain a thriving natural ecological balance and to preserve the "multiple use relationships" in an area. *See* 16 U.S.C. § 1332 (f). As stated in another section of the WFRHBA, "[A]ll excess animals" must be removed by the BLM "so as to restore a thriving ecological balance to the range, and to protect the range from deterioration associated with overpopulation" to preserve and maintain the "multiple use relationship in that area." *See* 16 U.S.C. § 1333 (b)(2). When a determination is made that there is an "excess," action is immediately required because the "endangered and rapidly deteriorating range cannot wait." *Blake v. Babbitt,* 837 F. Supp. 458, 459 (D. D.C. 1993).

According to the Tenth Circuit, the BLM must make two determinations before the BLM's duty to remove excess animals is triggered. *Wyoming v. United States Department of the Interior,* 839 F.3d 938 (10th Cir. 2016). The first determination is that an overpopulation exists on a given area of the public lands. *Id.* at 944. This is shown when an area exceeds its AMLs as discussed above. The second determination is that "action is necessary to remove excess animals." *Id.* If a determination has not been made by the agency that an action is necessary, then the agency does not have a duty to remove those excess horses. *Id.*

Although there is no federal statute requiring private landowners to allow wild horses to graze on their private lands, private landowners cannot remove the horses; the BLM must be notified of any trespass horses. The WFRHBA mandates that the BLM, once notified, must "immediately" remove trespass wild horses from state and private land.

Wild horses have been problematic for federal land grazing permittees since the passage of the WFRHBA. In recent years, the BLM has been unsuccessful in completing gathers to reduce the numbers of wild horses on rangelands. Many HMAs are significantly over AML, causing harm to rangelands. HMAs are not fenced, allowing horses to cause degradation on private and state lands.

6.7.2 Resource Assessment and Legal Framework

The Wild-Free Roaming Horses and Burros Act (WFRHBA) was passed by Congress in 1971 and declared wild horses and burros to be "living symbols of the historic and pioneer spirit of the West" (16 U.S.C. § 1331). The law requires the BLM and USFS to manage and protect herds in their jurisdiction in areas where wild horses and burros were found roaming in 1971. Under WFRHBA, "wild free-roaming horses and burros" on BLM land are under the Secretary of the Interior's jurisdiction for the purpose of management. (16 U.S.C. § 1333(a)). The act requires that the Secretary and BLM must inventory and determine appropriate management levels (AMLs) of wild horses and burros, determine if overpopulation exists, and "shall immediately remove excess animals from the range so as to achieve AMLs" (16 U.S.C. §§ 1333(b) (1) and (2) and 43 C.F.R. § 4720.1).

Herd Areas

Herd areas are areas in which wild horses and burros were found in 1971 and are the only areas BLM may manage horses by law. Herd areas are not currently managed for equines by the BLM but some may have feral horses or burros. There are two herd areas designated within Hot Springs County, Zimmerman Springs and Sand Draw.

Herd Management Areas (HMAs)

Herd management areas (HMAs) are the areas selected within each herd area that were evaluated by BLM to have adequate food, water, cover, and space to sustain healthy and diverse "wild" horse and burro populations over the long term and were calculated using geographical information system (GIS) (National Horse & Burro Rangeland Management Coalition, 2015).

Herd management areas (HMAs) are lands under the supervision of the BLM that are managed for the primary but not exclusive benefit of free roaming wild horses and burros. There are 16 wild horse HMAs covering nearly five million acres of the state of Wyoming. There are currently no Herd Management Areas within Hot Springs County. (BLM, n.d.-b)

Estray

"Estray" means any animal found running at large upon public or private lands, fenced or unfenced, in Wyoming whose owner is unknown, whose owner cannot be found, or that is branded with two or more disputed brands for which neither party holds a bill of sale. An estray

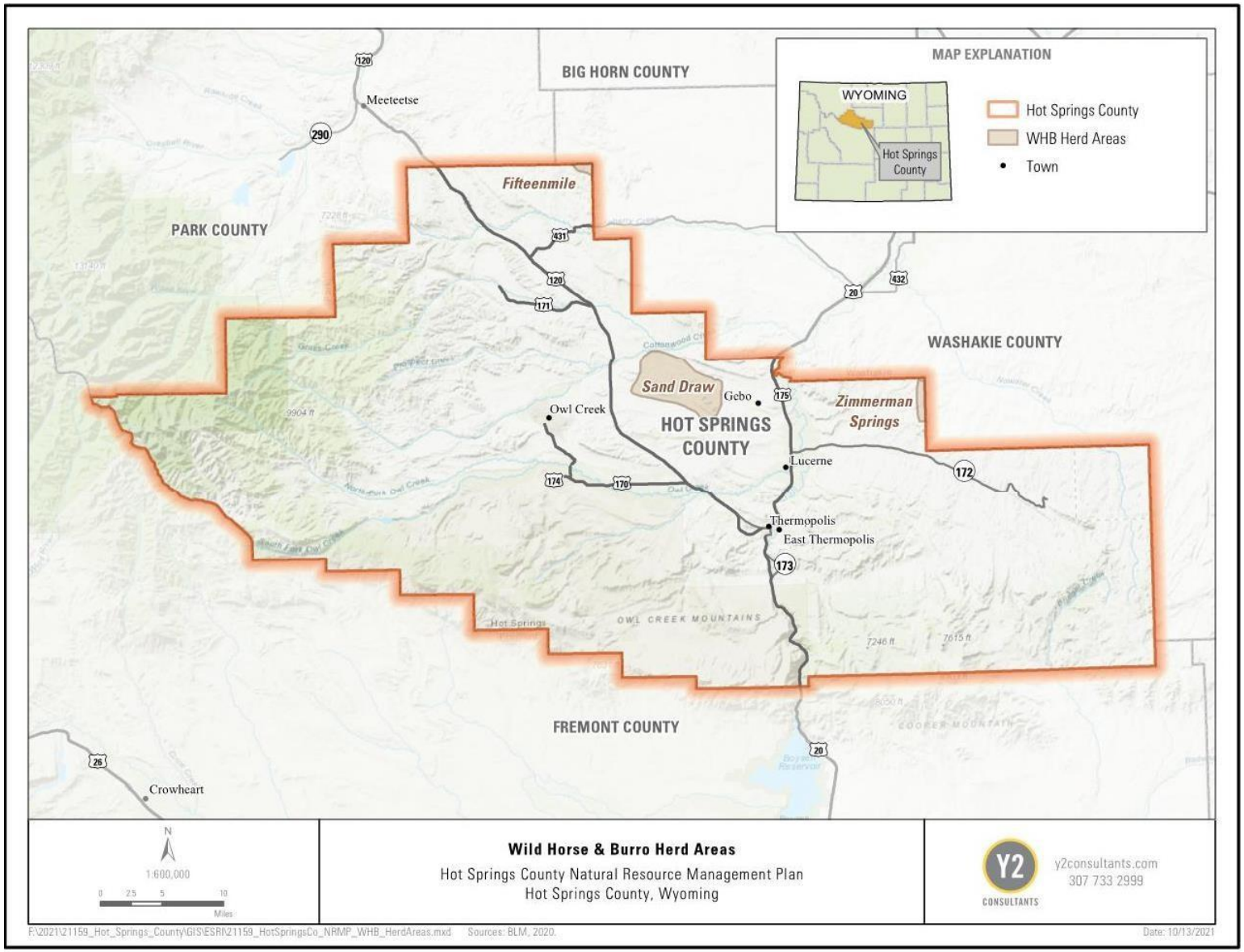
includes any animal for which there is no sufficient proof of ownership found upon inspection (W.S. 11-24-101 through 11-24-115).

6.7.3 Wild Horse and Estray Livestock Resource Management Objectives:

A. No Herd Management Areas or Herd Areas will be designated or created in Hot Springs County without coordination.
B. Any estray livestock from public or private lands are immediately gathered and removed per Wyo. Stat. § 11-24-101.

6.7.4 Wild Horse and Estray Livestock Priority Statements:

1. Hot Springs County supports removal of wild horses from the county should they stray from their range (herd management area) and enter the county.
2. Hot Springs County recognizes the Big Horn/Washakie wild horse management area is outside the county boundaries, has been functioning satisfactorily, and opposes expansion of the management area into Hot Springs County or establishment of new wild horse herds in the county.
3. Federal agencies should notify and coordinate with Hot Springs County if there are any intentions to designate or create Herd Management Areas or Herd Areas within the county.
4. Any equine animal released from private individuals, tribes, or neighboring lands onto public lands after 1971 shall be considered as estray and be removed immediately.



Map 16. Herd Areas and Herd Management Areas in Hot Springs County.

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CHAPTER 7: ECONOMICS & SOCIETY

7.1 TOURISM AND RECREATION ON FEDERAL LANDS

7.1.1 History, Custom, and Culture

Hot Springs County offers a variety of recreation and tourism opportunities for residents and visitors alike. Heightened and more proactive efforts to expand recreation and tourism opportunities will only enhance the quality of life and make a significant contribution to sustaining the custom, culture, and economic stability of the county.

The forests, campgrounds, rivers, streams, lakes, and hot springs of the county, the Owl Creek Mountains, and Hot Springs State Park provide significant contributions to the quality of the experience enjoyed by tourists and recreationists. Privately owned concessionaires rely heavily on public land management for their livelihoods. Tourists rely on public land management to assure a positive experience, and residents rely on public land management to maintain their quality of life.

Our western heritage gave us the opportunity to travel for miles and feel along with the land. Open space values and access to open spaces are a part of our culture and customs and must be preserved. Camping, hiking, riding, biking, hunting, and fishing highlight the scenic nature of public lands in the county. Subdivisions have encroached on access to public land and closure of some private land.

7.1.2 Resource Assessment and Legal Framework

Most recreation and tourism opportunities occur on public land, but draw on county resources and infrastructure to provide support for that experience. Since public land is not taxed, the County relies on programs like the "Payments in lieu of taxes" (PILT) program to provide infrastructure, and public services. Unfortunately, PILT has never been fully funded so the burden falls to the local taxpayer to pick up the difference. Any shortfall may be detrimental to the recreational and tourism experience, and the local economy suffers as a result. It also means the quality of life for local residents is diminished since money which would have otherwise gone to enhancing their lifestyle must be used to maintain services and infrastructure for non-taxpaying tourists and recreationists.

U.S. Highway 20 and State Highway 120 are the two major highways running through Hot Springs County. Highway 20 takes the motorist through the Wind River Canyon along the Wind River and then follows the Big Horn River through Thermopolis and continues north through the county. There are prime hunting areas, fishing streams, and historic sites attractive to sportsmen and tourists along the two routes. Both highways are on a major route to Yellowstone National Park, which experiences seasonal surges in tourism. The Wind River Canyon has been designated a Scenic Byway.

The discovery of significant amounts of fossilized dinosaur remains has provided a new economic force for the county. Based on a major fossil dig southeast of Thermopolis, the Wyoming

Dinosaur Center has become a major attraction for drawing visitors to Hot Springs County. This has resulted in recreational benefits to visitors and economics benefits to businesses and residents.

Hot Springs County offers a diverse and abundant game and non-game wildlife population, due in part to aggressive predator control practices and sound range management practices. Recreation and related tourists activities (motorized and non-motorized transport and activities, including but not limited to hunting, fishing, trail riding, wildlife viewing, and water and land sports) have played a large and historically important role in the county's economy. It is the County's belief that they will continue to do so.

Historic sites and structures remind us of our rich cultural resources and offer a continuing source of education opportunity. Historical, archeological, paleontological, and geological sites abound in Hot Springs County and add to the evidence of the county's long and significant history and are used to attract tourists.

Local culture and custom is also closely tied to access of public land. Access is a means of approach, entrance, or passage; ingress and egress. Activities linked to local culture and custom, and which need access are as follows: recreation and related tourist activities for motorized and non-motorized transport, and activities including but not limited to hunting, fishing, water and land sports, hiking, and wildlife viewing.

Forest recreational tourism is an important source of demand for the tourism industry in this county. People travel millions of miles each year in all seasons to find and experience activities in forest settings. In many ways, the long-term sustainability of the tourism industry is tied to the long-term sustainability of the public and private forests of the county. Past fires and other natural disasters have brought the public closer to the issue of forest health, sustainable management, and the economic tourism value of our forest systems. Recurring droughts have taken their toll in the past, and this prolonged episode has certainly resulted in dire consequences to the health of local forests. The mountain pine beetle is a designated pest and is found on the forested portions of the State and Federal lands within the county. Some forests are suffering major damage due to this infestation. If trees decline, this will affect the aesthetics, health, and natural use of our forests.

7.1.3 Tourism and Recreation Resource Management Objective:

A. Recreational and tourism resources are managed to promote access and availability to the public for both tourism and local recreational uses, while the custom and culture of the county and maintaining benefits to Hot Springs County's economy across important industries including agriculture, mineral development, and tourism.

7.1.4 Tourism and Recreation Priority Statements:

1. Forest health should be sustained as it is central to supplying a quality forest experience to the people who use public lands and the timber industry in Hot Springs County.

2. Recreation and tourism opportunities should be carried out in an environmentally-responsible manner consistent with sustaining local business that rely on tourism and recreation.
3. Hot Springs County encourages cooperative agreements with the Wind River Indian Reservation to develop heritage and cultural corridors, and will take appropriate action in support of efforts to create facilities and signage to bolster access in and through the county.
4. Hot Springs County strongly supports State and Federal agencies efforts to provide public facilities including sufficient sanitary facilities on major highway corridors, at recreation areas, historic sites, and other attractions throughout the county.
5. State and federal land use and management plans should incorporate standards and objectives for public facilities, including sanitation facilities on major highway corridors, at recreational areas, historic sites, and other attractions throughout Hot Springs County which sustain and support local recreation and tourism economic interests.
6. State and federal agencies should provide sufficient signage on major highway corridors, at recreation areas, historic sites, and other attractions throughout Hot Springs County to direct tourists and those recreating to the use of public land.
7. State and federal agencies should coordinate with Hot Springs County to protect the mineral hot springs.
8. Hot Springs County supports visitation opportunities to significant local cultural sites on public lands and strongly urges protection of these cultural resources.
9. Federal agencies should coordinate with Hot Springs County to actively participate in regional tourism efforts affecting public lands that link and promote the county's unique attractions and activities, the participation will encourage efforts that will attract new and repeat visitors to communities' businesses.
10. Federal and state agencies should manage off-road vehicles and rock climbing to decrease damage to canyon walls.
11. Federal law enforcement officers must enforce recreation management restriction on public lands throughout Hot Springs County.
12. Federal and/or state agencies should coordinate with Hot Springs County to identify and promote recreational opportunities that do not conflict with adjacent property owners or create undue burden on the limited county resources to support them.
13. Hot Springs County should be notified and be given the opportunity to participate as a cooperating agency at the earliest time possible for proposed federal agency actions or decisions affecting recreation and tourism opportunities on public lands in the county.
14. Federal and/or state agencies should support access to recreational opportunities on public lands within Hot Springs County.
15. Federal and/or state agencies are encouraged to promote responsible tourism through educational outreach that explains the historical significance of areas, sites, and roads.
16. Federal and/or state agencies should encourage a year-round multiple use management approach for use on public lands as a means of continuing and enhancing recreation opportunities within Hot Springs County while supporting other approved uses and associated private property rights.

17. Federal and/or state agencies should coordinate with Hot Springs County when implementing land use fees and/or fee increases, or the creation of new fees for the recreational use of federal lands or State Parks within the county.
18. Federal and/or state agencies should coordinate and consult with Hot Springs County to manage tourist and recreational activities based on the ability of natural resources to sustainably handle the level of impact.
19. Federal and/or state agencies should coordinate with Hot Springs County when new special recreation permits are requested.
20. Federal and/or state agencies should encourage recreational activities on the lands in Hot Springs County that increase the capacity for federal and state land resources to provide more economic return to the county.
21. Unless otherwise approved by Hot Springs County, federal and/or state agencies should not favor one type of recreation to the exclusion of others.

7.2 LAW ENFORCEMENT AND EMERGENCY MANAGEMENT

7.2.1 History, Custom, and Culture

Law enforcement and emergency response are critically important to the health, safety, and welfare of the citizens of Hot Springs County. The Hot Springs County citizens have relied on the elected County Sheriff to provide law enforcement and security. Over the years the Sheriff has been the sole law enforcement agent, however, with the origination of the BLM, USFS, and other federal agencies, more rules, regulations, and law enforcement officers have come into the county.

7.2.2 Resource Assessment and Legal Framework

Law Enforcement

The search and rescue program for Hot Springs County is conducted through the Hot Springs County Sheriff's Department. In addition, the County has an emergency coordinator, who along with the Thermopolis/Hot Springs County Volunteer Fire Department works closely with the Sheriff's Department. Law enforcement's vital communications equipment may be located on public land. Without unimpeded access to public land, the health, safety, and general welfare of the public will be put at risk and could jeopardize the department's ability to protect and service within its mission.

Violators do not recognize boundaries between public and private land. Consequently, assurances that Hot Springs County Sheriff continues as the chief law enforcement officer on public lands is important to assure consistency and to maintain public expectations. Furthermore, FLPMA provides a means for federal agencies to work with local law enforcement authorities to enforce federal law. The pertinent language follows:

"*The Secretary may authorize Federal personnel or appropriate local officials to carry out his law enforcement responsibilities with respect to the public land and their resources. Such designated personnel shall receive the training and the responsibilities and authority provided for in paragraph (1) of this subsection."* 43 U.S.C. § 1733(c)(2).

Cooperative agreements have been worked out in the past. The County may use cooperative agreements to assure efficient and effective law enforcement.

7.2.3 Law Enforcement Resource Management Objectives:

A. The Hot Springs County sheriff constitutes the chief law enforcement officer on the public lands in the county for the enforcement of State and County laws. With cooperative agreements under the Federal Land Policy and Management Act, the County Sheriff is authorized to enforce certain federal statutes on public lands.
B. Law enforcement and emergency services have unfettered access to public lands to protect the health, safety, and welfare of the residents and visitors of Hot Springs County.
C. Communication infrastructure is developed on public lands to ensure emergency communication services exist throughout Hot Springs County and citizens and visitors to the county can seek emergency assistance throughout the entire county.

7.2.4 Law Enforcement Priority Statements:

1. Hot Springs County Sheriff's Office should be notified of all federal law enforcement actions within Hot Springs County.
2. State and federal land managers should put up signage and demarcate change in land ownership in order to prevent trespass on private lands.
3. Law enforcement within Hot Springs County must strictly enforce trespass issues within the county and the County should be coordinated with on trespass discussions within the county.
4. Hot Springs County requests involvement in discussions on corner-crossing within the county.
5. Hot Springs County requires that federal and state agencies allow safe and unrestricted access to federal land for law enforcement and emergency services.
6. Federal and/or state agencies should work and coordinate with Hot Springs County and other surrounding counties and agencies within the region to ensure that telecommunications and informational highway interests are heard and addressed to protect and promote the health, safety, and general welfare of the citizens of the county and surrounding areas.
7. Federal and/or state agencies should support increasing the number of adequate broadband T1-lines available within the community to enhance emergency response and protect the health, safety, and welfare of Hot Springs County.
8. Federal and/or agencies should encourage the introduction of the newest technology for accessibility from all areas within Hot Springs County. Including siting of communication towers on public ground.

7.3 ECONOMIC VIABILITY

7.3.1 History, Custom, and Culture

Federally managed lands have significant impacts on Hot Springs County. The economic stability of Hot Springs County rests upon continued multiple use of the federally or state-managed lands. Tax revenue is available to the County primarily through the ad valorem tax, or property tax. Tax revenue is secondarily supplied by the County's share of sales tax receipts. That limited tax base

must be protected, and the continued vitality of that tax base is dependent upon the continued multiple use of federally or state-managed lands. If multiple use is restricted, business income will suffer, and sales and property taxes will be affected. If grazing is restricted, financial pressure will be placed on the rancher, which may even result in going out of business. When oil and gas leasing is reduced, severance taxes are reduced, and jobs are lost. When recreation opportunities are reduced, tourism suffers and lodging tax revenue is reduced. Ultimately, when the public is unable to utilize public lands, the tax base of the county suffers, and the business income is also reduced.

Due to Hot Springs County's sparsely populated nature, all income sources must be maintained at their highest sustainable level. The loss of any industry, at any level, heavily impacts smaller communities, most of which are reliant on one or two industries. The effects of such losses critically impact the community structure at the local level causing loss of community cohesion and disintegration of the community itself.

7.3.2 Resource Assessment and Legal Framework

In 2017, the total market value of livestock and crop sales were $15,225,000. Livestock sales made up approximately 93% ($14,227,000). There were 223 farms (25 more than in 2012) totaling approximately 528,123 acres with the average farm size being 2,368 acres. Of the farms in the county, 97% were family owned farms. Approximately 20,972 cattle and calves were in Hot Springs County, 174 broiler and other meat-type chickens, 159 goats, 15 hogs and pigs, 1,443 horses and ponies, 614 layer hens, 7,300 sheep and lamps, and 12 turkeys (these do not account for seasonal use of public land). Cattle and calves accounted for $11,075,000 of the total $14,227,000 in livestock sales. The largest and only recorded crop grown in Hot Springs County was forage (hay) with 10,002 acres in production and $999,000 in sales. (USDA, National Agricultural Statistics Service, 2017)

Oil and mining service are also important to the economy of Hot Springs County. The total assessed valuation for Hot Springs County in 2021 for minerals was $470,207,599. Of this $45,147,935 was from oil, $1,948,627 was from the mining of bentonite, and $111,037 was from the mining of sand and gravel. (Wyoming Department of Revenue, 2021)

The economic data provided below is supplied by Headwaters Economics and gives an overview of the economic status of Hot Springs County. Economic data is constantly changing and updates to this section will be made as appropriately deemed by the County.

Summary of Population and Employment

From 1970 to 2020, the population in Hot Springs County decreased from 5,023 to 4,425 people, a 12% decrease. In this same time period, employment grew from 2,160 to 2,801, a 30% increase. Personal income from 1970 to 2020 grew from $116.1 million to $296.5 million, a 155% increase. (Headwaters Economics, 2020)

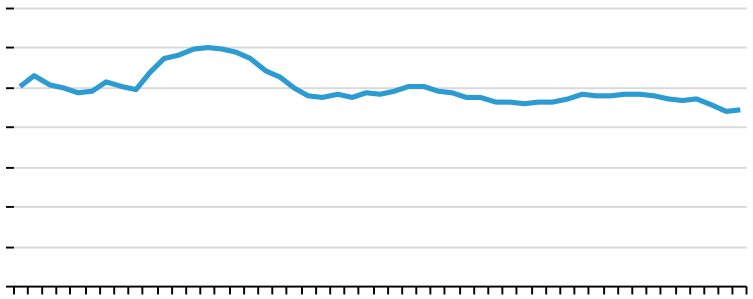


Figure 4. Population trends in Hot Springs County (Headwaters Economics, 2022).

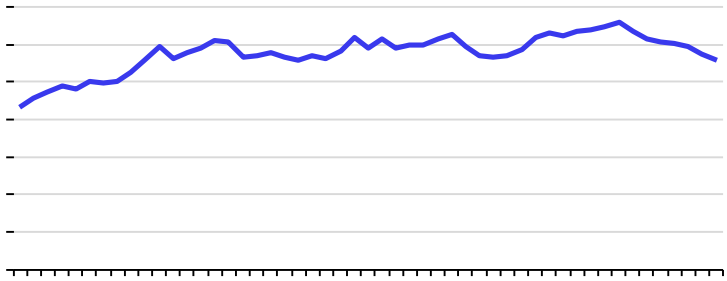


Figure 5. Employment trends in Hot Springs County (Headwaters Economics, 2022).

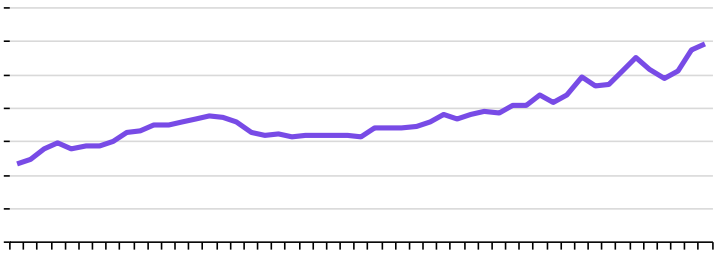


Figure 6. Personal income trends in Hot Springs County (Headwaters Economics, 2022).

Employment by Industry

Employment data are categorized using two different systems. From 1970-2000, the Standard Industrial Classification was used. Since 2001, industry-level data have been organized using the North American Industrial Classification System.

From 1970 – 2000, the two industry sectors that added the most new jobs were services (394 jobs) and retail trade (139 jobs). (Headwaters Economics, 2022)

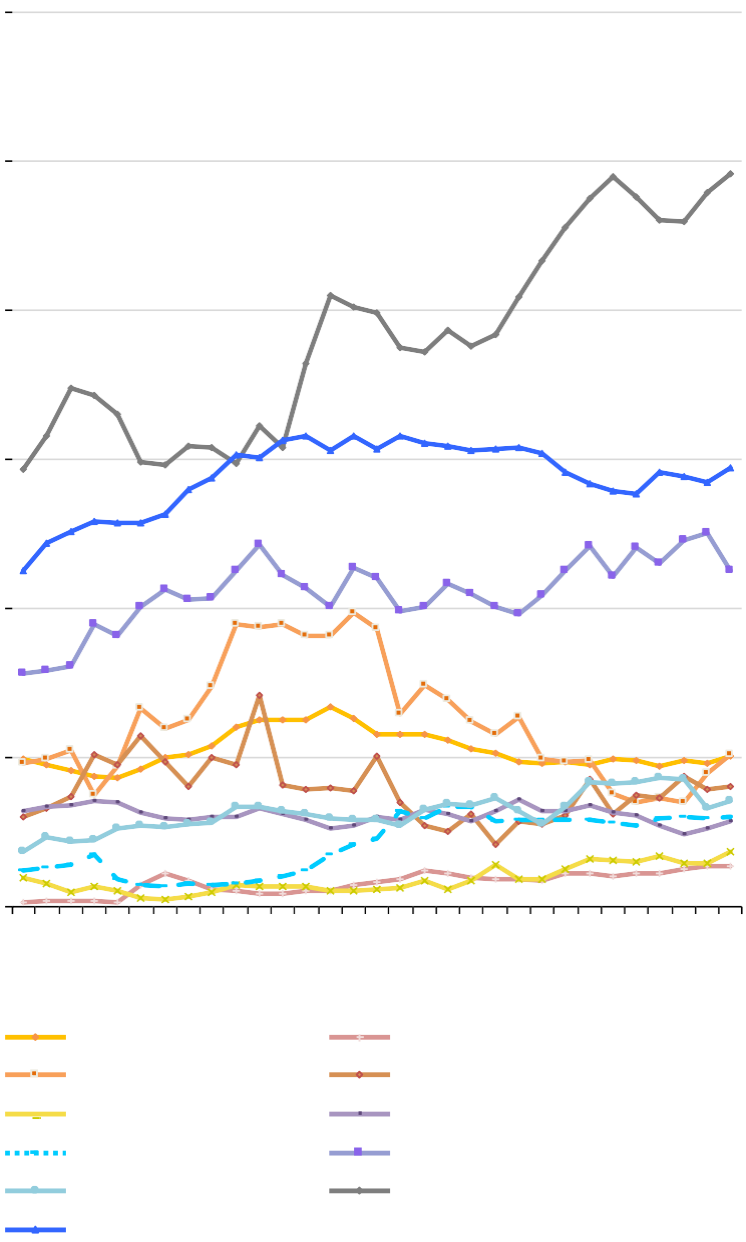


Figure 7. Employment by industry in Hot Springs County from 1970-2000 (Headwaters Economics, 2022).

From 2011 to 2020, total employment (both service and non-service related jobs) decreased from 3,131 jobs to 2,801 jobs. Non-services related jobs (e.g. farming, mining, construction, manufacturing) decreased from 650 jobs to 578 jobs. Service related jobs (e.g. utilities, trade,

transportation and warehousing, education services, etc.) decreased from 1,798 jobs to 1,496 jobs. Government jobs within the County increased from 575 jobs to 604 jobs.

In 2020, the three industry sectors with the largest number of jobs were government (604 jobs), health care and social assistance (331 jobs), and food services (241 jobs). From 2001 to 2020, the three industry sectors that added the most new jobs were manufacturing (78 new jobs), government (29 new jobs), and finance and insurance (27 new jobs). (Headwaters Economics, 2022)

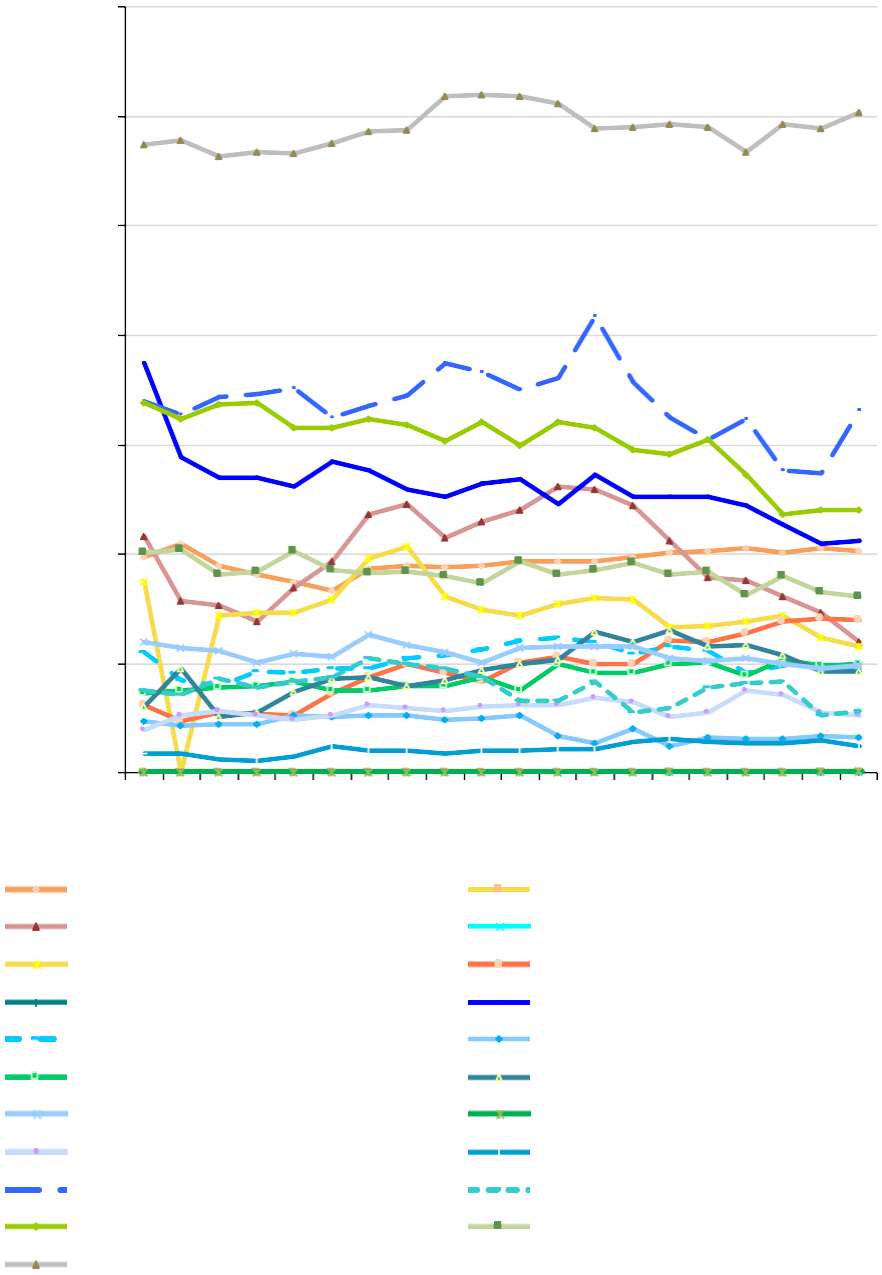


Figure 8. Employment by industry in Hot Springs County from 2001-2020 (Headwaters Economics, 2022).

Earnings by Industry

From 1970 to 2000, the three industry sectors that added the most earning to Hot Springs County were government ($8.3 million), services ($6.0 million), and wholesale trade ($3.7 million). (Headwaters Economics, 2022)

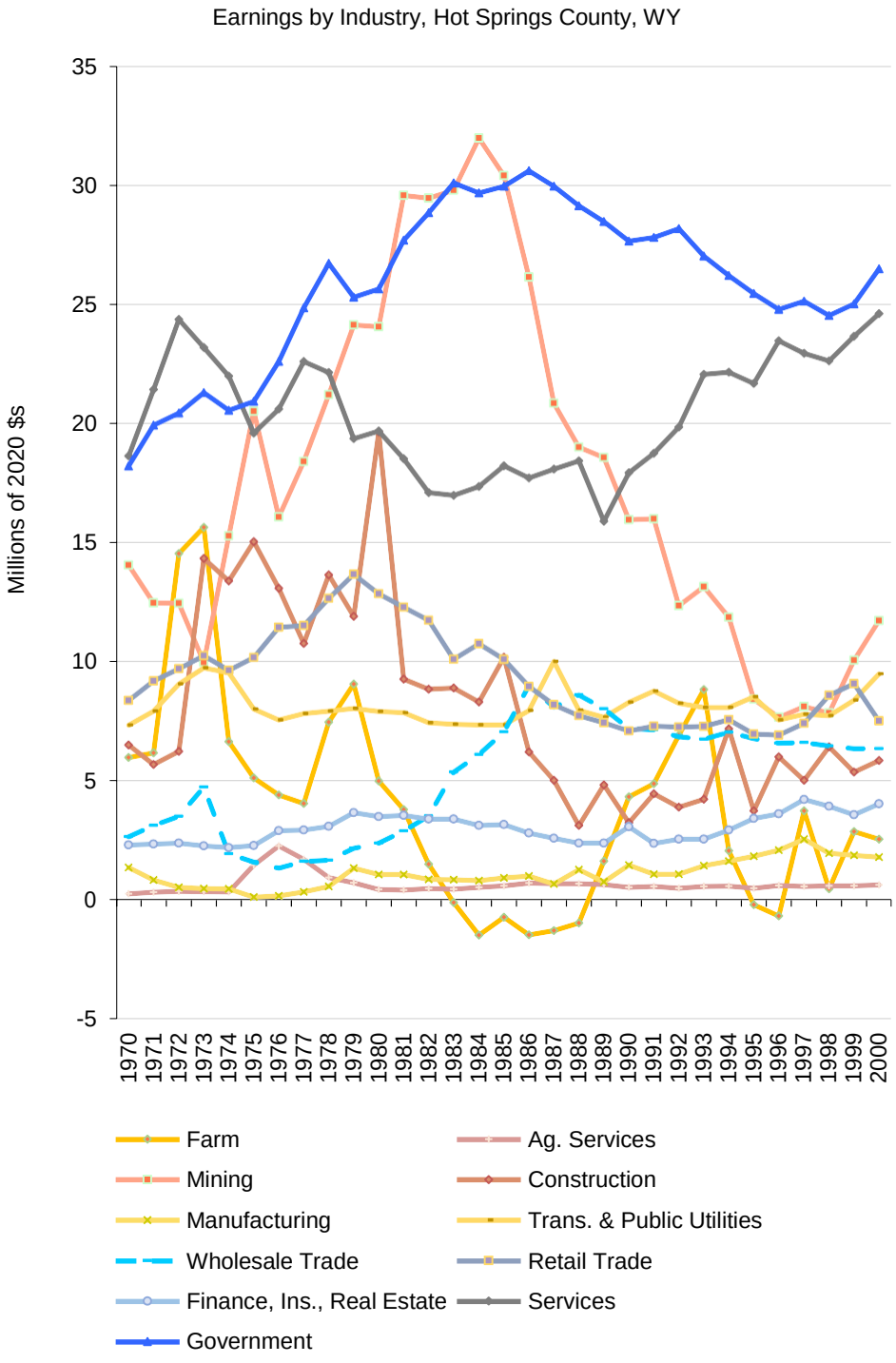


Figure 9. Employment by industry in Hot Springs County from 1970-2000 (Headwaters Economics, 2022).

From 2001 to 2020, earnings in non-services related industries grew from $30.8 million to $43.5 million, a 41% increase. Earnings in services related industries also grew from $48.1 million to $132.8 million, a 176% increase. Earnings in government from 2001 to 2020 grew from $26.7 million to $43.6 million, a 63% increase.

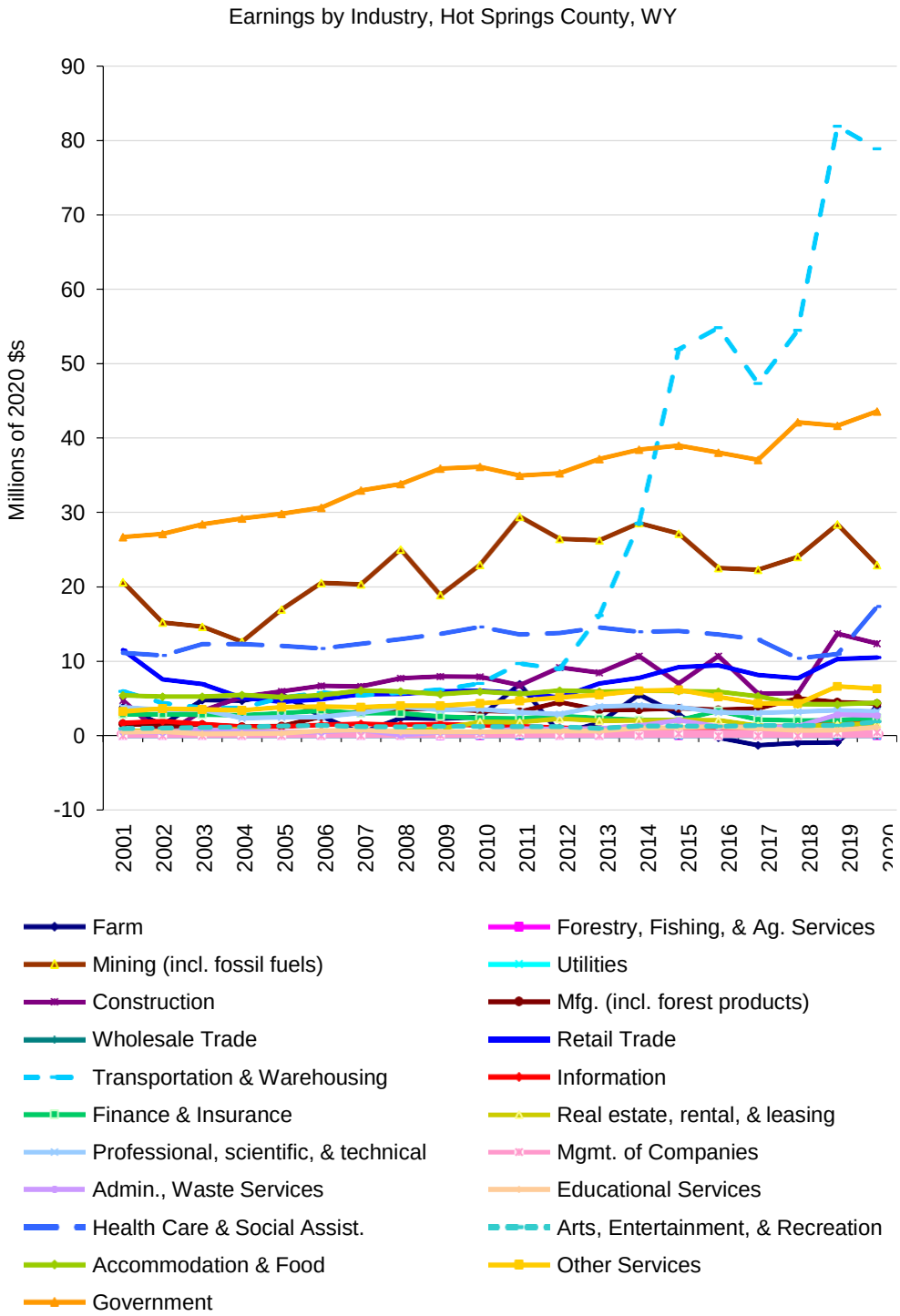


Figure 10. Earnings by industry in Hot Springs County from 2001-2020 (Headwaters Economics, 2022).

In 2020, the three industry sectors with the largest earnings were transportation and warehousing ($78.9 million), government ($43.6 million), and health care and social assistance ($17.3 million). From 2001 to 2020, the three industry sectors that added the most earnings were transportation and warehousing ($73.0 million), government ($16.9 million), and health care and social assistance ($6.2 million). (Headwaters Economics, 2022)

Employment and Wages by Industry (2019)

In 2020, 1,832 jobs had an average wage of $39,294. Government jobs paid the highest wages ($49,052) and services related jobs paid the lowest ($29,060) while non-service related jobs paid an average wage of $48,694. Local government jobs employed the largest number of people (479) and information jobs employed the lowest (11). Under natural resources and mining approximately 188 people were employed with an average wage of $60,133. (Headwaters Economics, 2022)

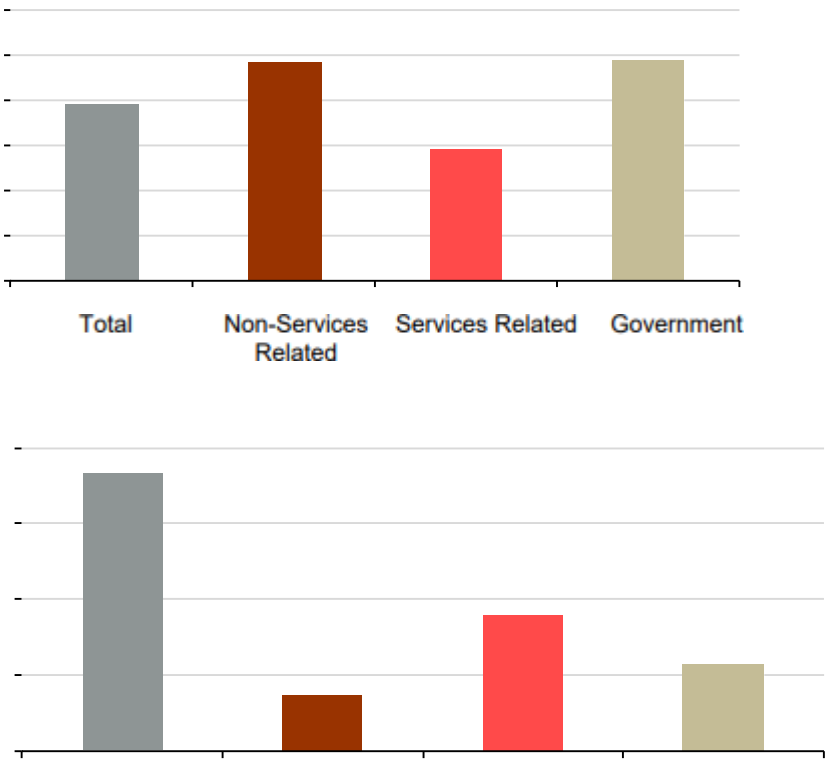


Figure 11. Wages and employment by industry for Hot Springs County in 2020 (Headwaters Economics, 2022).

Employment Changes During Recessions

Six national recessions have occurred between 1976 and 2020. From 1976 to 2021, employment decreased from 2,159 to 2,133 jobs, a 1% decrease.

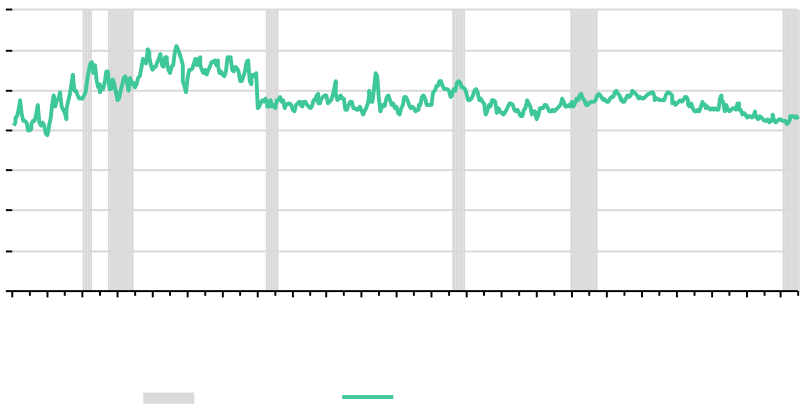


Figure 12. Employment trends during National Recessions for Hot Springs County (Headwaters Economics, 2022).

Unemployment

Since 1990, the average annual unemployment rate has ranged from a low of 3.6% in 2000 to a high of 5.6% in 2010. In the most recent decade, the lowest monthly unemployment rate was April and May of 2019 at 3.1% and the highest monthly unemployment rate was May of 2020 at 6.6% (Headwaters Economics, 2022).

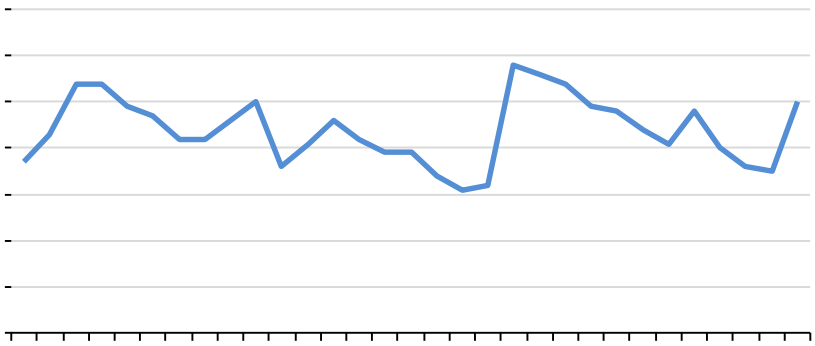


Figure 13. Average annual unemployment for Hot Springs County (Headwaters Economcis, 2022).

Payments in Lieu of Taxes and Secure Rural Schools Act

Land exchanges or acquisitions that eliminate or decrease private lands can be harmful to the County because the federal government does not pay property taxes, but still may create a demand for services, such as fire protection and police cooperation. One way to offset some of these losses are Payments in Lieu of Taxes (PILT) administered by the United States Department of Interior. 31 U.S.C. §§ 6901-6907. The annual PILT payments to local governments are computed in a complex formula based on five variables 1) the acres of eligible land in the county; 2) the population of the county; 3) the previous year's payments for all eligible lands under other payment programs from federal agencies; 4) any state laws requiring payments to be passed through to other local government entities (such as school districts); 5) any increase in the Consumer Price Index for the 12 months ending the preceding June 30th. Generally, federal lands eligible under PILT include acreage within the National Forest and National Park Systems, those managed by the Bureau of Land Management, and those affected by U.S. Army Corps of Engineers and Bureau of Reclamation water resources development projects. 31 U.S.C. § 6901. Individual county payments may increase or decrease from the prior year due to changes in computation variables and the amount allocated by Congress in its discretionary spending. 31 U.S.C. § 6902. Hot Springs County received $840,764 in PILT payments in 2020. (U.S. Department of the Interior, 2020). The Congressional Research Service offers an in-depth look at PILT and the sum of the issues surrounding the program, including, the uncertainty counties face regarding PILT funding because the funding is discretionary for Congress. (Hoover, 2017).

The Secure Rural Schools Act (SRS) provides funding opportunities to counties paid from the USFS and BLM to (1) to carry out activities under the Firewise Communities program; (2) to reimburse participating counties for search and rescue and other emergency services, including firefighting and law enforcement patrols; (3) to cover training costs and equipment purchases directly related to the emergency service described in paragraph (2); and (4) to develop and carryout community wildfire protection plans. P.L. 115-141 (2012). The USFS provides a FAQ regarding SRS funding here.

National Environmental Policy Act

NEPA can play a crucial role in the economic and socio-economic well-being of a community. NEPA applies to "every major Federal action significantly affecting the quality of the human environment" (42 U.S.C. § 4332(1)(C)). The courts have interpreted this to generally mean that every time the federal government decides for almost any action that may have an environmental impact, NEPA compliance is required. Some courts have even required agencies to follow NEPA when the agency spends a small amount of money on a project or program that they are not the lead agency. *See e.g., Citizens Alert Regarding the Environment v. United States Environmental Protection Agency*, 259 F.Supp.2d 9, 20 (D.D.C. 2003). In 2020, a new final rule was issued with reforms to NEPA, with the change in administration this is likely to change. Additional information on the 2020 ruling can be found in Appendix C.

NEPA requires that agencies undertake an environmental analysis to determine whether a federal action has the potential to cause significant environmental effects. If a proposed major federal action is determined to significantly affect the quality of the human environment, federal agencies are required to prepare an Environmental Impact Statement (EIS). The regulatory requirements for an EIS are more detailed and rigorous than the requirements for an Environmental Assessment (EA). NEPA does not mandate results or substantive outcomes. Instead, NEPA's purpose is to "provide for informed decision making and foster excellent action." 40 C.F.R. § 1500.1(a). Thus, NEPA ultimately does not require a specific result, but should be utilized to ensure that federal agencies "conduct environmental reviews in a coordinated, consistent, predictable, and timely manner, and to reduce unnecessary burdens and delay." *Id*. at (b). Therefore, for an agency to be NEPA compliant, they need to make timely and coordinated decisions that are based on informed decision-making.

One of the greatest economic harms for a local community is the typical several year delay of an important project due to NEPA. Since 2010, the average EIS completion time was approximately 4.5 years and averaged more than 600 pages. Even more disturbing, over a quarter of the EISs during that time span took more than 6 years to complete (Council on Environmental Quality, 2010). At the time of this NRMP update, CEQ regulations require that EAs not exceed 75 pages and one year to complete unless a senior agency official of the lead agency approves a longer period in writing and establishes a new time and page limit. 40 C.F.R. § 1501.5, 1501.10. Similarly, CEQ regulations now require that EISs not exceed 150 pages (300 for proposals of unusual scope or complexity) and two years to complete, unless a senior agency official of the lead agency approves a longer period in writing and establishes a new time and page limit (40 C.F.R. § 1502.7).

To increase efficiency in the NEPA process, agencies are supposed to include cooperating agencies at the earliest time practicable to participate. Additionally, agencies are supposed to eliminate duplication of efforts by cooperating with local governments and form (1) joint planning processes; (2) joint environmental research and studies; (3) joint public hearings; (4) joint environmental assessments. 40 C.F.R. § 1506.2(b). Further, agencies, unless specifically

prohibited by law, allow local governments to be joint lead agencies in certain NEPA decisions and cooperate in fulfilling local government requirements that may not conflict with federal law. *Id*. at (c).

Environmental Justice

In February of 1994, Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" was signed and directed each federal agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations" including tribal populations. Environmental justice mitigation measures must be outlined or analyzed in EA, Findings of No Significant Impact (FONSIs), EISs, and Records of Decisions. (EPA, 2015)

7.3.3 Economic Viability Resource Management Objectives:

A. Federal and state agencies evaluate and consider Hot Springs County's economic viability in all public land decisions.
B. Hot Springs County is coordinated with and given opportunity to be a cooperating agency when a decision that will impact the county's socioeconomic and economic viability is being considered.

7.3.4 Economic Viability Priority Statements:

1. Consultation and coordination with Hot Springs County should occur at the earliest time possible for any proposed action, change of existing activities, newly permitted activities, or changes in regulations that may affect the economic basis of the county. This coordination should be used to determine the full scope of potential social and economic effects of activities proposed on public lands, including impacts to circulating dollars when access and use of federal land is proposed.
2. Hot Springs County supports continued access to natural resources development/use on federal land to maintain economically viable communities within the county.
3. In all management decisions, federal agencies should show a preference for those alternatives that would result in "no net loss" in Hot Springs County's economic base.
4. Federal and state agencies should analyze and consider social and economic factors at the most localized level, such as County, municipal, or region-wide basis to the extent data is available.
5. When a federal agency is conducting a NEPA analysis that is triggered by a project applicant, the agency shall base the purpose and need on the goals of the applicant in coordination with the local governments the agency's statutory authority.
6. An "effect" when conducting a NEPA analysis should not be considered "significant" if the effect is remote in time, geographically remote, or the result of a lengthy causal chain.
7. When determining the effects of any proposed action, those effects should be reasonably foreseeable and have a reasonably close causal relationship to the proposed action, including those effects that occur at the same time and place as the proposed action or alternatives and may include effects that are later in time or farther removed in distance from the proposed action or alternatives.

8. Effects should not be considered if the agency has no ability to prevent the effect due to its limited statutory authority or the effect would occur regardless of the proposed action.
9. Hot Springs County economic information must be a consideration for any NEPA application and clearly demonstrate what impacts the NEPA application has on Hot Springs County economics.
10. Hot Springs County encourages the permitting and construction of telecommunication infrastructure and enhancements, which will both sustain local businesses, and assist them in becoming competitive in the global marketplace.
11. Hot Springs County encourages cooperation between and among telecommunication service providers to enhance communication between and among communities.
12. Hot Springs County supports efforts to improve the reliability and expansion of local cellular capabilities.

CHAPTER 8: AGRICULTURE

8.1 AGRICULTURAL PRODUCTION

8.1.1 History, Custom, and Culture

Food production is the primary use of agricultural lands within Hot Springs County, either as crops for human consumption or as crops for livestock forage. In addition to food production, agricultural lands contribute to Hot Springs County's landscape and scenic beauty and provide wildlife habitat, open space, and recreational opportunities for residents and visitors alike for hunting, fishing, snowmobiling, and other tourism-related activities. Agriculture is an invaluable source of affordable food, employment, raw materials, and open space to the county. Agriculture also provides numerous opportunities for environmental stewardship to benefit local ecosystems and serves as a key component of Hot Springs County's sustainable economy.

Out of economic necessity, most agricultural operations in the West cover large areas, and thus agriculture contributes substantially to maintaining open spaces on private ranch and farmlands. Agriculture open space in the county contributes to many ecosystem goods and services. Ecosystem goods and services include regulation functions, habitat functions, provisioning functions, and information functions. These services produce the many life-sustaining benefits we receive from nature—clean air and water, fertile soil for agriculture production, pollination, climate regulation, water supply, waste treatment, recreation, biodiversity, cultural information, and flood control. These ecosystem services are important to environmental and human health and well-being, yet they are limited and often taken for granted. Farmers and ranchers constitute the largest group of natural resource managers in the world. (FAO, 2007)

8.1.2 Resource Assessment and Legal Framework

Agriculture continues to be a very important part of Hot Springs County's economic and cultural heritage. In comparison with Wyoming's other 22 counties in 2017, Hot Springs County ranks second in horses and fifth in the production of fruits, tree nuts, and berries.

Agricultural production is an important part of the Hot Springs County economy providing both revenue and employment. In 2017 the market value of agriculture products in Hot Springs County totaled $15,225,000. The 2017 market value for livestock products was $14,227,000 and for crop products was $999,000. In 2017 there were 528,123 acres of agricultural land within Hot Springs County, 95% of which are pastureland. For Hot Springs County 93% of agricultural sales are livestock products while 7% are crop products. (National Agricultural Statistics Service, 2017)

The largest portion of crops produced in the county include alfalfa, grass, hay, silage, and feed grains which are an integral part of the livestock industry which relies heavily on public lands for livestock grazing. Row crops, including but not limited to bean, corn, cereal grains, and sugar beets, also form an important base of the agricultural economy of the county and are important to the livestock industry and wildlife.

Irrigated and intensive agriculture also provide a major contribution to the economic base of the county and are of critical importance to the economic stability of the county. Productive

watersheds on public lands must be well maintained within the county as essential factors to preservation of irrigated agriculture.

8.1.3 Agricultural Production Resource Management Objectives:

A. A sustainable future for the local agriculture industry is secured through the development of new product, value added industrial development, reliable transportation alternative, and marketing efforts.
B. Agricultural use of federal and state lands is a major component of multiple use of public lands and is maintained as a viable and major component of the economy, custom, and culture of Hot Springs County.
C. Federal and state actions affecting agriculture are to be made in coordination with Hot Springs County.

8.1.4 Agricultural Production Priority Statements:

1. Federal and state agencies should coordinate with Hot Springs County to conduct studies to identify obstacles, barriers and opportunities for agricultural development and develop strategic plans to overcome problems and take advantage of opportunities that need to be identified.
2. Hot Springs County encourages the continued use of public lands for grazing and other forms of agriculture as a key element of the doctrine of multiple use.
3. Hot Springs County supports opportunities for enhancement of land stewardship.
4. Hot Springs County supports actions which diversify and strengthen the economic base of agriculture within the county.
5. Hot Springs County supports the multiple use status of the federally and state managed lands by actively participating, at its discretion, in decisions affecting the management of agricultural lands.
6. Support development of all plans and policies that directly or indirectly assist agriculture with the intent of increasing the stability and expansion of the industry as well as encouraging innovative techniques that improve the efficiency of crop production within Hot Springs County.
7. Federal agencies should quickly process permits on federal lands for the construction, maintenance, or expansion of irrigation and stock water distribution systems to private lands, and allow maintenance.
8. Federal agency actions should be consistent with Right to Farm laws, to the extent applicable. Right to Farm laws should be considered when coordinating on federal and state land use decisions.
9. Any agricultural property damage, crop loss, or grazing AUMs caused by an escaped prescribed burn, fire suppression efforts, or damage caused by government agency action, resulting in economic loss in Hot Springs County should be considered justification for economic compensation and restoration by the responsible party to the property owner at current market values.
10. State and federal wildlife and lands managers should coordinate with private property owners to minimize impacts to private property on agricultural lands.

8.2 LIVESTOCK GRAZING

8.2.1 History, Custom, and Culture

Grazing has been important in the Hot Springs County area for over 50,000 years. The vegetation in Hot Springs County evolved under tens of thousands of years of grazing and periodic fire, and the interaction of the two. Grazing in the region began to shape the modern vegetation we see today around 18,000 years ago in the Pleistocene. These grazers included ancient muskox, antelope, Pleistocene bighorn sheep, ancient bison, camels, as well as mammoths. Eventually, humans began to use fire to manage the grazing of these ancient herds. (Martin & Gilbert, 1978; US National Park Service, 2015)

Wildlife, wildfire, and early humans continued to shape the vegetation of the basin. In the late 1600s to mid-1700s, Indigenous Peoples obtained the horse and became forage managers as well as wildlife managers, manipulating the vegetation and animal populations. Both historically and recently, communities have relied on the grazing lands of Hot Springs County to provide food, clothing, recreation, and sources of income. The semi-arid climate and topography of both rangeland and forest provide excellent areas for the grazing of livestock.

Permitted grazing on public lands is a critical piece of livestock operations in Hot Springs County. The intermingled BLM, USFS, state, and private lands allow ranching to continue in the county. The low percentage of private lands in the county means that access to public lands is critical to the continued ability to maintain the ranching community and the viability of the county. Public lands allow private lands to grow hay in the summer months that provides forage for livestock during the harsh winters. Maintaining public lands grazing is also tied to keeping private ranchlands intact and providing important ecosystem functions. Reductions in public land grazing can affect the economic viability of agriculture operations.

The contribution of the ranching industry to Hot Springs County goes beyond the critical economic livestock sales. Studies in similar counties have shown that ranchers tend to spend the majority of their dollars in the county they reside in on fuel, food, supplies, and equipment. Ranchers are also involved in their communities and serve important leadership roles in many areas. A thriving agriculture industry helps maintain local economies. (Miller & Heaton, 2015)

8.2.2 Resource Assessment and Legal Framework

The continued viability of the livestock industry is vital in maintaining Hot Springs County's economy and government, as well as preserving the culture and heritage of area residents. Sections of the federal land in the county are laid out in an interspersed mixed ownership of state, private, and federal land or intermixed with private lands. When federal land management policies are enacted, they influence the management of the associated private land. Many management challenges accompany the intermingled federal and private lands, including access, land use, water rights, and grazing rights. Private lands that are encompassed in a grazing allotment have restrictions for use just like the federally managed land. Grazing management on public lands can vary greatly depending on special designations. Special designations such as wilderness, WSAs, and national forests can allow grazing in specific situations. Refer to Section

3.3 Special Designation and Management Areas for additional information regarding special designation areas.

Because most of the rangeland in Hot Springs County is federally managed, ranchers must rely on obtaining federal and state grazing leases and permits. Most of the rangeland and riparian zones in the county support an understory or periodic cover of herbaceous or shrubland vegetation amendable to rangeland management principles or practices. The principal natural plant cover is composed of native grasses, forbs, and shrubs that are valuable as forage for livestock, big game, other wildlife, and pollinators. Rangelands in the county consist of sagebrush steppe, small grasslands, forested areas, desert shrublands, riparian zones, and wet meadows. The soil and climate of Hot Springs County make a majority of the land best-suited for grass and shrub production, rather than farming. Many of the forested grazing leases are highly productive but with limited forage available due to dead and downed timber causing accessibility issues for livestock and wildlife.

Reduction in livestock numbers on federal lands can be a result of natural factors, including wildfire and drought. The primary factor in determining livestock grazing capacity on public land is the availability of grazing resources. Proper grazing management is an important tool for the management of rangeland resources, and can be used to mitigate invasive species impact, wildfire impact, enhance reclamation, and can improve rangeland health. In addition to the widescale reduction of fuels that grazing can induce, the BLM has also shown success in using targeted grazing as a management tool to slow down and stop range fires, as well as reduce the size of fires in grazed areas. (Idaho Rangeland Resource Commission, 2016)

Livestock grazing, irrigated farming, and other intensive agriculture practices are integral to Hot Springs County's ability to remain viable with a diverse and sustainable economy. Ranching and agricultural operations maintain open space and large landscapes to support multiple uses.

Taylor Grazing Act

The Taylor Grazing Act (TGA) of 1934 (43 U.S.C. 315) established the Grazing Service, which eventually became known as the BLM. Local BLM grazing advisory boards administered the adjudication process to determine where, when, and what type of livestock grazing could occur on public rangelands. To receive an allotment through this process, the stockman had to have (1) "commensurate base property" on which he could graze his livestock when they were not using the federal lands, (2) have an economically viable livestock operation, and (3) be members of the local community and support the local stability of the community (43 U.S.C. § 315b). The TGA gives individuals the right to apply for grazing permits on federal lands based upon the ownership of qualified base property (43 U.S.C. § 315(b)). The purpose of the TGA is "to stabilize, preserve, and protect the use of public lands for livestock grazing purposes…" (*Barton v. United States*, 609 F.2d 977 (10th Cir. 1979)). As the court in *Public Lands Council v. Babbitt*, explained, "Congress enacted the [TGA], establishing a threefold legislative goal to regulate the occupancy and use of the federal lands, to preserve the land and its resources from injury due to overgrazing, and 'to provide for the orderly use, improvement, and development of the range" (154 F.3d 1160, 1161 (10th Cir. 1998)). Once a grazing district is established, grazing must occur on the land (*See*

generally, Mountain States Legal Foundation v. Andrus, 499 F.Supp. 383 (D. Wyo. 1980))(holding that the intent of FLPMA was to limit the ability of the Secretary of the Interior to remove large tracts of public land from the operation of the public land laws). Further, Congress intended that once the Secretary established a grazing district under the TGA, the primary use of that land should be grazing ((*Public Lands Council v. Babbitt*, 167 F.3d 1287, 1308 (10th Cir. 1999) *aff'd on other grounds*, 529 US 728 (2000)). The Secretary can modify the boundaries of a grazing district, but unless land is removed from designation as grazing, or the TGA designation is terminated, the Secretary must use it for grazing (43 U.S.C. § 315).

When modifying the boundaries of a grazing district or terminating the TGA designation of an allotment, the Secretary must classify the land as no longer "chiefly valuable for grazing" (May 13, 2003, Solicitor's Memorandum to the Assistant Secretaries for Policy, Management and Budget, Land and Minerals Management and the Director, Bureau of Land Management, clarifying the Solicitor's Memorandum M-37008 (issued October 4, 2002)). Thus, a permittee may relinquish a permit but, barring the Secretary determining that there is a better use for the land through land-use planning, the forage attached to the permit must be available for grazing. Thus, except upon the showing that the land is no longer "chiefly valuable for grazing," the Secretary does not have the discretion to bar grazing within a grazing district and must therefore review applications for grazing permits and make a final decision in a timely fashion when they are filed.

Wyoming Standards for Healthy Rangelands

According to the Department of the Interior's final rule for grazing administration, effective August 21, 1995, the Wyoming BLM State Director is responsible for the development of standards for healthy rangelands and guidelines for livestock grazing management on 18 million acres of Wyoming's public rangelands. The development and application of these standards and guidelines are to achieve the four fundamentals of rangeland health outlined in the grazing regulations (43 CFR § 4180.1). Those four fundamentals are: (1) watersheds are functioning properly; (2) water, nutrients, and energy are cycling properly; (3) water quality meets State standards; and (4) habitat for special status species is protected. (BLM, 1997)

Standards address the health, productivity, and sustainability of the BLM administered public rangelands and represent the minimum acceptable conditions for the public rangelands. The standards apply to all resource uses on public lands. Their application will be determined as use-specific guidelines are developed. Standards are synonymous with goals and are observed on a landscape scale. They describe healthy rangelands rather than important rangeland byproducts. The achievement of a standard is determined by observing, measuring, and monitoring appropriate indicators. An indicator is a component of a system whose characteristics (e.g., presence, absence, quantity, and distribution) can be observed, measured, or monitored based on sound scientific principles (BLM, 1997). Guidelines provide for and guide the development and implementation of, reasonable, responsible, and cost-effective management practices at the grazing allotment and watershed level. The guidelines in this document apply specifically to livestock grazing management practices on the BLM-administered public lands. (BLM, 1997)

These management practices will either maintain existing desirable conditions or move rangelands toward statewide standards within reasonable timeframes. Appropriate guidelines will ensure that the resultant management practices reflect the potential for the watershed, consider other uses and natural influences, and balance resource goals with social, cultural/historic, and economic opportunities to sustain viable local communities. Guidelines, like standards, apply statewide. (BLM, 1997)

Implementation of the Wyoming standards and guidelines will generally be done in the following manner: Grazing allotments or groups of allotments in a watershed will be reviewed based on the BLM's current allotment categorization and prioritization process. Allotments with existing management plans and high-priority allotments will be reviewed first. Lower priority allotments will be reviewed as time allows or when it becomes necessary for BLM to review the permit/lease for other reasons such as permit/lease transfers, permittee/lessee requests for change in use, etc. The permittees and interested publics will be notified when allotments are scheduled for review and encouraged to participate in the review. (BLM, 1997)

There must be a formal determination before a plan is made and implemented. The review will first determine if an allotment meets each of the six standards. If it does, no further action will be necessary. If any of the standards are not being met, then a rationale explaining the contributing factors will be prepared. If livestock grazing practices are found to be among the contributing factors, corrective actions consistent with the guidelines will be developed and implemented before the next grazing season in accordance with 43 CFR 4180. If a lack of data prohibits the reviewers from determining if a standard is being met, then a strategy will be developed to acquire the data in a timely manner. (BLM, 1997)

Continuingly, the Standards for Healthy Rangelands will direct on-the-ground management on the public lands. They will serve to focus the ongoing development and implementation of activity plans toward the maintenance or the attainment of healthy rangelands. (BLM, 1997)

Quantifiable resource objectives and specific management practices to maintain or achieve the standards will be developed at the local BLM District and Resource Area levels and will consider all reasonable and practical options available to achieve desired results on a watershed or grazing allotment scale. The objectives shall be reflected in site-specific activity or implementation plans as well as in livestock grazing permits/leases for the public lands. These objectives and practices may be developed formally or informally through mechanisms available and suited to local needs (such as Coordinated Resource Management efforts). (BLM, 1997)

The development and implementation of standards and guidelines will enable on-the-ground management of the public rangelands to maintain a clear and responsible focus on both the health of the land and its dependent natural and human communities. This development and implementation will ensure that any mechanisms currently being employed or that may be developed in the future will maintain a consistent focus on these essential concerns. This development and implementation will also enable immediate attention to be brought to bear on existing resource concerns. (BLM, 1997)

Grazing Flexibility

Flexibility for grazing is allowed under 43 CFR § 4130.3-2 (f) which states "Provision for livestock grazing temporarily to be delayed, discontinued or modified to allow for the reproduction, establishment, or restoration of the vigor of plants, provide for the improvement of riparian areas to achieve proper functioning condition or for the protection of other rangeland resources and values consistent with objectives of applicable land use plans, or to prevent compaction of wet soils, such as where delay of spring turnout is required because of weather conditions or lack of plant growth". Grazing flexibility is conducted through individual grazing permits and coordination with the local permitting authority.

The BLM recently implemented an initiative known as Outcome-Based Grazing Authorizations (OBGAs). The initiative is designed to offer a more collaborative approach between the BLM and its partners within the livestock grazing community when issuing grazing authorizations. The purpose behind OBGAs is to improve BLM's management of grazing on public lands by offering livestock operators greater flexibility to respond more readily to changing on-the-ground conditions, such as drought or wildfire. This will better ensure their ability to manage ranching operations that are economically sustainable while also providing healthy rangelands and high-quality wildlife habitat. Decreasing the response time to changing field conditions is one of the primary goals of the demonstration project. The program highlights BLM's commitment to partnerships, vital to managing sustainable, working public lands.

The flexibility outcome-based grazing provides is to support:

- Enhanced partnerships for managing livestock grazing;
- Implement grazing based on conservation performance and ecological outcomes rather than hardline metrics;
- Improvement, management and/or protection of public lands within a grazing allotment or specified geographic area; and,
- Continued achievement or attainment of positive economic and social outcomes.

As part of the initial implementation program, eleven ranches across the west were selected as pilot projects for OBGAs. The projects on these specific ranches are being used to share experience and demonstrate or develop best practices to be considered in other BLM grazing permit renewals. As part of the process, the pilot projects developed goals and objectives as part of their permit (often including goals and objectives for ecological, social, and economic aspects of the operation). A monitoring plan was also required for the pilot projects that laid out short-term and long-term monitoring objectives to capture the results of the increased flexibility. Range improvements were also identified as part of the OBGA pilot projects to help with the ability to become more flexible on the different operations. Several of the pilot projects are into the implementation phase, while several others are still working through the NEPA process for approved grazing permits. The information acquired through these pilot projects will allow for recommendations for regulatory modifications that could better provide for the ability to issue OBGAs that maximize and normalize the use of flexibility to address changing conditions. The

BLM and its partners will not only share the responsibility for reaching the mutual objectives of this project but also for monitoring its success.

Range Improvements

BLM Range Improvements

All range improvements on BLM lands must be authorized by the agency. There are two options for authorization: A Cooperative Range Improvement Agreement or a Range Improvement Permit. The Cooperative Range Improvement Agreement identifies how the costs of labor, materials, and maintenance are divided between the agency and the permittee. Range Improvement Funds can be used for labor, materials, and final survey and design of projects to improve rangelands. The Range Improvement Permit requires the permittee or lessee to provide full funding for construction and maintenance of the improvement. NEPA analysis is not required for normal repair and maintenance of range improvements that are listed on a term grazing permit; permission of the authorized officer is also not required. However, for reconstruction of a range improvement or construction of new improvements, NEPA analysis and a decision by the authorized officer are required. Range improvements such as water developments benefit wildlife in addition to livestock. (43 C.F.R. Part 4100)

USFS Range Improvements

All range improvements on USFS lands must be authorized by the agency. The USFS allows structural improvements (e.g., fencing and springs) and non-structural improvements (e.g., change in management practices). Any requirements for permittee construction or development of range improvements are identified in the grazing permit with credits for improvements (if any) to be allowed toward the annual grazing fee. It is a common practice for the USFS to furnish materials and the permittee to provide labor for structural improvements. If significant costs are expected, the permittee can assume responsibility for the improvement (maintenance) but the USFS generally holds title to the improvement. Should the improvement not be adequately maintained, the USFS can take action against the permittee for non-compliance with their grazing permit. Range Betterment Funds are available for planning and building rangeland improvements. (USFS, 2005)

8.2.3 Livestock Grazing Resource Management Objective:

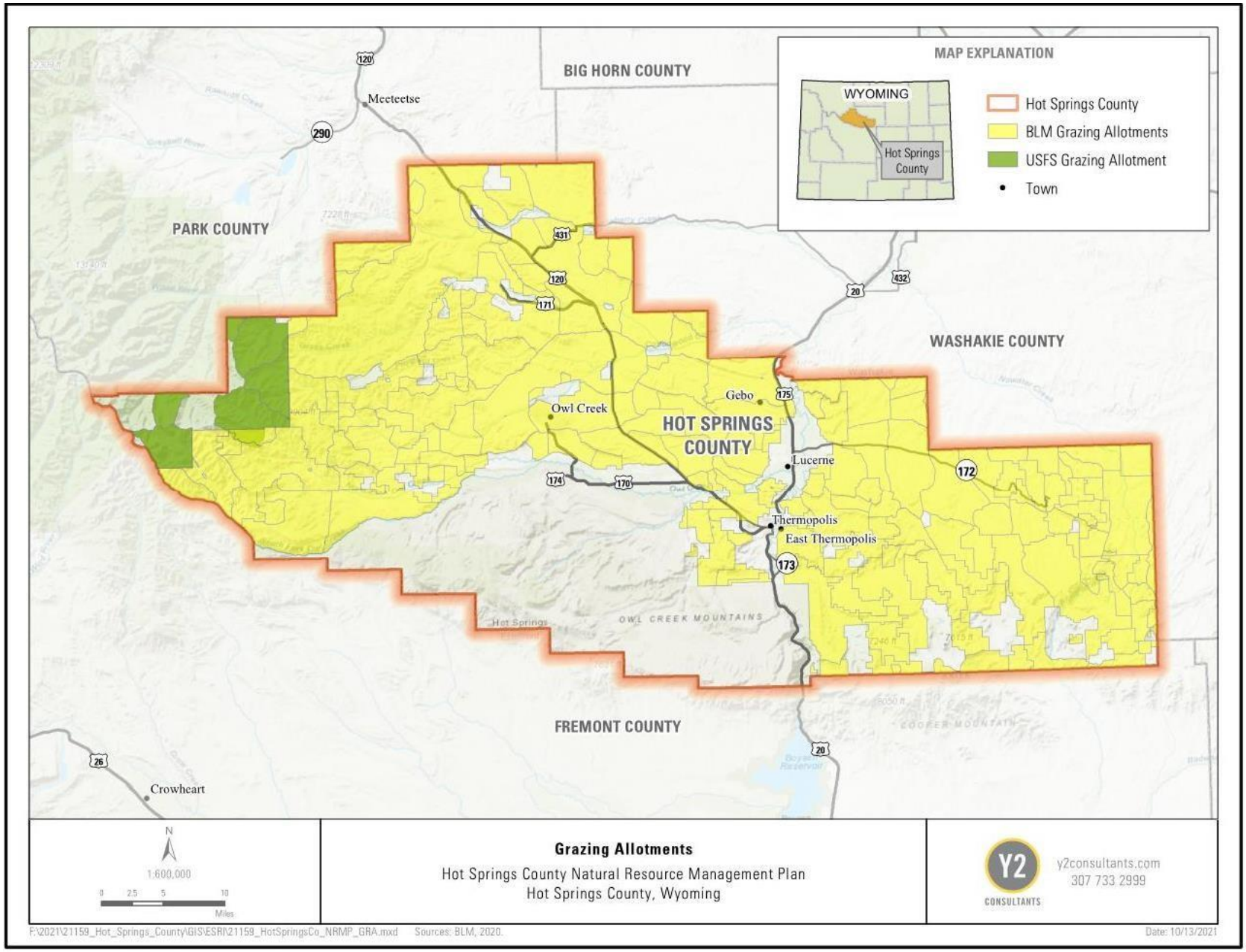
A. Livestock grazing is maintained as a viable major component of the economy, custom, and culture of Hot Springs County.
B. Hot Springs County is consulted early in the scoping process whenever a proposed decision will impact grazing, local agriculture producers, and/or the economy.
C. Decisions affecting grazing on public lands use best available scientific information and localized baseline and monitoring data are given heavier weight than regional, state, or national data.

8.2.4 Livestock Grazing Priority Statements:

1. Hot Springs County strongly supports the implementation of rangeland grazing improvements, such as wells, water containment and development, and fencing.

2. Hot Springs County recognizes that Bighorn Sheep populations in Hot Springs County have been introduced and efforts to protect wild sheep populations should not further impact domestic sheep grazing on public lands.
3. Hot Springs County expects that no grazing allotments will be cancelled, eliminated or suspended due to the presumed habitat needs of any endangered, threatened, or experimental species. Should any allotments be partially or fully lost, the County expects full mitigation of the loss to be firmly and timely implemented.
4. Federal and/or state agencies should support proven techniques and tools for management programs that are founded in credible data and initiatives that are implemented to increase forage for the mutual benefit of the watersheds, livestock operations, and wildlife species.
5. Any allotments that have been turned back to a federal agency that are meeting resource objectives should be reissued within 1-year.
6. Support the equitable conversion of designated livestock animal unit months (i.e., sheep to cattle, cattle to sheep, or cattle and sheep) that achieves the desired conditions of the resource.
7. Current livestock forage allocation on public lands should be maintained or enhanced.
8. Land management plans, programs, and initiatives should provide that the amount of domestic livestock forage, expressed in animal unit months, for permitted, active use, as well as wildlife forage, be no less than the maximum number of animal unit months sustainable by range conditions in grazing allotments and districts, based on an on-the-ground and scientific analysis.
9. Hot Springs County opposes the relinquishment, retirement, or transfer of permitted grazing animal unit months in favor of conservation, wildlife, wild horses, or other uses.
10. Any reductions or suspensions in domestic livestock animal unit months should be temporary and scientifically based upon rangeland conditions and returned to the permit holder when range conditions are met.
11. Policies, plans, programs, and initiatives related to vegetation management should recognize and uphold the active use of domestic grazing over alternate forage uses in established grazing districts while upholding management practices that optimize and expand forage for grazing and wildlife in conjunction with state wildlife management plans and programs.
12. Hot Springs County opposes any agency efforts to restrict the development of rangeland improvements.
13. Increases in available forage resulting from practices or improvements implemented by managing agencies should be allocated fairly to all forage users, with a greater allocation given to a surface user who contributed resources to increase the available forage.
14. Upon termination of a permit, the livestock permittee shall be compensated for the remaining value of improvements or be allowed to remove such improvements that the permittee made on their allotment.
15. Forage reductions resulting from forage studies, fire, drought, or other natural disasters should be implemented on an allotment basis and applied proportionately based on the respective allocation to livestock, wildlife, and wild horses.

16. Rangeland health assessments must identify all causal factors (such as wildlife, weather, wild horses, fire, etc.) when there is a failure to meet the Wyoming Standards for Healthy Rangelands.
17. Livestock grazing animal unit months should not be reduced to compensate for or mitigate the impacts of wild horses, wildlife, and other causal factors.
18. The individual that files for an improvement/development permit on BLM shall be allowed to manage the resource and the permit shall be in their name if it is approved.
19. The individual that files for an improvement/development permit on USFS should be allowed to manage the resource and the permit should be in their name if it is approved. If the improvement/development cannot be exclusively in the name of the permittee, then the improvement/development should be jointly in the name of the permittee and the USFS.
20. Changes in the season of use or forage allocation must not be made without full and meaningful consultation with the permittee.
21. Historic stock trails should be designated in all applicable planning documents as valid access routes for the purpose of trailing livestock between grazing areas.
22. If grazing on federal lands is temporarily suspended due to fire, grazing should be recommenced based on monitoring and site-specific rangeland health determinations rather than solely on fixed timelines. Livestock grazing should be returned to pre-fire levels when post-fire monitoring data shows established objectives have been met or have been achieved to an extent allowed by the site potential.
23. If a vacant allotment is available, it should be utilized as an area for grazing to occur when fire has affected a permittee's allotment.



Map 17. Hot Springs County BLM and USFS grazing allotments.

8.3 NOXIOUS AND INVASIVE WEEDS AND PESTS

8.3.1 History, Custom, and Culture

Hot Springs County has traditionally practiced weed and pest control to increase the productivity of the various lands within the county and as a means of promoting the health, safety, and general welfare of the residents of the county. When necessary, control of insect and weed pests has been a government and private effort since the 1920's. To do so, a fundamental goal of weed and pest management has been to hold each of the partner and assist various property owners and managers in the county responsible for the control of the weeds and pests on their land.

Hot Springs County, by and through the Hot Springs County Weed and Pest District are involved in various programs being directed to weed and pest management; including, but not limited to the National Undesirable Plant Management Act (7 U.S.C. § 2814). The County relies upon the Hot Springs County Weed and Pest Control District to declare certain detrimental weeds and pests as noxious in the district, and to make use of cooperative agreements, NEPA, the Wyoming Weed and Pest Act of 1973, and broad-based legal precedent to assure recognition of local conditions and circumstances in the decision-making process, and to keep the County and the public informed of these efforts.

8.3.2 Resource Assessment and Legal Framework

Invasive species can be plants, animals, diseases, or insects and are defined as non-native species causing or likely to cause economic or environmental harm. Pest management is defined as the ability to control species that interfere with management objectives. These pests may be considered invasive, noxious, or simply a nuisance and negatively impact the local environment, economy, or both.

The term noxious weed or pest is a legal term indicating that by law the species must be managed. Failure to comply with the noxious weed and pest laws may result in legal action. Ongoing programs to identify locations of all noxious weeds and pests and initiate management and/or eradication efforts will continue. All State agencies are required to control noxious weeds and pests on State managed lands and state law provides for cooperation with the federal agencies in controlling noxious weeds and pests on all federally managed lands. Current control tactics include but are not limited to:

- Education (plant identification, life cycles, mapping infestations, etc.);
- Prevention (cleaning equipment, buying quality seed, rangeland management, early control, etc.);
- Mechanical and physical controls (burning, mowing, cultivation, rotating land uses, establishment of desirable competitive plants, etc.);
- Biological (grazing, parasites, pathogens, etc.);
- Chemical (pesticides, weed oils, plant growth regulators, etc.);
- Law enforcement (remedial requirements, hearings, etc.);
- Training (commercial applicator training and certification, etc.);
- Rodent control (minimize disease threats and control losses); and

- Weed and Pest District Board actions (emergency declarations, budgeting, public meetings, etc.) (Wyoming Weed and Pest Council, n.d.).

Cooperative agreements and legal actions, if warranted, may be utilized to assure protection of vital land resources from noxious weed and pest occupation or invasion.

The Wyoming Weed and Pest Act of 1973, as enacted by the legislature of Wyoming, establishes the guidelines for creating Weed and Pest Control Districts and the regulations which govern the districts. Within the Act, the composition of districts is defined at W.S. § 11-5-103:

> *"All land within the boundaries of Wyoming including all Federal, State, private and municipally owned lands, is hereby included in the weed and pest districts within the County in which the land is located,"*

The act also specifically defines which weeds and pests are designated as weeds and pests in W.S. § 11-5-102. The Weed and Pest Act of 1973 in W.S. § 11-5-109 also spells out enforcement provisions that could result in heavy fines if persons are convicted.

> *"A landowner who is responsible for an infestation and fails or refuses to perform the remedial requirements for the control of the weed or pest [...] may be fined. [...] Any person accused under this act is entitled to a trial by jury."* (W.S. §11-5-109e)

Hot Springs County is working to suppress and eradicate all federally designated, State of Wyoming designated, and Hot Springs County declared weeds and pests. The current federal noxious weeds list is maintained on the USDA Plants Database (NRCS, 2019). The State of Wyoming designated list can be found here and the Hot Springs County declared weeds and pests are presented below.

Hot Springs County Declared Weeds and Pests (W.S. 11-5-102(a)(viii)) (list as of the writing of this plan in 2022)

- Bull thistle (*Cirsium vulgare*)
- Cheatgrass/downy brome (*Bromus tectorum*)
- Curlycup gumweed (*Grindelia squarrosa*)
- Duncecap larkspur (*Delphinium occidentale*)
- Mosquito (*Culicidae* spp.)
- Plains larkspur/Geyer larkspur (*Delphinium geyeri*)
- Puncturevine (*Tribulus terrestris*)
- Cocklebur (*Xanthium strumarium)*
- Russian Olive (*Elaeagnus angustifolia*)
- Russian Knappweed (*Rhaponticum repens*)
- Pine Bark Beetle (*Dendtroctonus ponderosae*)

In addition to the listed noxious weeds and pests, aquatic invasive species like hydrilla (*Hydrilla verticillata*), Eurasian watermilfoil (*Myriopyllum spicatum*), curly pondweed (*Potamogeton crispus*), and didymo (*Didymosphenia geminata*) are of concern. While most people think of

invasive species as plants, several animal species are also of concern such as aquatic invasive species like zebra and quagga mussels, New Zealand mudsnail, Asian carp, and rusty crawfish. Aquatic invasive species are managed by the WGFD and can have a negative impact on irrigation and local aquatic ecosystems if they become established. White pine blister rust, pine borers, and spruce budworms can also be problem invaders in the forested regions of the county. Several agricultural pests exist that can negatively impact the farming regions of the county.

PlayCleanGo – Stop Invasive Species in Your Tracks is an educational outreach program striving to protect valuable natural resources while encouraging the public to enjoy the great outdoors (NAISMA, n.d.). PlayCleanGo, along with other prevention campaigns such as *Clean Drain Dry* and *Don't Let It Loose* promotes awareness, understanding, and cooperation by provides a clear call to action to be informed, attentive, and accountable for stopping the spread of all invasive species.

Federal Agencies

Federal land management agencies within Hot Springs County are housed under the United States Department of the Interior and the United States Department Agriculture. Beyond specific strategies, directives, and authorities for invasive species management assigned to each department and agency, these departments and their agencies' invasive species management programs are guided by the National Invasive Species Council (NISC). NISCs purpose is to provide national leadership necessary to coordinate, sustain, and expand federal efforts to safeguard the interests of the United States through the prevention, eradication, and control of invasive species, and through the restoration of ecosystems and other assets impacted by invasive species. (NISC Terms of Reference 2019). This council along with partnerships with federal agencies on cooperative invasive species management utilizing integrated pest management practices are imperative to successful landscape-scale management programs.

U.S. Forest Service

In June of 2020, the BTNF signed a Record of Decision that authorized annual treatment of approximately 20,000 acres of invasive plant species using a combination of manual treatments, mechanical treatments, biological treatments, cultural treatments, and aerial and ground herbicide applications over the next 15 years in areas such as crucial big game winter ranges and other important habitats, fuels reduction projects, roads and trails, power lines, areas of timber harvest, and beetle-killed forests. (O'Connor, 2020)

Bureau of Land Management

The BLM also recognizes the PlayCleanGo Campaign which is an educational outreach program to protect valuable natural resources while encouraging the public to enjoy the great outdoors. PlayCleanGo promotes awareness, understanding, and cooperation by provides a clear call to action to be informed, attentive, and accountable for stopping the spread of all invasive species. (NAISMA, n.d.)

8.3.3 Noxious and Invasive Weeds and Pests Resource Management Objective:

A. Noxious weeds, invasive species, and pests (plants and animals) are managed to maintain healthy ecological levels using a combination of best management practices, manual treatments, mechanical treatments, biological treatments, cultural treatments, and aerial and ground herbicide applications.
B. Federal and state agency projects include actions for the prevention, early identification, detection, and aggressive treatments for noxious and invasive species and pests throughout Hot Springs County.
C. Federal agencies coordinate and communicate all invasive, noxious, pest, or weed management actions and plans with the Hot Springs County Weed and Pest.

8.3.4 Noxious and Invasive Weeds and Pests Priority Statements:

1. Hot Springs County encourages the cooperation of local, state, and federal governments for procurement of additional funding for Hot Springs County Weed and Pest for the control of weeds on all lands in the county.
2. Federal and state agencies should support Hot Springs County Weed and Pest District's current and future efforts to identify the location of all designated or declared noxious weeds and initiate management and/or control.
3. Federal and state agencies should support cooperative agreements to assure the protection of all lands from noxious weed invasion or occupation.
4. Federal and state agencies should communicate, coordinate, and consult with local and state governments on education about the control of potential invasive species.
5. Federal and state agencies should recognize the State of Wyoming Noxious Weed Act (Wyo. Stat. §11-5-102(a)(xii)) and assist Hot Springs County Weed and Pest in monitoring efforts of invasive plant species and noxious weed infestations throughout the county.
6. Hot Springs County encourages protection of private property bordering federal and state lands from noxious weeds, invasive species, and pests, including the use of preventative management and controls, such as quarter mile buffer zones along borders on federal and state lands.
7. Federal agencies should work closely with local, state, and federal health agencies to manage and monitor zoonotic and vector-borne diseases, including mosquitoes that transmit viruses, such as West Nile.
8. Federal and state agencies should allow Hot Springs County Weed and Pest access to and across public lands as may be necessary to carry out active control measures on both public and private lands.
9. Federal and state agencies should evaluate prescribed burns and capitalize on wildfires as an opportunity to control weed species and enhance rangeland health to support and expand multiple use.
10. Federal and state agencies should find ways to utilize prescriptive grazing techniques to control or manage noxious or invasive plant species.
11. Federal and state agencies should consider bio-agents for invasive species control specific to the targeted weed.

12. Federal and state agencies should elevate the awareness and priority of controlling any new or existing infestations of Cheatgrass, Ventenata, and/or Medusahead rye in Hot Springs County.
13. Hot Springs County supports habitat enhancement projects that have a defined and funded weed control and monitoring plan over the anticipated life of the enhancement.
14. Hot Springs County supports the use of pesticides.
15. Federal and state agency processes should consider adaptive or new control techniques and pesticides.
16. Federal and state agencies should implement weed control practices that include mapping as an integrated management tool.
17. Federal and state agencies should work with partners to prevent and manage aquatic nuisance species, although not listed Designated or Declared, (i.e., zebra mussels, quagga mussels) on all waters within Hot Springs County.
18. Hot Springs County supports the PlayCleanGo initiative and other education/awareness programs for public and private land users in weed identifications and understanding vectors of weed spread.
19. Federal and state agencies should use aerial equipment such as drones, helicopters, or fixed wing as a critical use for weed monitoring and control.
20. Federal and state agencies should support ongoing research and experimental options for the management of invasive, noxious species, and pests.

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APPENDICES

APPENDIX A. WEBSITE LINKS IN DOCUMENT

1. https://law.justia.com/codes/wyoming/2010/Title11/chapter16.html
2. https://sites.google.com/view/popoagieconservationdistrict
3. https://duboiscrowheart.org/contact-us/
4. https://lowerwindrivercd.org/contact/
5. https://eplanning.blm.gov/public_projects/lup/18602/49179/53514/ROD_8-8-14.pdf
6. https://www.bia.gov/bia
7. https://www.stateforesters.org/districts/wyoming/
8. https://eplanning.blm.gov/public_projects/lup/18602/57735/62476/Areas_Critical_Environmental_Concern.pdf
9. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5350226.pdf
10. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5446024.pdf
11. https://eplanning.blm.gov/public_projects/lup/18602/109984/134780/LFO_ROD_MAP_30_-_Visual_Resource_Management_Classes.pdf
12. https://eplanning.blm.gov/public_projects/lup/18602/57735/62504/Recreation_Management_Areas.pdf
13. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3837056.pdf
14. http://www.wyo-wcca.org/files/5614/6783/6940/FremontCounty_WSAs_SMALL.pdf
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16. https://www.forestsandrangelands.gov/strategy/
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18. https://www.fs.usda.gov/main/pts/countyfunds/faqs
19. https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm
20. https://www.arcgis.com/apps/webappviewer/index.html?id=3f7ab99343c34bd3ac5ae6ac8c04d95a/
21. https://wgfd.wyo.gov/Fishing-and-Boating/Instream-Flow-XStream-Angler/Instream-Flow-Map
22. https://wwdc.state.wy.us/surveys/surveys.html
23. https://www.federalregister.gov/documents/2015/06/29/2015-13435/clean-water-rule-definition-of-waters-of-the-united-states
24. https://deq.wyoming.gov/water-quality/
25. https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/water-planning/upper-platte/north-platte-river-settlement/amendment-1953-pathfinder.pdf
26. https://www.fws.gov/wetlands/data/mapper.html
27. https://www.archives.gov/federal-register/codification/executive-order/11990.html
28. https://wgfd.wyo.gov/WGFD/media/content/PDF/Habitat/SWAP/Wyoming-SGCN.pdf

29. https://wgfd.wyo.gov/WGFD/media/content/PDF/Hunting/JCRS/JCR_BGLANCOMP_2018.pdf
30. https://wgfd.wyo.gov/WGFD/media/content/PDF/Hunting/JCRS/LanderJCR_2019.pdf
31. https://wgfd.wyo.gov/Habitat/Sage-Grouse-Management/Sage-Grouse-Local-Working-Groups
32. https://wgfd.wyo.gov/WGFD/media/content/PDF/Habitat/Sage%20Grouse/Governor-Gordon-Greater-Sage-Grouse-EO-2019-3_August-21-2019_Final-Signed_2.pdf
33. https://onesteppe.wygisc.org/
34. https://wgfd.wyo.gov/Public-Access/WHMA
35. https://drive.google.com/file/d/1TLuj1UGcRTjOvBklmP4qwjehSVmGjch8/view
36. https://wgfd.wyo.gov/WGFD/media/content/PDF/Vet%20Services/Approved-CWD-Mgmt-Plan-July-16-2020.pdf
37. https://wgfd.wyo.gov/Wildlife-in-Wyoming/More-Wildlife/Wildlife-Disease/CWD-in-Wyoming-Wildlife/CWD-Map
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39. https://www.blm.gov/policy/im-wy-2010-027
40. https://www.fs.usda.gov/detail/r2/landmanagement/?cid=stelprdb5390116
41. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5370041.pdf
42. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3842886.pdf
43. https://ecos.fws.gov/ipac/location/2Y74VVJ5DRA3BOTIYKEP232DHY/resources
44. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5379223.pdf
45. https://ecos.fws.gov/ipac/location/2Y74VVJ5DRA3BOTIYKEP232DHY/resources
46. https://wgfd.maps.arcgis.com/apps/MapTools/index.html?appid=31c38ed91cf04fb7bb8aebd29515e108
47. https://wgfd.maps.arcgis.com/apps/webappviewer/index.html?id=935acbec194f4d42823af3db59272409
48. https://www.wyadmb.com/Predator%20Regs%20I.htm
49. https://windriver.org/things-to-do/
50. https://www.fremontcountywy.org/government/departments/emergency_management/fremont_county___municipal_multi_hazard_mitigation_action_plan.php#outer-192
51. https://wyoshpo.wyo.gov/index.php/nr-by-county-test/13-fremont-county
52. https://www.fs.usda.gov/science-technology/geology/paleontology
53. https://www.usbr.gov/cultural/fossil.html#:~:text=To%20date%2C%20Reclamation%20has%20documented,have%20occurred%20on%20Reclamation%20land.
54. https://www.fws.gov/historicPreservation/crp/index.html
55. https://www.blm.gov/paleontology
56. https://www.nps.gov/subjects/fossils/fossil-protection.htm
57. https://www.fs.usda.gov/main/pts/countyfunds/faqs
58. https://plants.sc.egov.usda.gov/java/noxiousDriver
59. https://wyoweed.org/noxious-species/listed-species/state-designated-noxious-weeds/

APPENDIX B. SUPPLEMENTAL INFORMATION

Statutory Requirements and Legal Framework

The National Environmental Policy Act

The National Environmental Policy Act (NEPA) applies to "every major Federal action significantly affecting the quality of the human environment" (42 U.S.C. § 4332(2)(C)). The courts have interpreted this to mean that every time the federal government makes a decision for almost any action that may have an environmental impact, NEPA compliance is required. Some courts have even required agencies to follow NEPA when the agency spends a small amount of money on a project or program when they are not the lead agency (See *e.g., Citizens Alert Regarding the Environment v. United States Environmental Protection Agency*, 259 F. Supp.2d 9, 20 (D.D.C. 2003)).

On July 16, 2020, the Council on Environmental Quality (CEQ) announced major regulation reforms to NEPA, including new rules trying to clarify what is a "major federal action." (*See* 85 F.R. 43304 (July 16, 2020)). The CEQ regulations define a "Major Federal Action" as "an activity or decision subject to Federal control and responsibility" (40 C.F.R. § 1508.1(q)). However, those activities and decisions are limited to those decisions that are discretionary or in which the federal government has sufficient control and responsibility over the outcome of the project. This means that those projects that the government has a minor role in are not included. Further, minor actions that do not typically have a significant effect on the human environment (such as allowing certain range improvements on a grazing allotment) are categorically exempt from NEPA (40 C.F.R. § 1508.1(d)).

NEPA requires that federal agencies undertake an environmental analysis to determine whether a federal action has the potential to cause significant environmental effects. If a proposed major federal action is determined to significantly affect the quality of the human environment, federal agencies are required to prepare an Environmental Impact Statement (EIS). The regulatory requirements for an EIS are more detailed and rigorous than the requirements for an Environmental Assessment (EA). 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 goals of the local government.

It is also important to note that the "human environment," as defined in NEPA, does not consist solely of ecological or environmental concerns, but also consists of the aesthetic, historic, cultural, economic (such as the effects on employment), social, or health effects in the human environment (40 C.F.R § 1508.1 (g) and (m)). Thus, decisions that may affect the historic, cultural, economic, or social stability of a community must also comply with NEPA and take those things into consideration.

Consistency Review

Local governments can use the NRMP as part of the federal agency's "consistency review" process. Under this provision, if the federal agency receives a local plan (NRMP) while writing an

EIS or EA, NEPA directs 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)). For local governments to take advantage of consistency review requirements, a written and adopted local plan is required. With a written plan, this analysis happens even when the local government does not know about the pending decision or action if the NRMP was provided in advance to the reviewing federal agency.

NEPA requires that copies of comments from state or local governments accompany the EIS or EA throughout the review process (42 U.S.C. § 4332(2)(c)). As there is no requirement for federal agencies to discuss the inconsistencies of a proposed action with comments from state or local governments, written comments submitted by a local government not tied to a formally adopted NRMP require less rigorous analysis than those tiered to an adopted NRMP. State agencies do not normally have to follow the consistency review requirements that federal agencies must follow. However, this may change if there is a federal nexus involved in the decision and NEPA is required.

Cooperating Agency

Local governments can participate in the NEPA process as a "cooperating agency" (40 C.F.R. § 1508.5), an action separate from NRMP review. If a local government believes that a proposed federal action will impact the local government, and the local government wants to be involved in the analysis and decision-making process at its inception or at any time, the local government may request "cooperating agency status" to the deciding federal agency. "Cooperating agency status" allows local governments to work with federal agencies throughout the development of a federal plan or proposal, including before public feedback is solicited. It does not require a written land use plan prepared by local governments. As part of the scoping process, lead agencies must invite likely affected local agencies and governments to participate as a cooperating agency (40 C.F.R. § 1501.9). An invitation during the scoping period is not required to participate as a cooperating agency and a local government can request to be a cooperating agency even after the scoping period. With respect to cooperating agencies, a lead agency must (1) request the participation of cooperating agencies at the earliest practicable time; (2) use the environmental analysis and proposals of cooperating agencies with jurisdiction to the maximum extent practicable; (3) meet with a cooperating agency at the cooperating agency's request; (4) determine the purpose and need, and alternatives in consultation with the cooperating agency (40 C.F.R. § 1501.7(h)). Should a local government request cooperating agency status for a particular agency proposed action (for example, the designation of critical habitat for a listed threatened or endangered species), the local government can, at the request of the lead agency, participate in drafting portions of the relevant NEPA document (40 C.F.R. § 1501.6(b)(3)). This can involve identifying appropriate scientific data, assisting with alternative development for the proposed federal action, and ensuring that the discussion of impacts to the local economy or the local citizens is accurate. A NRMP, while not required, can aid this analysis. Cooperating agency

status can be reserved for more significant federal decisions likely to have a larger impact on a community and is not required nor needed for every federal action.

Pursuant to NEPA, an applicant for cooperating agency status must be a locally elected body or agency such as a conservation district board of supervisors or a board of county commissioners; and possess "special expertise" A local government's special expertise is defined as the authority granted to a local governing body by state statute. Generally, in Wyoming, counties are authorized to participate as cooperating agencies and have the special expertise regarding the "health, safety, welfare, custom, culture and socio-economic viability of the county" (Wyo. Stat. § 18-3-504(v); 18-5-208(a)).

Cooperating agency status can be an expensive, time-consuming, and cumbersome process and may be particularly challenging for communities with limited resources. A NRMP ensures that the federal agency addresses the County's policies for virtually every federal decision without the burden of cooperating agency status. A NRMP may also give agencies advanced notice of actions or decisions the County may want to participate in as a cooperating agency.

The National Forest Management Act

The National Forest Management Act (NFMA) governs the U.S. Forest Service (USFS) and requires the agency to "coordinate". The NFMA requirements are as follows:

> *[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.

The USFS is also obligated to perform a consistency review. For the development of forest plans, the Forest Service shall review the planning and land use policies of State and local governments where relevant to the plan area. The results of the review shall be displayed in the EIS. 36 C.F.R. 219.4(b)(2). Such review of the plans and policies of State and local governments shall include consideration of:

(1) The objectives as expressed in local plans and policies

(2) The compatibility and interrelated impacts of these plans and policies

(3) Opportunities to address impacts identified and to contribute to joint objectives

(4) Opportunities to reduce or resolve conflicts, within the context of developing desired future conditions. 36 C.F.R. § 219.4(b)(2)(i) –(iv).

Additionally, the USFS is obligated to consider and provide for "community stability" in its decision-making processes. S. Rept. No. 105.22; 30 Cong. Rec. 984 (1897); *The Use Book* at 17; *see also* 36 C.F.R. § 219.6(b)(6) ("The Forest Service land use plan must provide for social, economic, and cultural sustainability"). "Community stability" is defined as a combination of local custom, culture, and economic preservation. As described by the Forest Service:

Forest reserves are for the purpose of preserving a perpetual supply of timber for home industries, preventing destruction of the forest cover which regulates the flow of streams, and protecting local residents from unfair competition in the use of the range.

We know that the welfare of every community is dependent upon a cheap and plentiful supply of timber; that a forest cover is the most effective means of maintaining a regular streamflow for irrigation and other useful purposes, and the permanence of the livestock industry depends upon the conservative use of the range.

Forest Service, United States Department of Agriculture, *The Use Book*, 13 (1906 ed.). Thus, in addition to providing for coordination and attempting to achieve consistency with local land use plans, the USFS is required to understand the cultural and economic drivers of a community and its plans must attempt to protect those drivers whenever possible.

The Federal Land Policy and Management Act

The Federal Land Policy and Management Act (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 that the BLM must:

> *To the extent consistent with laws governing the administration of the public lands, coordinate the land use inventory, planning, and management activities of or for such lands with the land use planning and management programs of other Federal departments and agencies and of the State and local governments within which the lands are located […] by considering the policies of approved State and tribal land resource management programs* (43 U.S.C. § 1712(c)(9)).

Such coordination is to be achieved by:

- To the extent practicable, the BLM must stay apprised of local land use plans.
- The BLM must assure that local land use plans germane to the development of BLM land use plans are given consideration.
- To the extent practicable, the BLM must assist in resolving inconsistencies between local and BLM land use plans.
- The BLM must provide for the meaningful involvement of local governments in the development of BLM land use programs, regulations, and decisions. This includes early notification of proposed decisions that may impact non-federal lands (43 U.S.C. § 1712(c)(9)).

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,] 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)). BLM regulations further strengthen this by requiring that State and local governments shall have at least 30 days to review and comment on BLM land and resources management plans. Should they notify the Field Manager, in writing, of what they believe to be specific inconsistencies between the Bureau of Land Management resource management plan and their officially approved and adopted resources related plans, the resource management plan documentation shall show how those inconsistencies were addressed and, if possible, resolved. 43 C.F.R. 1610.3-1(f). However, the BLM has no duty to make its plan consistent with a local government plan, if the BLM is not notified by the local government of the existence of its local plan. 43 C.F.R. § 1610.3-2(c). Thus, it is important that the local government provides the BLM notice of the existence of the local land use plan.

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). Pursuant to FLPMA's consistency review requirement, 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 (43 U.S.C. § 1712(c)(9)).

Governor's Consistency Review Process

FLPMA also requires that the BLM provide for a governor's consistency review as part of their land use planning process (43 C.F.R. § 1610.3-2(e)). State governors are entitled to an additional and entirely separate review of BLM land use plans, revisions, and amendments; this provides an opportunity to identify any inconsistencies with state or local plans. If a governor's comments result in changes to the plan, public notification of these changes is required. The governor may also refer to policies in the NRMP in their review of the proposed federal action. The Governor's office has traditionally included counties during the governor's consistency review by the Governor's Consistency Team whenever an agency action or decision may affect a specific county and its citizens. Hot Springs County expects that during the governor's consistency review that it be included in the review by the Governor's Consistency Team whenever an agency action or decision may affect Hot Springs County or its citizens.

R.S. 2477

The courts have clearly established that the states have proprietary jurisdiction over rights-of-way within their state (*Colorado v. Toll*, 268 US 228, 231 (1925)). This jurisdiction and control over rights-of-way through public lands must be actively ceded by the state (or counties as arms of the state) to the federal government, or curtailed by Congress, for the federal government to have control over rights-of-way (*U.S. v. Garfield County*, 122 F. Supp.2d 1201, 1235 (D. Utah 2000) *citing Kleppe v. New Mexico*, 426 US 529, 541-46 (1976)). Congress has yet to overturn R.S. 2477 or wrest control over the determination of what is a valid R.S. 2477 right-of-way. Thus, the

question of whether an R.S. 2477 is established and the scope of the right-of-way is a matter of state law (*U.S. v. Garfield County*, 122 F.Supp.2d at 1255; *Sierra Club v. Hodel*, 848 F.2d 1068, 1080 (10th Cir. 1988)).

Coordination between the government agency and the holder of the R.S. 2477 right-of-way is a necessity. The courts have clearly stated that both the holder of the dominant and servient estate must exercise their rights to not interfere with the other (*SUWA*, 425 F.3d at 746 *citing* Hodel, 848 F.2d at 1083). Thus, there must be a system of coordination between the federal agency and the holder of the R.S. 2477 right-of-way whenever there may be an action that may affect the rights or use of the other. *Id*. Further, the courts have also clearly demarcated that the use of an R.S. 2477 right-of-way is a question of scope on a case-by-case basis, considering state law, that will allow for the use that is reasonable and necessary for the type of use to which the road has been put until 1976. *Id*. This, however, does not mean that the road had to be maintained in precisely the same condition it was in on October 21, 1976; rather, it could be improved "as necessary to meet the exigencies of increased travel," so long as this was done "in the light of traditional uses to which the right-of-way was put" as of repeal of the statute in 1976 (*Hodel*, 848 F.2d at 1083).

R.S. 2477 does not give the holder a fee ownership, but an easement. However, unless otherwise specified when created, an easement is a permanent property right with a right to use and maintain until it is abandoned by the holder. To establish abandonment of an easement, the party asserting that the easement was abandoned must show affirmative acts manifesting an intention on the part of the owner of the dominant estate to abandon the easement (*Hasvold v. Park County School Dist. No 6*, 45 P.3d 635, 641 (Wyo. 2002)). Mere nonuse of an easement, even for a long time does not constitute abandonment. *Id*. Thus, in Wyoming an R.S. 2477 right- of-way is a property right that exists until the holder of the right-of-way (typically the County, but sometimes a private user) manifests an intent to abandon the right.

The repeal of R.S. 2477 "froze" the scope of the R.S. 2477 right-of-way. Thus, the scope of the R.S. 2477 right-of-way is limited by the established usage of the route as of the date of the repeal of the statute; meaning a right-of-way today only covers the exact path of the right-of-way before the repeal (*Southern Utah Wilderness Alliance v. Bureau of Land Management*, 425 F.3d 735, 746 (10th Cir. 2005, as amended 2006)). In relation to the roads at issue here, this scope would be access to and between private land sections.

As discussed earlier, an R.S. 2477 grant is self-executing, and the right-of-way comes into existence "automatically" when the requisite state law elements are met (*Shultz v. Dep't of Army*, 10 F.3d 649, 655 (9th Cir. 1993)). Thus, adjudication of R.S. 2477 rights is not a prerequisite to their existence unless the agency contests the existence of the grant. In cases where the federal agency contests the existence of an R.S. 2477 right-of-way, a claim against the United States would need to be made under the Quiet Title Act (28 U.S.C.A. § 2409a). The Quiet Title Act provides that the United States may be named as a party defendant in a civil action to adjudicate a disputed title to real property in which the United States claims an interest, other than a security interest or water right (28 U.S.C.A. § 2409a(a)). In such an action, a plaintiff must

demonstrate with particularity the nature of the right, title, or interest which the plaintiff claims in the real property, the circumstances under which it was acquired, and the right, title, or interest claimed by the United States (28 U.S.C.A. § 2409a(d)).

Clean Water Act

On September 11, 2020, the EPA published final CWA regulations that clarify some of the definitions and clearly set forth the jurisdictional limits of the CWA. The final regulations:

1) Include four simple categories of jurisdictional waters;
    a. Territorial seas and navigable waters
    b. Tributaries of jurisdictional waters
    c. Lakes, ponds, and impoundments that contribute surface water flow to a jurisdictional water in a typical year
    d. Wetlands adjacent to non-wetland jurisdictional waters
2) Provide clear exclusions for many water features that traditionally have not been regulated, including ditches, non-adjacent wetlands, groundwater, treated water, and ephemeral features; *see* 33 C.F.R. § 328.3.
3) Define terms in the regulatory text that have never been defined before, including adjacent wetlands, ephemeral, upland, and tributaries.

The CWA regulations are currently being challenged in federal court in the Federal District of Northern California, Federal District of Colorado, Federal District of Arizona, and the Federal District of Virginia. On August 30, 2021, the Federal District Court of Arizona issued a vacatur of the 2020 rule claiming that the rule was too flawed to keep in place. On September 3, 2021, the EPA announced on their website that they will no longer follow the 2020 regulations due to the Arizona Court's decision. The EPA in turn announced that it will be interpreting "waters of the United States" consistent with the pre-2015 regulatory regime until further notice. The Pre-2015 regulatory definitions and guidance documents can be found here.

APPENDIX C. STEERING COMMITTEE MEMBERS

- Hot Springs Natural Resource Planning Committee
- Hot Springs County Public Lands Committee
- Hot Springs County Commissioners

APPENDIX D. PUBLIC COMMENTS RECEIVED

Comment Received From	Comment Received	Response
No public comments received during review period		

UPDATED AFTER PUBLIC COMMENT PERIOD.[CG1][LC2]