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### **CHAPTER 1: INTRODUCTION**

#### 1.1 PREAMBLE

The people of Fremont County, Wyoming believe the United States Constitution and Wyoming State Constitution to be the supreme law of Fremont County. Those documents contain the ultimate protections for the rights of Fremont County citizens and guarantee its citizens the freedom to pursue activities protected by those Constitutions. Some of those protections include rights to due process, equal protection under the law, and the right to own property. Due to the



importance of these constitutional principles, Fremont County's custom, culture, and way of life are founded on many of the promises made under the Constitution. Those promises have influenced investment-backed expectations of many in the past, and future generations are entitled to rely on those promises as well. The people of Fremont County establish this Natural Resource Management Plan in the spirit of those Constitutions. This plan is intended to ensure that Fremont County has a seat at the table to participate in decisions that may affect those promises and is also intended

to be used as a tool to create partnerships between the County and the federal agencies whose actions affect the rights and livelihoods of many Fremont County citizens.

#### 1.2 PURPOSE

# **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 (Budd-Falen, 2018).



Chapter 1: Introduction

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. (Budd-Falen, 2018)

The Fremont County NRMP serves as a basis for Fremont 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. (Budd-Falen, 2018)

The Wind River Reservation is located within Fremont County. This NRMP only focuses on areas within Fremont County's jurisdiction. The Eastern Shoshone and Northern Arapahoe Tribes have a separate sovereign relationship with the federal and state governments.

# 1.3 STATUTORY REQUIREMENTS AND LEGAL FRAMEWORK

Federal agencies are required to identify and analyze the impacts to 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.

# The National Environmental Policy Act (NEPA)

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. See id. 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 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 a 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 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. An 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 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. An NRMP ensures that the federal agency addresses the County's policies for virtually every federal decision without the burden of cooperating agency status. An 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 (NFMA)

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 Federal Land Policy and Management Act (FLPMA)

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. Regarding 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)).

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, the 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. Fremont 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 Fremont County or its citizens.

### 1.4 FREMONT COUNTY NRMP PROCESS

#### **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.

### **NRMP Development**

Consistent with Wyo. Stat. § 9-4-218(a)(viii)(D) and in accordance with Wyo. Stat. §§ 16-4-401 through 16-4-408, Fremont 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 45-day public comment period beginning on July 20, 2021 through September 5, 2021. Public meetings were held in Riverton, Dubois, and Lander the week of August 16<sup>th</sup>. Comments received during the public comment period were incorporated into the final plan as appropriate, received comments can be found in Appendix C. The final plan was presented to the Fremont County Board of County Commissioners for final adoption on October 19, 2021.

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).

# Amending the NRMP

It is recommended to review the plan every five years. Economic data and minor changes within the plan may be updated more frequently. This plan can be amended following the Wyo. Stat. § 9-4-218(a)(viii)(B) and the public meetings laws. Amendments to the plan only require that the NRMP with amendments is presented and adopted by the Fremont 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 Fremont County Board of County Commissioners



Agenda before the meeting and the changes should be made available for the public when the agenda is posted.

# **County Expectations for NRMP**

Fremont 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 Fremont 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. In turn, A separate memo to this document describes the process for providing this NRMP to the appropriate agencies. Additionally, to that end, Fremont County commits to the following actions and requests the following from the state and federal agencies:

- Within 90 days of the date of adoption of this plan, Fremont 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, Fremont County will transmit a copy of this local land use plan to the state, regional, and local federal agency offices doing business within Fremont County for their consideration as part of any consistency review that is required pursuant to federal statute. At minimum, the County plans on distributing the NRMP to the following agencies:
  - a. Bureau of Land Management (Lander Field Office), Lander, WY
  - b. Bureau of Land Management (Wyoming State Office), Cheyenne, WY
  - c. Bridger-Teton National Forest (Pinedale Ranger District, Supervisors Office for Bridger-Teton National Forest in Jackson)
  - d. Shoshone National Forest (Washakie Ranger District, Lander and Wind River Ranger District, Dubois, Shoshone National Forest Supervisor Office in Cody)
  - e. Wyoming Governor's Office (Cheyenne Office)
  - f. Wyoming Game and Fish (Lander and Chevenne Offices)
  - g. Wyoming Department of Environmental Quality (Cheyenne Office)
  - h. Office of State Lands and Investments (Cheyenne Office)
  - i. Bureau of Indian Affairs (Fort Washakie)
  - j. Wyoming State Archeologist (Cheyenne Office)
  - k. Bureau of Reclamation (Casper Office)
  - I. 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.

Fremont County supports the establishment of a multi-agency stakeholder group hosted by the Board of County Commissioners 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 Fremont County and allow the opportunity for questions and answers to be provided in a collaborative space.

#### 1.5 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 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 <a href="here">here</a> and is similar to that defined in Wyoming State Statute.

# 1.5.1 Credible Data Resource Management Objective:

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

# 1.5.2 Credible Data Priority Statements:

- 1) When making land use planning decisions, federal agencies should include quantitative data that meets credible data criteria, even if the data were not produced by a federal agency.
- 2) Require that federal agencies only use data that is legally collected and meets the criteria described in their respective handbooks.
- 3) The more stringent of credible data laws between the State of Wyoming Credible Data Laws and federal agency data laws should be applied.
- 4) Federal agencies should be transparent in their decision-making and provide the source for all data relied upon for their analysis.



### **CHAPTER 2: FREMONT COUNTY CUSTOM AND CULTURE**

### 2.1 FREMONT COUNTY INTRODUCTION AND OVERVIEW

County Commissions in the State of Wyoming have been charged with responsibility for the preservation of the custom and culture of Wyoming counties in matters relating to the NEPA and federal land planning. Since the customs, culture, and history of Fremont County are inseparably tied to the use of and access to land and resources managed by federal agencies, the Board of County Commissioners will use the policies set forth in this NRMP to represent the vital interests of the County in federal natural resource planning efforts.

Fremont County citizens migrated to the area because of abundant natural resources. These resources provided a livelihood to the early settlers and nomadic populations and still provide a livelihood for many residents today. Many historical documents record the names of people who customarily harvested and developed resources and created resource-based communities.

### **County Overview**

Fremont County is the second-largest county in Wyoming containing 5.9 million acres. Most of this land area is under federal or tribal management. More than 54 percent of the county's land area (3.2 million acres) is owned by the federal government. Of this amount, the BLM manages nearly 36%, with the USFS managing more than 17% and the Bureau of Reclamation (BOR) managing nearly 2%. Tribal lands represent nearly 26% of the county's land area (1,579,491)

acres). State lands account for more than 5% of the county's land area (more than 317,000 acres). Nearly 85% of the state land area is state trust land with the other 15% held by the Wyoming Game and Fish Department (WGFD) and the Recreation Commission. Finally, local government owns 0.1% of the land in the county (slightly more than 5,500 acres). As a result of the large government and tribal presence in the county, less than 14% of the county's land area is privately owned (slightly more than 820,000 acres).



Information from the Wyoming Department of Revenue on acres taxed as agricultural land indicates that nearly 90% of the private land in the county is in agricultural use (more than 729,000 acres). Of this amount, nearly 84% is rangeland (more than 610,000 acres) (University of Wyoming Extension et al., 2015).

Federally or State managed lands and resources throughout Fremont 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.



Fremont County is a recreation paradise. Big game hunting and sport fishing are important recreational resources that bring people from around the world to Fremont County. Fremont County is also one of the main entrances to Yellowstone and Grand Teton National Parks which brings millions of visitors each year.

The total population in Fremont County according to 2020 U.S. Census data is 39,234 persons. Most of the population lives within the cities and towns throughout the County, though Fremont 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 Fremont County.

#### Table 1. Cities, towns, census-designated places, and unincorporated towns within Fremont County.

- Lander (City County Seat)
- Riverton (City)
- Dubois (Town)
- Hudson (Town)
- Pavillion (Town)
- Shoshoni (Town)
- Arapahoe (Census-designated)
- Atlantic City (Census-designated)
- Boulder Flats (Census-designated)
- Crowheart (Census-designated)
- Ethete (Census-designated)
- Fort Washakie (Census-designated)

- Jeffrey City (Census-designated)
- Johnstown (Census-designated)
- Kinnear (Unincorporated)
- Lost Cabin (Unincorporated)
- Lysite (Unincorporated)
- Midvale (Unincorporated)
- Moneta (Unincorporated)
- St. Stephens (Unincorporated)
- Sand Draw (Unincorporated)
- South Pass City (Unincorporated)
- Sweetwater Crossing (Unincorporated)
- Willow Creek (Unincorporated)



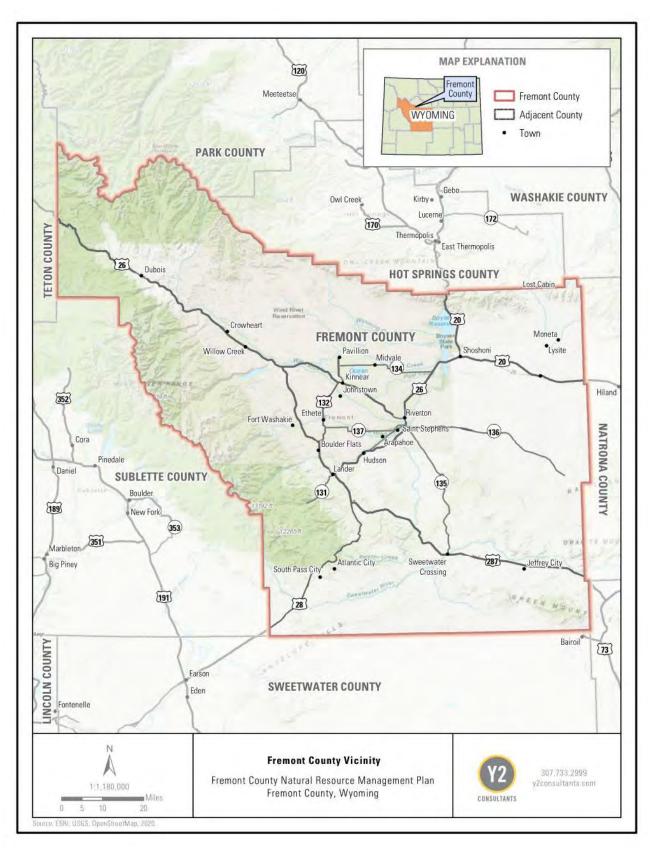


Figure 1. Vicinity map for Fremont County, Wyoming (data from USGS ESRI in 2020).



#### 2.2 FREMONT COUNTY HISTORY

Humans have occupied what is now Fremont County for over 5,000 years and perhaps longer. Hard archeological evidence is lacking for earlier occupation by humans. However, humans probably traveled through Fremont County, if not staying here, soon after the last ice age ended 10,000 to 15,000 years ago.

People knew this vast and beautiful area of land lying between the Owl Creek and the Wind River Mountains as the 'Warm Valley'. The earliest historic record links the occupation of Fremont County with the Crow Tribe and the Shoshone Tribe. In 1854, Chief Washakie of the Shoshones and Big Robber of the Crows met in battle along the Wind River in the vicinity of Crowheart Butte. According to legend, the battle between the two tribes was climaxed when Chief Washakie killed Big Robber on top of Crowheart Butte and proudly displayed his heart on the end of his lance. It was the winning of this battle that transferred the historical dominance of the area from the Crow Nation to the Shoshones.

The first Europeans to enter the area were fur trappers from Canada, a French Canadian by the name of Sieur de La Verendrye and his sons came down through northern Wyoming as far as the Wind River. They traded with the Indians and the Indians in turn acted as their guides. Sometime

later, French, Canadians, and Indians formed the Northwest Fur Company, which became the largest in the world. Central Fremont County boasts the site of the first rendezvous in the area, which was held in 1829, on the Popo Agie River near what is now Lander. The rendezvous was a method by which commerce in the fur trade was advanced. The trappers could bring their harvest to the rendezvous and sell their furs and purchase supplies, saving the travel east for hundreds of miles.



President Jefferson in 1803, after the Louisiana Purchase, commissioned Meriwether Lewis and William Clark to find a water route through the new territory. Two people in their party Sacajawea, their Indian guide, and John Colter played later roles in Wyoming's history. Colter returned to the West after the Lewis and Clark expedition and entered what is now Fremont County over the Northern Owl Creek Mountains, ascended the Wind River, and crossed over Union Pass into Jackson Hole. Other trappers and hunters in the area during the early 1800s included people such as Wilson Hunt, General Ashley, Captain Benjamin Bonneville, Kit Carson, and Jim Bridger. Some of these early hunters and trappers, notably Hunt, Ashley, and Bonneville were the first to use South Pass as a trail route that became, several years later, the Oregon Trail, one of America's most important emigrant trails. The history of the fur trade is a fascinating chapter of Fremont County's history. Many "rendezvous", yearly gatherings of trappers, traders, Indians, and fur company men, were held in the Wind River Basin. These were the first temporary,



non-indigenous, settlements anywhere in Fremont County. The trappers and traders of the 1820s and 1830s pioneered the exploration of Fremont County that would later help bring permanent settlement.

In 1846, General John C. Fremont, with the help and knowledge of early trappers and explorers such as John Colter, explored and mapped portions of the area that was later named in his honor. Later in 1859, Col. F.W. Lander was commissioned to survey and lay out a road from Burnt Ranch on the Sweetwater to the upper crossing of the Green River thence to Oregon via Bear Lake, Utah. Fremont County's County seat was later named in honor of Col. Lander.

Gold was known to exist in the area many years before the actual rush of 1867. Emigrants, on their way to California, had discovered gold along Strawberry Creek and the Sweetwater. Soldiers also found small amounts of gold in various locations and the Indians had found gold-bearing



quartz that they had taken to their trading places. Louis Robinson discovered and brought a considerable amount of gold to Fort Bridger, Utah in 1867. Shortly afterward there was a rush to South Pass. The first major lode mine "the Clarissa", now called the Carissa, was located by a group of Salt Lake City men in 1867. Within a very short time as many as five thousand people were combing the hills and valleys of the area.

The city of South Pass was established in 1867 in what is called the Clarissa Gulch below the Clarissa mine. It was estimated that during South Pass' heyday there was a resident population between 1,200 and 2,000 people. Other mining camp towns created during the gold rush days included Atlantic City and Miners Delight. The last gold mining camp to be created was Lewiston in 1881 sometime after the main gold rush was over. By the early 1870's most of the easy gold had been removed and the area began to lose population with only a few remaining to carry on with hard rock mining. While vast sums of money were never made from the sale of gold, the gold rush greatly accelerated the settlement of the Wind River Valley and the development of its early farms and villages.

South Pass is equally known for being the birthplace of women's suffrage. Ester Hobart Morris, a resident of South Pass City, obtained a pledge from Col. William H. Bright, a member of the Wyoming Territorial Legislature, to introduce and work for the passage of legislation granting suffrage to women. Col. Bright's bill was passed and signed into law by Governor J.A. Campbell on December 10, 1869. Wyoming territory thus became the first government to grant its women the right to vote. Mrs. Morris was then honored in 1870 by being appointed as the world's first woman Justice of the Peace.

The creation of the Shoshone Indian Reservation, the result of a treaty signed at Fort Bridger Utah Territory on July 3, 1868, by the U.S. Government, Eastern Shoshone and Bannock was another important event that helped accelerate the settlement of the area. After the boundaries of the Reservation were established, the government built several forts and camps to keep the



peace. The earliest military camps included Camp Augar, built in 1869, where the City of Lander is now located, and Camp Stambaugh near South Pass City in 1870. Camp Auger was renamed Camp Brown, in honor of Captain Brown of the eighteenth infantry who was killed in the Fort Phil Kearney massacre of 1866. Three years later, Camp Brown was moved sixteen miles north of Lander to its present location. In 1879, Camp Brown was renamed Fort Washakie in honor of the great Chief Washakie of the Shoshone.



The Arapaho now co-occupy the Reservation with the Shoshone and are known as the "Northern Arapaho." Their placement on the reservation stems from a series of actions and inactions taken by the government after the treaty entered into by the U.S. Government and the Sioux, Cheyenne, and Arapaho in 1876. The Arapaho agreed to take up residence in the Indian Territory on a separate reservation to be created for them. After reaching the North Platte River in Eastern Wyoming, a portion of the Arapaho decided they would travel no further, and they asked that a reservation be established for them along the North Platte.

The government, because winter was coming, sought and obtained permission from the Shoshone to place them temporarily on the Shoshone Reservation. No later action was taken to move the Arapaho. The whole situation dragged along until a new administration in Washington was elected and all promises made by the earlier administration were forgotten. Consequently, the Arapahos have never been moved. The government later changed the name of the reservation to the Wind River Indian Reservation and has officially recognized it as being jointly owned by both tribes.

The very earliest towns within the county were the gold mining towns mentioned earlier. Many of the miners however, after the mining played out, moved further north and settled in the "Warm Valley" on the north side of the Wind River Mountains. Some of the earliest settlers had started truck gardening in areas along the Popo Agie and supplied the mining towns with fresh vegetables. This vegetable growing earned the community to be formed near the Popo Agie the name of "Push Root". The treaty of 1868 with the Shoshone resulted in the building of Camp Auger located near the location of Fourth and Main Streets in Lander. The same treaty also diminished the Shoshone areas by relinquishing the area between the Sweetwater and the North Fork of the Popo Agie to settlers. In 1882, a townsite was platted by B.J. Lowe and Peter Dickenson, which encompassed the old Camp Auger site. The new townsite was named in honor of Col. F.W. Lander who surveyed the land and established the Lander Cut-Off portion of the Oregon Trail.

Moneta, another of the County's earliest trading spots originated as a Texas cattle drive stop. It was here that the hired hands received and spent a part of their pay. Later when the Wyoming



and Northwestern Railroad was built (1906), J.B. Okie, an Englishman, built a sheep-shearing barn, holding pens, and a store in the area. The town, named Lost Cabin, also boasted three houses, a livery stable, and a hotel.

The Wyoming Territorial Legislature created Fremont County in 1884. The history of its creation can be traced from Idaho Territory, through Dakota, Nebraska, and finally Wyoming Territory. Fremont County was cut from a then much larger Sweetwater County, which was originally called Carter County.

When Fremont County was first established it contained over 12.5 million acres. Subsequent actions have reduced the overall size of the County to approximately six million acres. Lander was named as the County Seat and the first Board of County Commissioners met and organized the County on May 6, 1884. It is interesting to note that the very first formal action of the Board on that day was the establishment of the first county roads, the 'Green River Road' from Green River to North Fork, the 'Rawlins Road' from Lost Soldier to Lander and the road from North Fork to Stinking Water.

In 1904, a U.S. Government engineer, Goyne Drummond, after completing a thorough study of a portion of the Wind River Reservation between the Owl Creek and Wind River Mountains, found that the study area could be made agriculturally productive through irrigation. Pursuant to a 1905 agreement with the tribes, the U.S. Government withdrew the area north of the Big Wind River from the Reservation and opened it to homesteading. A group of Chicago investors, the Wyoming Central Irrigation Company, contracted to build an irrigation project on the ceded portion and began construction in 1906. Wyoming Central completed what is now known as the Riverton Valley Canal in 1907, and the LeClair-Riverton Canal was completed in 1916. Widespread irrigation on the Midvale portion of the project did not get underway until after 1920 when the U.S. Reclamation Service (later called the Bureau of Reclamation) took overall funding and development responsibility for that portion of the project. This project was known as the Riverton Reclamation Project.

With the announcement that the government was going to open a portion of the Reservation to homesteading, the Pioneer Townsite Company platted and laid out the border town of Shoshoni. The official opening of the date of the new town was September of 1905 nearly one year before the opening of the ceded portion of the Reservation. It is reported that the town became an instant tent city with over two thousand residents prior to the opening of the Reservation.

In 1906, when the ceded portion of the Reservation was opened to homesteading, a townsite was platted by the government surveyors to provide lots for the coming homesteaders and to create a center of commerce. The town was first called "Wadsworth," but the name Riverton was chosen after a few weeks as the permanent name for the town built in response to the boom brought about by the irrigation project. Riverton is now the largest city in the County.

The coming of the railroad in 1906 stimulated the local economy and provided further impetus to the overall development of the area. At least one town, Hudson, owes its origin to the building of the railroad. Hudson began as a railroad depot at the confluence of the Big and Little Popo



Agie Rivers. Subsequent growth of the town was stimulated by the development of a coal mining operation. Hudson's peak population numbered approximately 1,500 persons. Later reductions in the demand for coal, caused by the advent of the diesel locomotive and operational problems at the two mines caused the town's population to dwindle.

The Wyoming and Northwestern Railroad Company originally built the railroad from the east connecting the towns of Moneta, Bonneville, Shoshoni, Riverton, Hudson, and Lander. Most of the track has since been taken over by the Burlington Northern Railroad which ran a north-south line from points north through the Wind River Canyon connecting with the Wyoming-Northwestern near Bonneville. These railroads served as major transportation arteries for several years. The railroad discontinued its service between Riverton and Lander in the late 1960s. Rail service from Riverton to Shoshoni was discontinued in the late 1980s.

# **Natural Resource History in Fremont County**

Natural resources within Fremont County have always been extremely important to its development, history, custom, culture, and economy. The diversity of landscapes throughout the county provides numerous opportunities for resource development and use. Provided below is a short history of some of the resources within the County. Many of these resources are still extremely important today to Fremont County's economy.

### **Crop Farming and Cattle and Sheep Grazing**

As gold started to decline at South Pass City in the late 1870s, residents started leaving the area and some went down to the Wind River Valley to raise crops and livestock that could be sold to those still working in the mines. Farther downstream on the Sweetwater River, stockmen brought herds of cattle into the area. Shortly after cattle came into the area, sheep also arrived in the Wind River Valley and the Bighorn Basin (Jost, 2014).

#### Coal, Oil, and Railroad Ties

The construction of the Chicago and Northwestern Railroad brought other developments as well. Coal was mined in small quantities for many years near present-day Hudson. With a railroad to buy significant quantities of coal, several large coal mining operations began and the opportunity for employment in those mines attracted many immigrants from southeastern Europe. By 1922, the coal mines began to decrease as the railroads began shifting to oil (Jost, 2014).

Oil seeps had been known about in the Lander area since the fur trade era of the early 1800s and the first oil well drilled in the Wyoming territory was near the Little Popo Agie southeast of Lander in 1884. The arrival of the railroad made it easy to transport the oil (Jost, 2014).

The railroad also needed ties for the tracks and the timber for such ties was available around the Dubois area. The Wyoming Tie and Timber Company came into existence to produce those ties and the tie industry had a significant impact to the economics of the Dubois and Riverton areas (Jost, 2014).



### 2.3 FREMONT COUNTY CUSTOM AND CULTURE

Fremont County's rural nature is such that its culture is shaped by the relationship with the land. Early residents of the area brought with them the cultures of their former homelands. Spanish, French, English, Scandinavian, Basque, other European and South American cultures all gravitated to the rich resources found in Fremont County. Those cultures revolved around hard work, self-sufficiency, individualism, isolation, and a love for the land and natural resources. They also all used the renewable resources found here and used them in such a way that those resources are still capable of producing economic good and social livelihood to this day. Fremont County's culture today is the mixture of those backgrounds and their heritage of using the natural resources found here.

Fremont County's cowboy image is recognized worldwide, and that image reflects the determination of our citizens. The early residents of this county faced arid summers, frigid winters, and isolation from civilized society. They worked hard to establish their livelihoods, and today's residents similarly work hard and depend on Fremont County's natural resources to maintain their livelihoods. The accomplishments of our predecessors in the County were made through tenacity, risk-taking, and stubbornness in exercising and protecting their constitutionally guaranteed rights.

Fremont County citizens have a long history of using federally or state managed lands and waters according to the invitation and enticements of the land use and land disposal acts of those federal and state governments. Recreational and subsistence hunting, recreational fishing, trail riding, camping, and nature appreciation activities all have their roots in the survival skills of early settlers as seated in the customs of their individual historic cultures.





### **CHAPTER 3: LAND USE**

#### 3.1 LAND USE

### 3.1.1 Overview

Federal lands are managed for different purposes under differing statutory authorities. Three categories of designation are presented for counties in the Economic Profile System – Human Dimension Toolkit: 1) Protected, 2) Restricted, and 3) General Use. In Fremont County, nearly 22% of federal lands are designated as protected (nearly 672,000 acres). This amount includes more than 530,000 acres of USFS land that is designated as national wilderness (54 percent of total USFS land in the county). Also, more than 8% of federal lands are designated as restricted (nearly 250,000 acres) and the remaining 70% is designated for general use (more than 3 million acres) (University of Wyoming Extension et al., 2015).

Federally managed lands, and natural resource availability and use, greatly impact Fremont County's social and economic stability. Agriculture, mining and mineral production, outdoor recreation and 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 Fremont County.

The economy of Fremont County benefits from multiple-use policies that allow grazing, mining, timber harvest, oil and gas development, water storage, preservation of



natural scenic, scientific and historical values, for abundant wildlife and fish, and recreation on federally or state-managed lands.

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 federally or state-managed land, is best protected by the citizens who live locally within the County and may 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.

# 3.1.2 Mixed Ownership Lands

Much of the land in Fremont County is federally managed. However, there is some mixed ownership of lands particularly along areas near water and due to homesteading and the railroad. These mixed-ownership lands can pose challenges to access and ecological management, and cause unintended consequences to private, state, and public lands when management decisions are made. This landscape pattern can also lead to landlocked parcels for both public and private



lands, as a parcel can be surrounded by other land ownerships. In many cases, these mixed-ownership areas are managed together due to the inability to fence individual parcels. The federal decisions made on the public lands in these areas can have more impact on the private landowners and state-managed areas as compared to areas where there are large tracts of public lands.

#### 3.1.3 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).

Fremont County includes three Conservation Districts: <u>Popo Agie Conservation District</u><sup>3</sup> (PACD), the <u>Dubois-Crowheart Conservation District</u><sup>4</sup> (DCCD), and the <u>Lower Wind River Conservation District</u><sup>5</sup>(LWRCD).

The PACD was formed in 1942 in response to the Dust Bowl Era of the 1930s. The PACD encompasses the southern portion of Fremont County and includes the communities of Lander, Hudson, Ethete, Ft. Washakie, South Pass, and Jeffrey City. The DCCD was formed in 1945 and includes parts of the Wind River Mountains to the south and west, the Absaroka Mountains to the north, and the Wind River Indian Reservation to the west. The LWRCD was formed in 1969 when the Pavillion and Wind River Conservation Districts were merged. The district encompasses nearly 2 million acres including the communities of Pavillion, Kinnear, Riverton, Shoshoni, Moneta, Lysite, and Lost Cabin (DCCD, 2021; LWRCD, 2021; PACD, 2021).

# 3.1.4 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).



The Lander BLM Field Office is in Lander and encompasses 6.6 million acres in central Wyoming and includes most of Fremont County, the southwest corner of Natrona County, and small portions of Carbon, Sweetwater, and Hot Springs counties. Of the 6.6 million acres managed by the BLM, 2.5 million acres are public lands managed by the BLM and the remaining 4.1 million acres are federal mineral estate. The Lander Field Office manages a diversity of resources and uses including National Historic Trails, the Continental Divide National Scenic Trail (CDNST), historic mining areas, rock climbing, hiking, mountain biking, hang gliding, livestock grazing, and wild horses. The Lander Field Office Resource Management Plan<sup>6</sup> (RMP) was last updated in June of 2014.

#### 3.1.5 United States Forest Service

In 1876, U.S. 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.-e). 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) required 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)).

There are two national forests within Fremont County; the Shoshone National Forest (SNF) which makes up the majority of USFS managed lands within the county and a small portion of the Bridger-Teton National Forest (BTNF) along the Wind River Range on the western edge of the county. Within the SNF there are two ranger districts that encompass portions of the county: the Washakie Ranger District in Lander and the Wind River Ranger District in Dubois. The small portion of the BTNF within the county is managed by the Pinedale Ranger District in Pinedale, Wyoming.

#### 3.1.5 Bureau of Reclamation

The BOR began as the United States Reclamation Service (USRS) in 1902, as part of the United States Geological Survey (USGS). The USRS 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 BOR manages the Riverton Unit, also known as the Midvale Irrigation District, which features the Bull Lake Dam, Pilot Butte Dam, Wind River Diversion Dam, and Pilot Butte Powerplant, together with approximately 100 miles of main canals, 300 miles of laterals, and 644 miles of drains (BOR, n.d.-b).

The BOR also manages the Boysen Unit which consists of Boysen Dam, Boysen Reservoir, and Powerplant. Boysen Dam impounds the waters of the Wind River providing regulation of the stream flows for power generation, irrigation, flood control, sediment retention, fish propagation, and recreation development (BOR, n.d.-a).

#### 3.1.6 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 Indian 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<sup>7</sup>.

Land under the BIA's jurisdiction within Fremont County lies within the Wind River Indian Reservation.

# 3.1.7 Wyoming State Lands

There are several state agencies that 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 subsurface 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 Wyoming 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. There is a field office for the Forestry Division in Riverton.

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<sup>8</sup> (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 several WHMAs within Fremont County that are further discussed in the wildlife section. The Lander Regional Office for WGFD is in Lander. The WGFD and its role, particularly in Fremont 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 Fremont County is for multiple-use management and should be done in coordination with the County.
- B. Federal agency decisions support the socioeconomic wellbeing of Fremont County citizens and maintain the culture and customs of its constituents.

#### **3.1.9 Land Use Priority Statements:**

- Federal agencies should conduct any management action or plans following their agency's multiple-use mandates.
- Fremont 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 its residents.



- 3. Federal agency decisions should analyze and make management decisions that would avoid negative impacts to the current use of neighboring federal lands within Fremont County.
- 4. Federal agencies should coordinate with and accommodate the reclamation needs of neighboring landowners whenever a project will affect neighboring lands within Fremont County.
- 5. Federal agencies should give regular (where regular is defined as not less than quarterly) updates on current and proposed projects within Fremont County's jurisdiction and provide reasonable timelines and explanations for issuance of delays from permitting agencies to the County.
- 6. Federal agencies should coordinate with Fremont County to protect and enhance historic and current natural resource-related industries to ensure they remain economically viable.



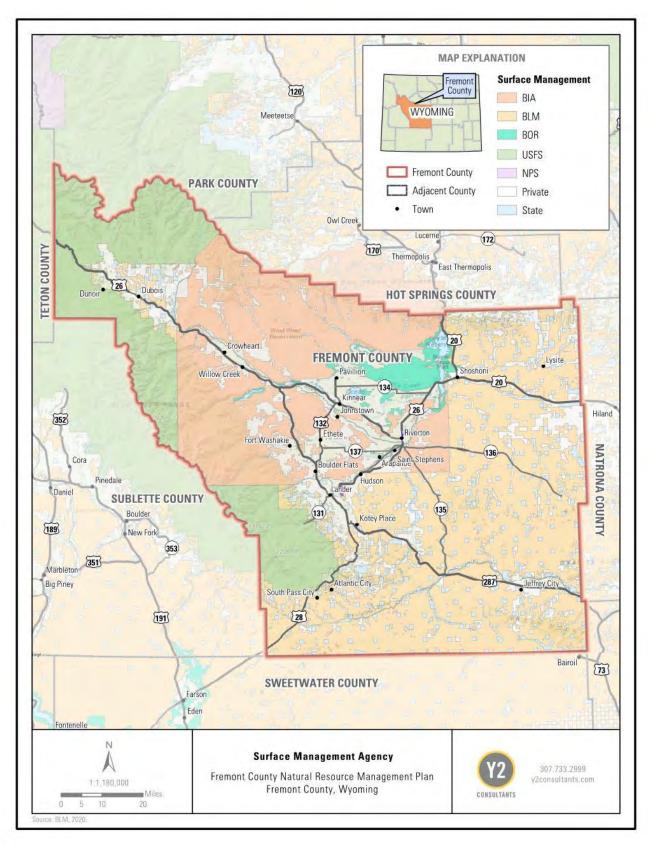


Figure 2. Fremont County surface management (data from 2020 BLM database).



#### 3.2 TRANSPORTATION AND LAND ACCESS

# 3.2.1 History, Custom, and Culture

One of the tenets of Fremont County's culture is the ability to move around and across the County. Towns, ranches, recreational areas, mining areas, and other important resources within the County have historically been separated by long distances. Due to these long distances, County residents are accustomed to traveling considerable distances in operating their businesses.

It has long been the custom of Fremont County citizens to access public lands within the County for the use and economic viability of their economic endeavors. The use of horses, all-terrain vehicles (ATVs), snowmobiles, off-road vehicles (ORVs), mountain bikes, and other modes of transportation have long been recognized as a customary way to get from place to place in Fremont County.

# 3.2.2 Resource Assessment and Legal Framework

Access to and across public lands is critical to the use, management, and development of those lands and adjoining state and private lands. The loss of the use of rights-of-way for moving

livestock, oil and gas exploration and development, recreation, timber harvest, and other historic uses could significantly harm the County's economy and goes against the custom and culture of open travel in the County. Fremont 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.



Congress, as the constitutional manager of the federal lands, has made it clear through natural resource statutes that the public must have use of and access to the federal lands. It is vital to the County's interests and performance of duties that full and complete access to the federal lands continues.

The BLM and USFS both have specific provisions they must follow when considering the closure of roads and trails. A requirement of these provisions is that such activity be conducted in coordination with the County prior to such action being taken. Road closures have occurred in the County by both federal and state agencies without prior coordination, despite requirement



by federal law for coordination prior to a final decision. This has caused economic harm and impacted citizen and visitor enjoyment of the County's natural resources.

It is vital to the sustainability of the livestock industry in Fremont County that grazing areas, and the stock trails that connect them, be open and accessible. Livestock "trailed" from one grazing area to another must access the grazing areas on either end of that process, as well as lands in between. Historical use of stock trails and grazing areas has fluctuated over the years, depending on market prices, and weather conditions, but the need for access availability has remained constant.

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.

## **Federal Highway Administration**

The Federal Highway Administration (FHWA) is an agency within the U.S. Department of Transportation and was created in 1966.

"The mission of FHWA is to enable and empower the strengthening of a world-class highway system that promotes safety, mobility, and economic growth, while enhancing the quality of life of all Americans" (Office of Federal Lands Highway, 2018).

Under this mission, the FHWA provides resources to municipalities across the nation in the form of indirect and direct methods. Indirectly, the FHWA provides valuable research and design guidance on numerous topics to push the industry toward a safer, efficient, and wholistic network. Directly, the FHWA provides grants to the local Department of Transportation divisions to facilitate project design and construction based upon merit. These grants are distributed through the Federal Highway-Aid Program.

Alongside the FHWA, numerous programs were created under the Federal Lands Highway Division to specifically service certain groups and were reauthorized under the Fixing America's Surface Transportation Act. These programs are:

- Federal Lands Access Program: "established in 23 U.S.C. § 204 to improve transportation facilities that provide access to, are adjacent to, or are located within, Federal lands. The Access Program supplements State and local resources for public roads, transit systems, and other transportation facilities, with an emphasis on high-use recreation sites and economic generators" (Office of Federal Lands Highway, 2018).
- Federal Lands Transportation Program: "established in 23 U.S.C. § 203 to improve the transportation infrastructure owned and maintained by federal land management



agencies including National Park Service (NPS), U.S. Fish and Wildlife Service (USFWS), USFS, BLM, U.S. Army Corps of Engineers (USACE), BOR, and independent federal agencies with land and natural resource management responsibilities" (Office of Federal Lands Highway, 2018).

- Nationally Significant Federal Lands and Tribal Projects Program: "...provides funding for the construction, reconstruction, and rehabilitation of nationally significant projects within, adjacent to, or accessing Federal and tribal lands. This program provides an opportunity to address significant challenges across the nation for transportation facilities that serve Federal and tribal lands" (Office of Federal Lands Highway, 2018).
- Emergency Relief for Federally Owned Roads: "established to assist federal agencies with the repair or reconstruction of tribal transportation facilities, federal lands transportation facilities, and other federally owned roads that are open to public travel, which are found to have suffered serious damage by a natural disaster over a wide area or by a catastrophic failure" (Office of Federal Lands Highway, 2018).

Wyoming Department of Transportation (WYDOT) can work directly with any of the above programs to help secure funding and has done so annually. Through the FLAP program alone, Wyoming has secured \$73.3 million spread across 16 projects from 2013 to 2022.

#### **United States Forest Service**

The Multiple Use Sustained Yield Act (MUSY) 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 are not 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 MUSY (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 USFS in locations and according to specifications which will permit maximum economy in harvesting timber from USFS 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 (9<sup>th</sup> 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 at 254).

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 (10<sup>th</sup> 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 (10<sup>th</sup> 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 (9<sup>th</sup> 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)).

## 3.2.3 Transportation and Land Access Resource Management Objectives:

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

## 3.2.4 Transportation and Land Access Priority Statements:

- Federal agencies should continue to designate all currently open trails, rights of ways, and
  roads as open. No road or trail should be closed, including temporarily, unless public
  safety or health demands its closing and the proper analysis and disclosure, in
  coordination with Fremont County, is completed prior to closure. All formally established
  public roads and rights-of-ways should be considered valid transportation routes unless
  formally decommissioned, even if not presently maintained.
- 2. Access to and/or across federal and State managed lands within Fremont County should not encumber or restrict private property rights.
- 3. Private property owners should be guaranteed access to their private property, including given access to cross federally managed lands to reach landlocked property.
- 4. Federal agencies should coordinate with private landowners seeking to enforce trespass laws and prevent illegal crossings into private property to access public lands.
- 5. Fremont 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 NEPA analysis has been completed including public review and coordination with the County. Should the agency believe that a road closure falls under a categorical exemption or a finding of no significant impact, the County should be consulted.
- 6. Roads and trails should be accessible year-round, regardless of road status for emergency personnel and law enforcement.
- 7. Temporary roads should be analyzed for other potential beneficial uses before they are officially closed.
- 8. All proposed development plans should contain a transportation plan.
- Reasonable access to all water-related facilities such as dams, reservoirs, delivery systems, monitoring facilities, livestock water and handling facilities, etc., should be maintained.
- 10. Federal agencies should work with Fremont County to determine responsibility for maintenance of all routes, roads, and trails.
- 11. Federal agencies should support the development of new routes and trails for motorized, non-motorized, and animal-powered recreation within Fremont County.
- 12. Federal agencies should support the development of additional roads for public utilities infrastructure within Fremont County.



- 13. Federal agencies should work with Fremont County to reopen roads and trails that were closed by an agency without specific coordination with the County.
- 14. Historic stock trails should be designated in all applicable planning documents as valid access routes for the purpose of trailing livestock between grazing areas.
- 15. Federal land managers should properly and proactively manage landslides near roads to prevent/minimize new movement, especially where landslides could disrupt public transportation or threaten public safety.
- 16. Fremont County supports establishing wildlife crossings on highways within the County.

#### 3.3 SPECIAL DESIGNATION AND MANAGEMENT AREAS

## 3.3.1 History, Custom, and Culture

Fremont County citizens have historically used wilderness areas and other special management areas for grazing, recreation, commercial guiding, and solitude. Tribal members have historically used wilderness for hunting, fishing, and commercial guiding as well. It is customary for people to use and enjoy these special areas in Fremont County.

Fremont 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 many local sporting goods stores, motels, dude ranches, and other retail businesses.

The use of, and access to, wilderness and other special management areas is important to Fremont County families and communities. The communities have significant investment-backed expectations in the continued levels of wilderness use and protection. Wilderness defines the very character of our people: independent, self-reliant, rugged, remote, strong-willed, individualistic, and free.

### 3.3.2 Resource Assessment and Legal Framework

There are several special designation and management areas within Fremont County both designated by the USFS and the BLM. Figure 3 depicts the special management and designation areas within the County.

#### **Areas of Critical Environmental Concern**

Areas of Critical Environmental Concern (ACEC) are BLM-managed areas "where special management attention is needed to protect from irreparable harm important historical, cultural, and scenic values, or fish and wildlife or other natural resources" (BLM, 2016a). An ACEC may also be designated to protect human life and safety from natural hazards (BLM, 2016a). An ACEC designation must go through the NEPA land use planning process. An ACEC designation may be revisited through subsequent land use planning, revision, or amendment. ACECs and other special designations may compete with the natural resource-based businesses that are important to the County's economy, like grazing, mining, and recreation.

There are eight ACECs within Fremont County identified in the 2014 Lander BLM RMP. A map of those ACECs can be found <a href="here">here</a>9.



- Beaver Rim
- Lander Slope
- Red Canyon
- Whiskey Mountain
- East Fork
- Green Mountain
- South Pass Historical Landscape
- Twin Creek

### Wilderness and Wilderness Study Areas

The Wilderness Act of 1964 established the National Wilderness Preservation System to be managed by the USFS, NPS, and the USFWS. The passage of FLPMA in 1976 added the BLM as a wilderness management authority to the Wilderness Act. The Wyoming Wilderness Act of 1983<sup>10</sup> designated some wilderness areas and added onto other existing wilderness areas in the State of Wyoming. Wilderness areas must have "wilderness character", which is described with four qualities. Wilderness Study Areas (WSAs) are places that have wilderness characteristics; (i.e., untrammeled, natural, undeveloped, and outstanding opportunities for recreation) which make them eligible for future designation as wilderness. (BLM, 2016b)

The four characteristics that must be met for designation as a WSA or Wilderness Area:

- 1. The area must be untrammeled by man. Untrammeled refers to wilderness as an area unhindered and free from modern n human control and manipulation. Human activities or actions on these lands impairs this quality.
- 2. The area must be natural. The area should be protected and managed to preserve its natural conditions and should be as free as possible from the effects of modern civilization. If any ecosystem processes were managed by humans, they must be allowed to return to their natural condition.
- 3. The area must be undeveloped. No human structures or installations, no motor vehicles or mechanical transport, or any other item that increases man's ability to occupy the environment can be present.
- 4. The area must offer solitude or primitive and unconfined recreation. People should be able to experience natural sights and sounds, remote and secluded places, and the physical and emotional challenges of self-discovery and self-reliance.

WSAs are established in three different ways:

- They are identified by the wilderness review as required by Section 603 of FLPMA;
- 2) They are identified during the land use planning process under Section 202 of FLPMA; or
- 3) They are established by Congress.

Section 603(c) of the FLPMA requires that WSAs are managed so as not to impair their suitability for preservation as wilderness and strives to retain their primeval character and influence,



without permanent improvements or human habitation (BLM, 2016b). However, the FLPMA also requires that mining, livestock grazing and mineral leasing (e.g., grandfathered uses) continue in the manner and degree as they were being conducted in 1976. Therefore, to the extent that grazing was allowed in the wilderness prior to 1976, its use, specifically including allowing the same number of livestock as existed in 1976, should be continued. Grandfathered uses are protected and must be maintained in the same manner and degree as they were being conducted on October 21, 1976, even if they impair wilderness characteristics according to *Rocky Mountain Oil and Gas Association v. Watt*, 696 F.2d 734, 749 (10th Cir. 1982). This requirement includes the authority to develop livestock-related improvements (*Utah v. Andrus*, 486 F. Supp. 995 [D. Utah 1979]).

### BLM Managed Wilderness Study Areas

### Copper Mountain WSA

The Copper Mountain WSA spans approximately 6,858 acres of BLM-administered land without any inholdings or split estate. The WSA is part of the Copper Mountain Range also known as the Bridger Mountains and is near Boysen Reservoir. The area is dry and mountainous with scattered limber pine and juniper on rocky slopes (BLM, n.d.-c).

#### **Dubois Badlands WSA**

The Dubois Badlands WSA encompasses 4,520 acres of BLM-administered land with no split estate or private inholdings. The area is primarily badlands and flat-topped benches, which are extensively eroded and separated by numerous drainage patterns. There are limited opportunities for primitive and unconfined recreation in the area. Day hiking is possible but the WSA's size and lack of water limits its attraction (BLM, n.d.-d).

#### Lankin Dome WSA

The Lankin Dome WSA encompasses approximately 6,316 acres of BLM-administered land, including 360 acres of surface split-estate lands with the boundaries. The area is located about 10 miles east of Jeffrey City. Lankin Dome consists of two landforms: the uplifted mountain of reddish granite rocks, slabs, and exfoliated domes, and the flats of Nolen Pocket north and west of the rocks. The area is mixed with private and public lands, permission is required when crossing private land (BLM, n.d.-h).

### Split Rock WSA

The Split Rock WSA encompasses approximately 1,789 acres. The area consists of uplifted mountains of reddish granite rocks, slabs, exfoliating domes, and sagebrush flats. Motorized travel is prohibited and there are private inholdings within the WSA. The WSA is closed to mineral entry (BLM, n.d.-e).



### Sweetwater Canyon WSA

The Sweetwater Canyon WSA encompasses 9,056 acres of BLM-administered lands without any split estate or private inholdings. The WSA lies along the southeastern border of the Wind River Range in the high plains desert. There are 5,538 acres recommended for wilderness in the core of the Sweetwater Canyon (BLM, n.d.-g).

#### Whiskey Mountain WSA

The Whiskey Mountain WSA encompasses 487 acres of BLM-administered land. The area is on the north-facing slope of Whiskey Mountain in the Wind River Mountains. These lands became a WSA due to their proximity to the Fitzpatrick Wilderness Area. The largest concentration of Rocky Mountain Bighorn Sheep in the U.S. inhabits the area and surrounding environments (BLM, n.d.-i).

### Bridger-Teton and Shoshone National Forest Managed Wilderness Areas

### **Bridger Wilderness**

A small portion of the Bridger Wilderness within the Bridger-Teton National Forest lies on the western border of Fremont County. The Bridger Wilderness lies within the Wind River Mountains and extends 80 miles along the Continental Divide. This is home to the headwaters of the Green River, along with 10 of the world's largest glaciers, and hundreds of alpine lakes. The highest point in Wyoming, Gannett Peak at 13,809 feet, lies on the shared boundary of the Bridger Wilderness and Fitzpatrick Wilderness (USFS, n.d.-a).

#### **Fitzpatrick Wilderness**

The Fitzpatrick Wilderness within the Shoshone National Forest was designated in 1976 and named for Tom Fitzpatrick, a mountain man and partner of Jim Bridger. The area spans 198,525 acres in the Wind River Mountain Range. The area has been carved by glaciers from granite and limestone rock and contains alpine meadows, numerous lakes, rock-covered plateaus, precipitous canyons, and meandering streams. The western border of the wilderness area is the Continental Divide, shared with the Bridger Wilderness and the eastern border is shared with the Wind River Indian Reservation. Wyoming's highest point, Gannett Peak at 13,8014 feet, is within the wilderness area (USFS, n.d.-f).

### **Popo Agie Wilderness**

The Popo Agie Wilderness within the Shoshone National Forest was designated in 1984 and covers 101,870 acres within the Wind River Range. The Popo Agie Wilderness has high jagged peaks and perennial snowfields that dot the Continental Divide that runs through the area. There are more than 20 summits that reach above 12,000 feet in elevation. The headwaters of the Middle Fork Popo Agie, North Fork of the Popo Agie, and South Fork Little Wind River (all tributaries of the Wind River) all originate here.



#### **Teton Wilderness**

The Teton Wilderness, within the Bridger-Teton National Forest, encompasses the very northwestern point of Fremont County with most of the wilderness falling within Teton County. The Teton Wilderness lies south of Yellowstone National Park and encompasses 585,238 acres. The Teton Wilderness is the second-largest wilderness in Wyoming. It is home to the famous Two Ocean Creek which splits along the Continental Divide, where its waters contribute both to the Atlantic and Pacific Oceans. The headwaters of the Snake River, North and South Buffalo Fork Rivers, the Soda Fork River, and Pacific Creek all lie within the Teton Wilderness.

### Washakie Wilderness

The Washakie Wilderness, within the Shoshone National Forest, was founded in 1964 and was named in honor of Chief Washakie, leader of the Shoshone tribe of Wyoming. The area encompasses 704,274 acres in the southern Absaroka Mountains, with Yellowstone boarding to the northwest, Teton Wilderness to the west, and the Wind River Indian Reservation to the southeast. The area has unusual geologic formations and large portions of the land are rough and barren with sparse vegetation. The area is home to a diverse population of wildlife.

### Wyoming Public Lands Initiative

Fremont County participated in the Wyoming Public Lands Initiative (WPLI) from 2016 – 2018. The WPLI was a voluntary, collaborative, county-led process that intended to result in one, multicounty 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.). Fremont County formed a WPLI Advisory Committee that provided recommendations for designation and management to the Fremont County Board of County Commissioners. 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 language in the bill for different management areas within the County is summarized below and the recommendation can be found here<sup>11</sup>:

### Designation of Upper Sweetwater Canyon and Lower Sweetwater Canyon Wilderness Areas

In accordance with the Wilderness Act, the land within the boundaries of the Sweetwater Canyon Wilderness Study Area is designated as wilderness and is to be known as the Upper Sweetwater Canyon Wilderness and the Lower Sweetwater Canyon Wilderness. Grazing of livestock in both the Upper and Lower Wilderness Areas would be allowed to continue where established before the date of enactment of the Wilderness Act, this would be similar for existing roads within the boundaries.



### Release of Wilderness Study Areas

The Dubois Badlands WSA would be removed from WSA status. The Dubois Motorized Recreation Area would be established and include any land within the boundaries of the Dubois Badlands WSA that is west of the fence that would be installed and/or repaired or relocated along the western boundary west of North Mountain View Road. The Dubois Badlands National Conservation Area would be established as well within the same boundaries. The land within the boundaries of the Conservation Area would be withdrawn from mineral development.

The Copper Mountain WSA and Whiskey Mountain WSA would be released from WSA status and placed back into multiple use management.

### **Lands with Wilderness Characteristics**

Section 201 of FLPMA requires the BLM to maintain, on a continuing basis, an inventory of all public lands and their resources and other values, which includes wilderness characteristics. It also provides that the preparation and maintenance of the inventory shall not, of itself, change or prevent change of the management or use of public lands. It does not address or affect policy related to Congressionally designated Wilderness or existing Wilderness Study Areas.

The BLM uses the land use planning process to determine how to manage lands with wilderness characteristics (LWC) as part of the BLM's multiple-use mandate. The BLM will analyze the effects of:

- Plan alternatives on lands with wilderness characteristics, and
- Management of lands with wilderness characteristics on other resources and resource uses.

There is one LWC within Fremont County, the Little Red Creek LWC. This area is approximately 4,954 acres and is managed to protect wilderness values. The area is closed to motorized travel. (Bureau of Land Management, 2014)

### **Research Natural Areas**

Research Natural Areas (RNAs) are special management areas that reflect the natural condition of an ecosystem, allowing the agency to see how the ecosystem would be without their involvement. These RNAs serve three functions for the USFS: benchmark reference areas; protect biological diversity; provide research sites for determining how an ecosystem functions. The BLM considers RNAs to be a type of ACEC (BLM, n.d.-a). Recreation in RNAs is not encouraged because it can alter the natural state of the area, but natural fire frequencies and intensities are desirable to maintain the natural cycles in the ecosystem.

There are currently two potential RNAs identified within Fremont County from the 2015 Shoshone National Forest Land Management Plan. The Arrow Mountain RNA is proposed at 14,452 acres and is located southeast of Dubois. The Roaring Fork RNA is proposed at 13,483 acres and is located southwest of Lander. A map of these potential RNAs can be seen <a href="here">here</a>12.



#### 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 takes 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 Lander Field Office can be viewed <a href="here">here</a>13.

## Special Recreation Management Areas/Extensive Recreation Management Areas

The BLM's land use plans may designate Special Recreation Management Areas (SRMAs) or Extensive Recreation Management Areas (ERMAs) to provide specific management for recreation opportunities, such as developing trailhead areas for hikers, mountain bikers, or off-road vehicle users. Both SRMAs and ERMAs exist in Fremont County. A map of these areas can be seen here<sup>14</sup>.

SRMAs are BLM administrative units where a commitment has been made to prioritize recreation by managing for specific recreation opportunities and settings on a sustained or enhanced, long-term basis. SRMAs are managed for their unique value, importance, and/or distinctiveness; to protect and enhance a targeted set of activities, experiences, benefits, and desired resource setting characteristics; as the predominant land use plan focus; to protect specific recreation opportunities and resource setting characteristics on a long-term basis.

### SRMAs within Fremont County include:

- Continental Divide National Scenic Trail Destination SRMA
- Dubois Mill Site Community SRMA
- Lander Valley Community SRMA



- National Historic Trails Destination SRMA
- National Trails Undeveloped SRMA
- Sweetwater Canyon Undeveloped SRMA
- Sweetwater Rocks Undeveloped SRMA

ERMAs are administrative units managed to address recreation use, demand, or existing Recreation and Visitor Services Program investments; support and sustain the principal recreation activities and the associated qualities and conditions; and commensurate with the management of other resources and resource uses.

### ERMAs within Fremont County include:

- Beaver Creek Nordic Ski Area
- Continental Divide National Scenic Trail
- Green Mountain
- Lander Slope/Red Canyon
- National Historic Trail
- Whiskey Mountain/East Fork
- Willow Creek

#### **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<sup>15</sup>.

### **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).



Multiple national trails run through Fremont County, most are in the southern end of the county and can be viewed <a href="here">here</a>16. These trails include:

- Continental Divide National Scenic Trail
- California-Oregon Mormon Trail
- Bryan South Pass Road
- Lander Cutoff
- Rawlins-Ft. Washakie Stage Road

#### 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 Fremont County designated as wild, scenic, or recreational within the National Wild and Scenic Rivers System (National Wild and Scenic Rivers System, n.d.-a). The 2014 Lander BLM RMP identified three segments within Fremont County that are eligible segments for the Wild and Scenic River System. These segments can be viewed on the <u>BLM map</u><sup>17</sup> and are:

- Baldwin Creek Unit: 8.1 miles (tentatively wild and scenic)
  - o Upper Baldwin Creek Segment: 6.96 miles
  - o Lower Baldwin Creek Segment: 1.14 miles
- Sweetwater River Unit: 12.88 miles (tentatively wild)
  - Sweetwater River Segment: 8.64 miles
  - o Granite Creek Segment: 1.04 miles
  - o Mormon Creek Segment: 1.08 miles
  - Willow Creek Segment: 1.32 miles
  - Strawberry Creek Segment: 0.81-mile warm Springs Segment 1: 1.3 miles (tentatively recreational and wild)

#### 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 are two byways found in Fremont County: Wyoming Centennial Scenic Byway and Wind River Canyon Scenic Byway.

#### Wyoming Centennial Scenic Byway

The Wyoming Centennial Scenic Byway (U.S. Highway 26/287) crosses the Continental Divide and offers a route that, although well-traveled, is off the beaten path between Grand Teton and Yellowstone National Parks.



### 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.).

## 3.3.3 Special Designation Resource Management Objectives:

- A. Designation and new management decisions of special designation or management lands are coordinated with Fremont County.
- B. Historic uses that consider the custom, culture, and preexisting land uses are maintained on lands with special designations and any lands proposed for special designation.
- C. Special land use designations are applied only when the management is consistent with surrounding management and contributes to the policies of multiple use, private property rights, economic viability, and county custom and culture.

# 3.3.4 Special Designation Priority Statements:

- 1. Federal agencies should uphold the legal requirements and qualifications set forth by the Wilderness Act, and the Wyoming Wilderness Act of 1984 including those providing for the continuation of existing uses, and the regulation of existing uses only to prevent unnecessary or undue degradation of the environment.
- 2. Federal land management agencies should apply wilderness area management techniques exclusively to only lands officially designated as wilderness areas.
- 3. Fremont County supports the Wyoming Public Lands Initiative (WPLI) recommendations for all wilderness study areas in the county. Following those recommendations, federal agencies should attempt consistency with the WPLI recommendations and remove wilderness study area designations based on those recommendations. Additionally, where possible, federal agencies consider additional resource uses, inventories, and multiple use management of the landscape irrespective of existing management boundaries based on those recommendations.
- 4. Historic use and access should continue in all special management or designation areas unless prohibited by law.
- 5. Federal agencies shall provide a thorough, peer-reviewed, economic analysis before implementing federal actions in existing wilderness or providing recommendations for wilderness.
- 6. Federal agencies responsible for making wilderness recommendations to Congress shall comply with their respective coordination mandates with Fremont County when making wilderness determinations and developing wilderness inventories.
- 7. The Bureau of Land Management should coordinate with Fremont County early and allow the County to participate as a cooperating agency whenever there is an Area of Critical Environmental Concern proposal on land managed by the Bureau of Land Management.
- 8. Proposals for Areas of Critical Environmental Concern designations shall strictly adhere to the relevance and importance criteria, and the Bureau of Land Management must demonstrate, using credible data, the need for an Area of Critical Environmental Concern



- designation to protect the area in question and prevent irreparable damage to resources, natural systems, or the economy of the local area.
- 9. Fremont County requests to Congress that any Wilderness Study Area designation decisions be expedited to achieve a decision within 2-years from the proposal of the designation; should the designation not be made within this timeframe, the County requests that the area be returned to multiple use.
- 10. Fremont County supports the removal or release of all wilderness study areas from consideration that contain non-wilderness characteristics, such as roads or active oil/gas wells within 2 years.
- 11. Management of special designation areas should be coordinated with the County and consistent to the maximum degree with the Fremont County Natural Resource Management Plan.
- 12. Federal agencies should allow for the use of herbicides to control noxious weeds in special designation and management areas and should coordinate with the Fremont County Weed and Pest and Wyoming State Weed and Pest.
- 13. Livestock grazing and the ability to construct and maintain range improvement projects should continue in all special management or designation areas unless prohibited by law.
- 14. Prior or existing lease rights should continue or be reinstatement in Wilderness Areas and Wilderness Study Areas as required by the Federal Lands Policy and Management Act.
- 15. Agencies should not curtail the installment of necessary rangeland improvements in Wilderness or Wilderness Study Areas (i.e., fences and water developments) to maintain and encourage use of the prior existing rights in the area.
- 16. On-the-ground mapping of the roads, fences, rangeland improvements, and any other anthropogenic influence in lands under consideration for lands with wilderness characteristics or wilderness study area designations should be conducted to ensure accurate representations of the area prior to a designation decision.
- 17. Economic and environmental cumulative impacts analysis should be conducted for all existing and proposed designations of any specially designated areas before any new areas are designated.
- 18. Fremont County should be a cooperating agency on any future designation of any action to analyze any current or proposed special land use designation.
- 19. Fremont County does not support any Research Natural Areas without coordination.
- 20. Any designation or eligibility classification for Wild and Scenic should be coordinated with Fremont County.



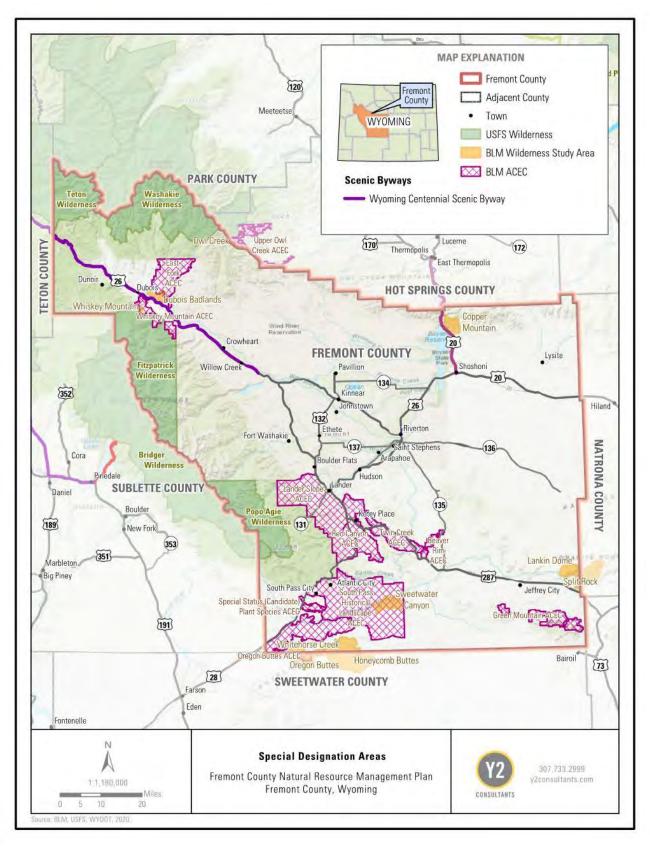


Figure 3. Special designation and management areas within Fremont County.



### **3.4 TIMBER RESOURCES**

## 3.4.1 History, Custom, and Culture

The first timbering operations in Fremont County were in the vicinity of the South Pass gold strikes in the 1860s. Boards and timbers were needed for the construction of several towns as well as in the mines. Development in the Wind River Valley soon followed with farmers,

storekeepers, and others settling in the areas that would become Lander and Ft. Washakie. Small sawmilling operations were established in these areas to provide lumber and material for homes and buildings.

Settlement of the Dubois area began in the 1880's and small sawmill operations were started in the upper Wind River Valley by 1890. Jim Seward who had been logging the Sheridan area began Fremont County's timber industry, the principal economic stimulus to the growth of Dubois in



1905. The main products of the industry were timbers and ties, used primarily in the construction of railroads. The ties were hand-hewn in the forest by lumberjacks called "tie-hacks", whose customs in that industry came with them from their former homelands. During spring runoff, when the river was full of water, the ties manufactured during the winter were transported downstream to processing yards. The fist tie drive from Dubois downstream to Riverton on the Big Wind River took place in 1915 and such tie drives were commonplace until 1946. Such timbering and tie driving activities, remnants of which are promoted in the County museums, provided a substantial County industry for a great many years.

The early residents of Fremont County were dependent on natural resources of the Federal lands. The timber-related resources were available to them, usually free of charge for personal use, and at a small fee for commercial purposes. The USFS felt it was their duty and usually provided for the public timber and forest product needs. Gifford Pinchot, the first chief of the Forest Service and principal architect of early U.S. Forest policy, was clearly concerned with local communities. In a 1907 publication aimed at informing the public about national forests, he wrote:

"National Forests are made for and owned by the people. They should also be managed by the people. They are made, not to give the officers in charge of them a chance to work out theories, but to give the people who use them, and those who are affected by their use, a chance to work out their own best profit. This means that if National Forests are going to accomplish anything worthwhile [sic] the people must know all about them and must take a very active part in their management. The officers are paid by the people to act as their agents and to see that all the resources of the Forests are used in the best interest of everyone concerned" (Pinchot, 1907).



## 3.4.2 Resource Assessment and Legal Framework

The Federal Government manages approximately 54% of the land in Fremont County, including about 2.1 million acres by the BLM and 1.0 million acres by the USFS's Shoshone National Forest. There are 127,009 acres are designated as suitable for timber harvesting on the 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.

### **Timber Industry Future**

Fremont County does not have a large-scale timber industry that is capable of addressing large scale forest management. There are small scale timbering operations within the county that are important to the local economy. The lack of a sustained Timber Program by the Shoshone National Forest and BLM since the mid-1980s may have contributed to the decline of the timber industry with the current management practices. The USFS has not sold a significant volume of timber to support or maintain the timber industry since the early 1980s. Several million board feet are lost each year to insects, disease, and fire. Due to a lack of available timber from the National Forest, an industry that was once a major contributor to the economy of Fremont County no longer exists. In 1978 earnings from lumber and wood products were at a high; they have dropped dramatically since. In 1998 earnings were only 6% of the 1978 peak.

Unfortunately, once the equipment and facilities for timbering are closed, a significant timber sale by the USFS may not be immediately helpful to Fremont County's economy as it takes significant time and resources to begin processing again. The milling capacity of the area has been lost, and it is doubtful it can be rebuilt unless a dependable supply of timber can be assured. Adequate timber inventories exist to supply several sawmill operations, and there is potential for the timber industry to again be a significant contributor to the economy and stability of Fremont County.

### **Age Class Diversity**

Much of the timber in Fremont County is older, mature to over-mature. This makes trees in the forest highly susceptible to insect and disease attacks, particularly in the harsher climates in the Wind River and Lander districts. Direct control of epidemics is an expensive, short-term solution. Replacing older trees with younger trees, through harvesting timber and other management practices in those areas that are suitable, provides a means to fight existing problems while creating diversity in stands of the same species and age class. Instead of a monoculture of trees, all susceptible at the same time, the forest in the long term becomes a mosaic of species and age classes where only a small portion is susceptible in any decade. In this way, timber management not only provides direct benefits in terms of revenues but also provides a means to improve the health of stands and avoid future insect and disease epidemics.



An additional benefit of changing current age class distribution is the opportunity to increase early age classes and create openings in stands of dense timber. This can significantly improve the habitat needed by many wildlife species, including deer and elk. In this area, tentatively suitable timberland tends to occur in large swaths. Creating openings and browse in areas surrounded by cover not only aids wildlife habitat but takes some wildlife pressure off rangeland grazed by domestic livestock.

The aesthetic beauty of western Fremont County is important to thousands of visitors every year, particularly because of its proximity to Yellowstone National Park. Most people enjoy a pattern of vegetation that includes many different ages and sizes of trees. By coordinating visual management with timber management, silvicultural treatments can be used to create desired diversity and enhance forest beauty. Timber management can provide recreation and visual quality outputs along with wood products: all at a lower cost than if attempted separately.

#### **Motorized Access**

Dispersed motorized recreation is a very popular activity on the forest, particularly on access routes to Yellowstone and Grand Teton National Parks. Dispersed non-motorized recreation is also very popular. As more people use existing roads and access areas, the quality of recreation experiences can decline. Providing roads through attractive and well-managed areas by coordinating timber management and travel management programs offers the opportunity to enhance dispersed recreation. Snowmobiling has been a popular winter sport on snow-closed timber roads since 1961, and often reaches levels of several hundred sleds a day. ATVs began using the timber roads in the early 1980s and numbers have significantly increased since then. Snowmobile and ATV use on timber roads are necessary tools for loggers, foresters, ranchers, and other users in the use of federally managed lands.

A related resource management need is improved access for public firewood gathering. Much of the firewood along existing roads have been removed through public firewood programs. Improved forest access, as a result of timber management, will substantially increase the supply of accessible firewood, Christmas trees, and other forest products.

#### **Water Production**

Another benefit of timber management is increased water production. It is well documented that vegetation manipulation can increase water yields, particularly in arid parts of the west. There is some potential for this where small patch cuts or forest thinning can be made for enhancing water flow and yield. Integrating these cuts into a broader timber management program reduces the costs of creating desired openings.

### **Forage Production**

Timber management also increases forage production. The removal of timber opens up areas to more sunlight and gives the understory an opportunity to grow grasses, forbs, and shrubs which are more palatable forage for both wildlife and livestock. Harvesting the timber allows these newly productive areas to be accessible, whereas downed and dead timber can sometimes cause an impasse to wildlife, livestock, and humans.



#### **Insects and Disease**

Insects and diseases act as both beneficial and destructive agents, and they are a part of forest ecosystems. They play an important role in microclimate energy balances and perpetuation of habitat for a variety of wildlife species. Conversely, vegetation mortality, defects, and growth reduction directly attribute to insects and disease, result in substantial economic and social costs. These dead and dying trees can cause a variety of problems including downfall timber that makes the area inaccessible to livestock and wildlife and an increase in on the ground and vertical fuels. The resulting accumulation of heavy fuel loading from dead and down timber poses a very real threat for wildfire to the national forest and adjacent houses and private lands.

The USFS's timber management program in past years has not been at a sufficient level to apply the stocking control and harvesting of mature timber necessary to maintain healthy, vigorous stands in tentatively suitable timberlands. As a result, many areas now are susceptible to epidemic insect populations. Currently, lodgepole pine stands, which became established near the beginning of the twentieth century, are the most susceptible. Insect and disease losses are also increasing in white bark pine, a high elevation species in Fremont County whose seeds are an important food source for grizzly bears and other wildlife. Far more timber is being lost to insects and disease than is being annually harvested.

The long-term goal of the integrated pest management program must be prevention rather than emergency suppression of insects and diseases. A variety of silvicultural activities can help prevent insect and disease problems. They include clear-cutting, slash disposal, sight preparation for regeneration, commercial and pre-commercial thinning, timber stand improvement and partial cutting, and prescribed fire. It is important to identify and prioritize timber stands according to susceptibility to insects and disease, so the highest risk stands are scheduled for treatment first. This will help ensure the maintenance of a healthy forest condition on that portion of forested land that is accessible and suitable.

#### Mountain Pine Beetle

The Mountain Pine Beetle (*Dendroctonus ponderosae*) is a serious pest on the Shoshone National Forest. An infestation in lodgepole pine has been occurring since the late 1960s. Silvicultural treatment is a means of reducing the acreage of susceptible trees and increasing stand diversity.

By 1980, the beetle populations were of epidemic proportions, and control measures began on National Forest System and private lands on a limited scale. They have been largely ineffective and losses from insects and disease continue to increase.

#### Dwarf Mistletoe

Dwarf Mistletoe (*Arceuthobium* spp.) is a widespread disease of lodgepole pine on the Shoshone National Forest.

#### Commandra Blister Rust

Commandra Blister Rust (*Cronartium comandrae*) is prominent particularly in the Wind River drainage because of an epidemic that started in the late 1940s. As a result of the disease, large acreages of lodgepole pine exhibit dead tops and have lost significant timber volume.



#### Other Insects and Diseases

The predominance of mature timber stands provides conditions suitable for several other diseases such as broom rusts, decaying agents, and canters. While none of these diseases cause unacceptable losses forest-wide, they have negative impacts on other resources such as visual quality and recreation.

### **Genetic Improvement**

Increasing demands for multiple-use goods and services, including timber, as well as increasing management costs suggest a need to produce more high-quality fiber per acre per year. One method of doing this is to use sound genetic principles in all vegetation management activities. This must be done on the Forest through careful selection of trees left in the overstory of shelter woodcuts, selection of trees to be cut in commercial and pre-commercial thinning and through the application of selection harvests in all age stands. In each case, trees that appear to be superior are favored as seed source trees.

## 3.4.3 Timber Resources Resource Management Objective:

- A. A healthy and productive forest is maintained while providing access to and maximizing production of wood and forest products consistent with other forest uses and needs.
- B. Timber resources within the county are managed in an economic and efficient manner in coordination with Fremont County.

## **3.4.4 Timber Resources Priority Statements:**

- 1. All forested lands within Fremont County shall be managed for sustained yield and multiple use.
- 2. Fire, timber harvesting, and treatment programs shall be managed to prevent waste of forest products.
- Forest management should support a coordinated timber harvesting and thinning method to promote forest health, reduce disease and insect infestation, reduce wildfire impacts, and prevent waste of forest products while supporting the economy of Fremont County for future generations.
- 4. Management programs should provide for fuel load management to prevent catastrophic events and reduce fire potential at the urban interface.
- 5. Timber management and harvest programs should be designed to provide an economically viable long-term product source for the local timber industry.
- 6. Federal agencies should adopt management programs and initiatives that improve watersheds, forests and increase forage for the mutual benefit of wildlife and livestock.
- 7. Utilize livestock grazing and fuels management programs to promote forest health and reduce wildfire risk.
- 8. All dead trees should be promptly harvested once a snag component has been met before additional loss of economic value occurs. The County encourages the use of categorical exclusions to accomplish this.
- 9. Support fire, both managed and prescribed, as a viable tool for vegetative treatment when properly applied. However, it should not replace the harvest of timber products as



- the primary method to manipulate forested areas and must not create waste of forest products.
- 10. Support and promote coordination between the timber industry and other forest users (e.g., recreation, livestock grazing, wildlife, etc.) for the purpose of creating opportunities for continued use upon the completion of timber extraction.
- 11. Access to forest products such as fuel, building materials, and Christmas trees should be ongoing and through an open roads and cross-country travel system.

### 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 Fremont 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.

It has been the custom for Fremont County residents to seek to prevent the occurrence of undesirable fires in Fremont County to prevent disruptions in economic viability and social stability from the loss of personal and public property. It is also the custom of Fremont County to responsibly use horses, ATVs, snowmobiles, and other ORV's to monitor and access fire suppression and prevention activities.

### 3.5.2 Resource Assessment and Legal Framework

Large wildfires have occurred throughout Fremont County and have caused resource stress to watersheds, timber, grazing lands, wildlife habitat, and recreational activities that rely on healthy forests and rangelands. Figure 4 shows the wildfires that have occurred within Fremont 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 Fremont 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.

Fremont 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 Fremont 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.



Fremont County has excellent fire departments, as do the various cities and towns. The Wind River Indian Reservation has a large, organized fire crew that travels to fires all over the west. Local firefighters from county and city fire departments and equipment are often sent to large wildfires out of the county. There is economic benefit returned to the county from wages and equipment rental from the use of local resources on wildfires on federally or State managed lands.

Fire management policies and prescribed fires that suppress damaging wildfires and improve and expand multiple use on federally managed lands have a positive impact on the economic viability of Fremont County.

Undesirable fire can create social instability from the standpoint of loss of recreational areas, which force citizens to concentrate in unburned areas, increasing a feeling of loss of personal space and special places. Overcrowding of recreational areas generates a loss of interest in the values that Fremont County citizens cherish. The county rejects activities that may be used to drive citizens from their historic and cultural special places.

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 <a href="https://example.com/here-18">here-18</a>.

The Fremont County Community Wildfire Protection Plan (FCCWPP) that was last updated in 2019 guides land managers, elected officials, planning departments, and other citizen groups in their efforts to minimize the effects of wildfire upon the communities within Fremont County. Implementation of the FCCWPP requires the collaboration of several jurisdictions including the USFS, BLM, Wyoming State Forestry Division, County Fire, Fire Districts, and local Fire Departments. Ongoing tasks under the plan include mitigation of fuels that increase wildfire potential. The goal of the plan is to help align federal, state, and local fuels reduction efforts within Fremont County (FCCWPP, 2019). A link to the plan can be found <a href="https://example.com/here19">here19</a>. 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 carry out community wildfire protection plans. P.L. 115-141 (2012). The USFS provides frequently asked questions regarding SRS funding <a href="https://example.com/here20">here20</a>.

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 Fremont County from 2000 to 2018.

Year of Fire	Fire Name	Acreage
2000	Murphy Draw	1365
2000	Kates Basin	31988
2000	Red Canyon	1311
2000	Cottonwood	153
2000	Burro Flats	269
2001	Beaver Rim	1927
2001	Dinwoody	2433
2002	South Fork 2	15126
2002	Arapahoe	356
2002	Pass Creek	13437
2003	Kates Basin	34387
2005	South Fork	175
2006	Wise Flat	1101
2006	Bull Ridge	837
2006	Purdy	14522
2006	Bomber Basin	491
2007	Hardscrabble	249
2007	East Fork	211
2008	Dead Horse	573
2008	Causeway	300
2010	North Fork	312
2011	Nowlin	2424
2011	Warm Springs	809
2011	Norton Point	24230
2012	Sheep Park	525
2012	Alpine Lake	46171
2012	Bear Cub	6492
2012	North Buffalo	2095
2013	Fairfield	1335
2013	Burroughs	1783
2015	Crooked Creek	359
2016	Lava Mountain	14658
2016	Puddle	114
2017	St Lawrence	167
2017	Deer Creek 2	109
2017	Sand	136
2018	Ruby Ranch	391
2018	Crowheart	154



## 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 Fremont County.
- B. Wildfire programs such as the Fremont County Community Wildfire Protection Plan, the Firewise Program, and other fire protection programs are used throughout Fremont County.

# **3.5.4 Wildfire Management Priority Statements:**

- 1. Federal agencies should coordinate with Fremont 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 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 Fremont 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 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.
- Federal 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, including salvage logging operations.
- 11. Federal agencies should survey and manage invasive and noxious weeds after wildland fire events to reduce fire fuels on federal 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. Ongoing research and



experimental options for new and alternative treatments to manage invasive and noxious weeds should be supported.



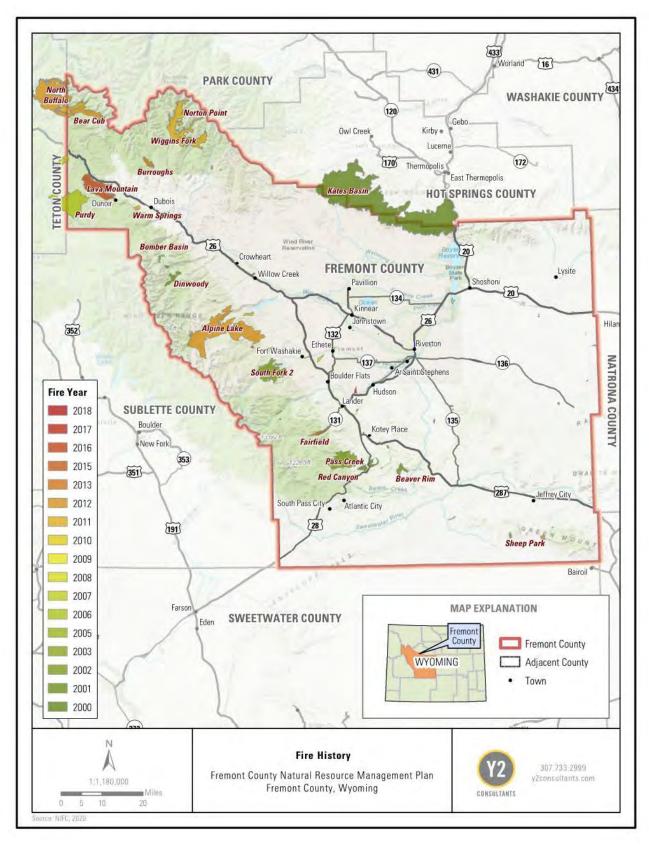


Figure 4. Fire history within Fremont County (data from ESRI and USGS in 2020).



### 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.-b).

## **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 Fremont County unless supported by the County.
- C. Land exchanges are coordinated with Fremont County.

## **3.6.4 Land Exchanges Priority Statements:**

- 1. There should be no net loss of the private land based on acreage and fair market value.
- 2. Land exchanges should not be used as a method to coerce private sale of lands and all land exchanges and purchases should be between a willing seller and a willing buyer.
- 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.
- 4. Fremont County should be notified of and consulted with whenever lands are made available for disposal.
- 5. When possible, land exchanges should be combined to increase process efficiency and reduce costs.
- 6. Land exchanges should be sought out when the said exchange will provide additional access to public lands or provide economic growth for Fremont County.



# **CHAPTER 4: GEOLOGY, MINING, AND AIR**

### **4.1 GEOLOGY**

A variety of geologic formations are present in Fremont County, resulting in great geologic complexity and diversity. Fremont County is characterized by dramatic elevation changes. Surface elevations range from 13,804 feet above sea level on Gannett Peak (highest point in Wyoming) to 4,035 feet on the Sand Mesa west of Boysen Reservoir. Although there is nearly 9,800 feet separation between the highest and lowest elevations in the county, the average elevation is 5,500 feet.

Much of Fremont County is within the 8,500 square miles Wind River Basin. This basin is similar to other large sedimentary and structural basins in the Rocky Mountain West. These basins were formed during the Laramide Orogeny from 135 to 38 million years ago. Broad belts of folded and faulted mountain ranges surround the basin; these ranges include the Wind River Range on the west, the Absaroka Range, Owl Creek Mountains, and southern Big Horn Mountains on the north, the Rattlesnake Hills to the east, and the Granite Mountains to the south. The center of the Wind River Basin is occupied by relatively un-deformed rocks of more recent age.

Mountain topography characterizes much of the county and results in spectacular views. However, most of the topography in the county consists of the broad, fairly flat, depositional strata of the central basin and the associated landforms sculpted by wind and water.

The importance of the geology of Wyoming, in relation to federally managed lands, as a source of minerals and gemstones cannot be overemphasized. One commonly overlooked national asset of federally managed lands is their educational value for the study of geology and the mineral industry. Fremont County is the location of two annual university geology field camps and other colleges, and universities frequently make scheduled stops in Fremont County during field trips. The Fremont County Schools and Central Wyoming College make use of federally managed lands as an outdoor classroom. Figure 5 below shows the geology of Fremont County.



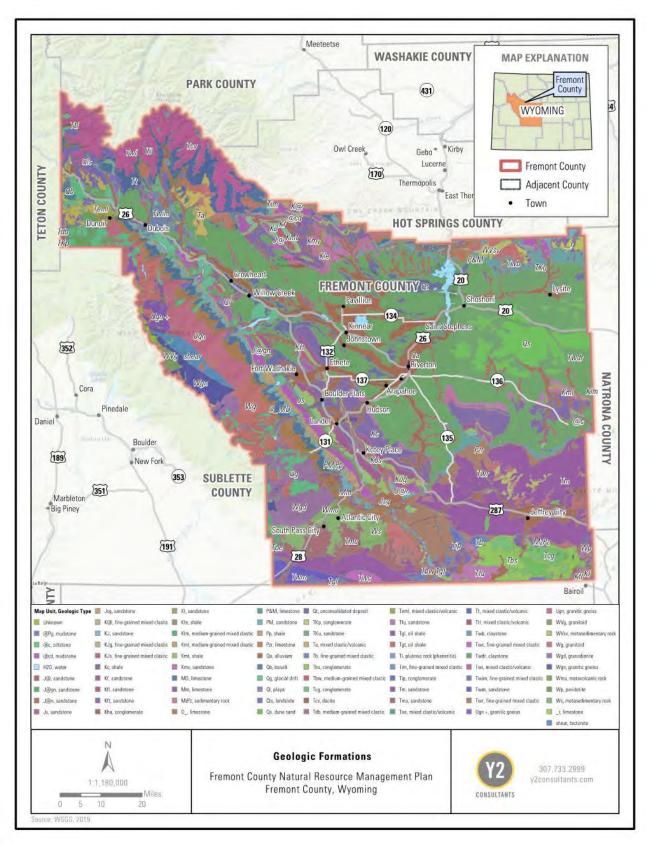


Figure 5. Fremont County geologic formations (data from USGS in 2019).



### **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 landhealth 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).

The three Conservation Districts within Fremont County work to promote the conservation of soil and water resources across the County (see Chapter 3: Land Use for more information).

## 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 <u>Web Soil Survey</u><sup>21</sup> (NRCS, n.d.-b). The soil survey mapping of Fremont County has been completed and is located on Wed Soil Survey (NRCS, n.d.-a). The general soil map units for Fremont County are depicted in Figure 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 is maintained and conserved through best management practices in coordination with Fremont 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 Fremont County.

# **4.2.4 Soils Priority Statements:**

- 1. When available, the Natural Resource Conservation Service soil survey is the basis for all public land soils related activities.
- 2. Any deviation from using soil survey data should only be done with support of the Natural Resource Conservation Service.
- 3. Federal agencies should support projects and policies which improve soil quality and ecology.
- 4. Federal 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 Fremont County that will 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 Fremont County's soil and site potentials. If local ESDs are not complete, the completion should be a priority for the agency.



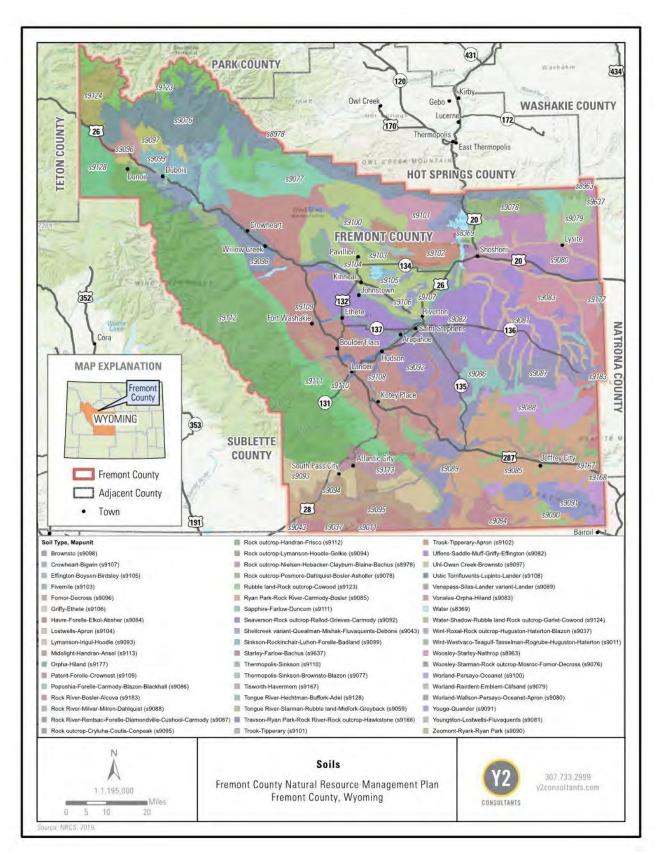


Figure 6. Soil type and map units for soils in Fremont County. Data from NRCS Web Soil Survey in 2013.



### 4.3 MINING AND MINERAL RESOURCES

## 4.3.1 History, Custom, and Culture

Mineral production has been part of Fremont County's culture for over 100 years. Mining is one of the historical uses of federally managed lands, predating the establishment of the USFS and BLM. Maintenance of such use is statutorily compatible with multiple use principles. Mineral resource production is an important industry in Fremont County and provides some of the best paying jobs in the region. Minerals and mining are an important part of the diverse communities that make up Fremont County (NASS, 2017).

Mining gained commercial importance in the County with the gold rush at South Pass in 1868. Since that time gold, coal, magnetite, feldspar, and uranium have been mined commercially in Fremont County. The gold rush in South Pass lasted until the late 1870s. The end of gold mining at South Pass led settlers into the surrounding valleys. Towns like Lander, Hudson, and Riverton sprang up. Since then, gold has not been of



commercial importance. Periodic interest has been shown in reopening one or more of the old mines and in more extensive exploration.

Coal production was important between 1907 and 1940, primarily in Hudson. Two large mines and several smaller ones produced coal for the railroad and other uses until the 1940's when natural gas started to replace coal for heating purposes.

In 1953, the discovery of uranium south of Riverton in the Gas Hills and Crooks Gap areas launched Fremont County into the uranium industry. The importance of uranium mining grew to a peak in the early 1980s and has since declined due to reduced emphasis on nuclear power and lower-priced uranium from foreign sources. In the late 1970s through the early '80s over two thousand people were employed within the county in the mining and milling of uranium.



Iron ore was also discovered within the area in the 1950s. The Columbia-Geneva Steel Division of the United States Steel Corporation began taconite mining and milling operations in 1962. Until 1982, U.S. Steel employed over 500 people. Between 1982 and 1985 the taconite mine productivity fluctuated in boom-and-bust cycles. By 1985 the mine was closed permanently. This large commercial mining operation had a great impact on Fremont County and Lander in particular. When U.S. Steel closed the mine and milling operations in 1984 Lander suffered a

significant loss of population and as a result, lost revenue.



The following minerals are found in Fremont County: Alum, Agate, Arsenic, Asbestos, Bentonite, Beryl, Calcite, Chalcedony, Chromium, Coal, Columbite- Tantalite, Copper, Corundum, Dolomite, Feldspar, Fluorite, Garnet, Glass Sand, Gold, Graphite, Gypsum, Magnesite, Hematite, Pyrrhotite, Pyrite, Siderite, Aluminum/Silica Clays, Lead, Lithium, Manganese, Mercury, Mica, Nephrite (Jade), Nickel, Petroleum & Natural Gas, Phosphate, Pumice, Sodium Sulfate & Sodium Carbonate, Selenium, Silver, Stone (building grade Granite and Sandstone), Sulfur, Talc, Tin, Tourmaline, Tungsten, Uranium, and rare earth metals.

#### **Split Estate**

A unique form of federal land ownership in the West comes from split mineral estates. 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. Many situations of split estate minerals in which the federal government owns the mineral estate originate back to the Stock Raising Homestead Act of 1916 in which the federal government reserved everything to the government besides what was necessary to farming and raising livestock (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.

## 4.3.2 Resource Assessment and Legal Framework

Fremont County has 53,141 records of mining claims managed by the BLM, 9% (4,882 claims) of which are active claims. Within Fremont County, uranium is the largest mining commodity followed by gold (The Diggings, n.d.). Figure 7 shows the mineral ownership within Fremont County.

The County supports the production of all minerals in an environmentally responsible manner by providing infrastructure and services such as roads, bridges, medical services, and law enforcement. Entities such as the Wyoming Oil and Gas Commission (WOGCC), BLM, USFS, and Wyoming Department of Environmental Quality (WDEQ) 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. Fremont County's policies for mineral development are structured to responsibly increase the exploration, development, and production of mineral and energy resources within the political jurisdiction of the County.



#### Split Estate

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 (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.

#### Withdrawal

Federal lands can be withdrawn from eligibility for mineral 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 prior to 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 "a 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 (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. 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)).

## 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.
- B. Mineral resource development, closure, withdrawal, or use restriction is done in coordination with Fremont County.



## **4.3.4 Mining and Mineral Resource Priority Statements:**

- Decisions to close lands to mineral exploration or extraction should be coordinated with Fremont County prior to closure to consider the impact such closure will have on the County's economic viability.
- Federal agencies should give regular (where regular is defined as not less than quarterly)
  updates on current and proposed projects within Fremont County's jurisdiction and
  provide reasonable timelines and explanations for issuance of delays from permitting
  agencies.
- 3. Federal land use and management plans should contain a thorough discussion and evaluation of energy and mineral development, including the implications such development may have on surface land uses and the County economy.
- 4. All exploration, development, and mining on federal lands in the County with mineral or energy potential shall be governed by adherence to all laws and regulations which pertain to mining and energy development and production, including but not limited to the General Mining Law of 1872, as amended, and FLPMA and BLM surface mining surface management regulations found in 43 C.F.R. § 3809.
- 5. 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.
- 6. Federal agencies shall protect the rights of access, occupation, and property of anyone prospecting and/or developing minerals within Fremont 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.
- 7. Federal agencies should encourage simultaneous or sequential mineral development with other resource uses in accordance with multiple use management principles in Fremont County, giving precedence to established mineral rights in the development coordination process.
- 8. 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.
- Federal 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.
- 10. Federal agencies should provide a justification whenever deferring lease applications.
- 11. Fremont County supports the exploration of all new mineral development, including uranium, in the county.
- 12. 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 that proper analysis shows that habitat losses cannot be mitigated onsite.



13. Federal agencies should implement the July 16, 2020, National Environmental Policy Act regulations which state that EIS's should be completed within 2 years from the issuance of a Notice of Intent and 150 pages or less excluding appendices and 1 year from the issuance of a Notice of Intent and 75 pages or less excluding appendices for Environmental Assessments.



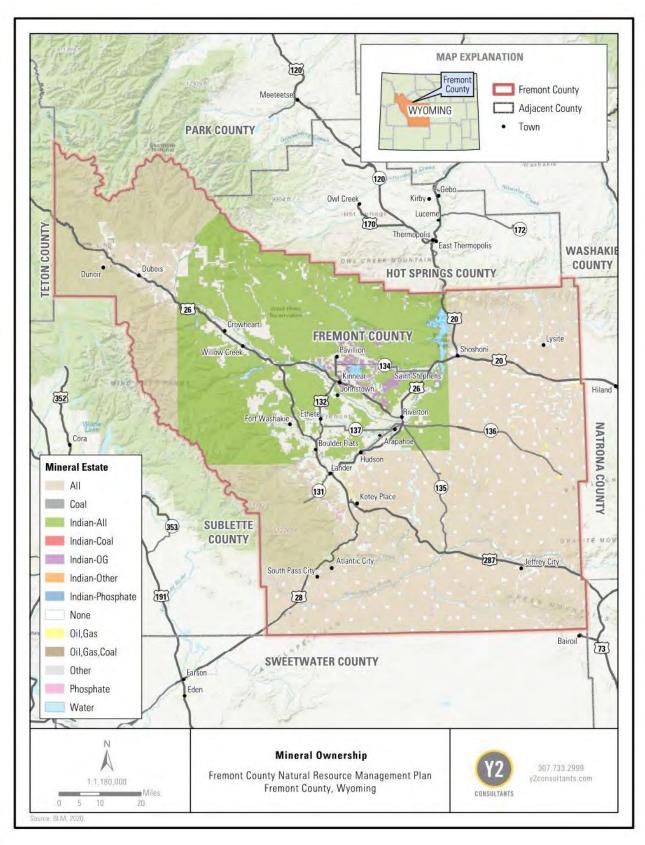


Figure 7. Mineral ownership mapped for Fremont County (data from BLM in 2020).

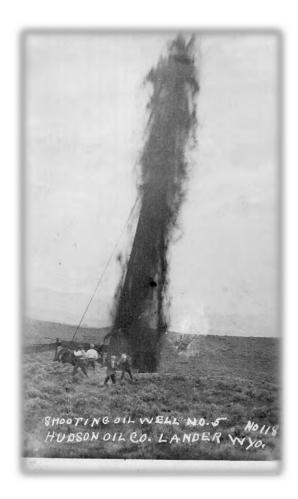


### **4.4 ENERGY RESOURCES**

# 4.4.1 Oil and Gas

#### 4.4.1.1 History, Custom, and Culture

Oil and gas production has contributed greatly to Fremont County's taxable income for over 100 years. The first producing oil well west of Pennsylvania, the Murphy No. 1 in the Dallas Oil Field approximately eight miles southeast of Lander, was drilled in 1884.



Prior to that, Native Americans used the naturally occurring oil springs and tar seeps for medicinal purposes; and by early settlers for wagon lubrication. Since then, numerous oil and gas wells have been brought into production. The oil fields lie mainly along a northwest-southeast axis running roughly parallel to the Wind River Mountains passing through the center of the County. The natural gas fields are mainly found within the northeastern part of the County.

The approximate valuation for oil and gas in 2014 was \$458.8 million (University of Wyoming Extension et al., 2015). The County has seen fluctuating oil and gas production over the past 35 years. Oil production peaked at 6.9 million barrels (BBL) in 1980 and gradually declined to 2.5 to 3.5 million BBL range in 1995, where it has fluctuated since. Conversely, gas production fluctuated near the 50 million MCF (million cubic feet) level until the late 1900s. Between 1995 and 2005 annual gas production was rose to over 200 million MCF. Since 2007 production has fluctuated from 140 to 170 million MCF (Drilling Edge, n.d.). These trends in decline and growth are tied to existing economic

conditions at the County, state, and national levels (Figure 8, Figure 9, and Figure 10).

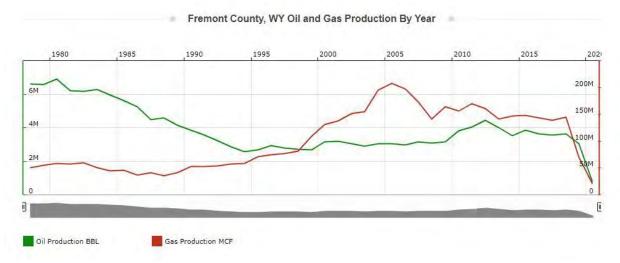


Figure 8. Oil and gas production in Fremont County between 1980 and 2020. (Drilling Edge, n.d.)

# Wyoming Oil Production for 1978-2020

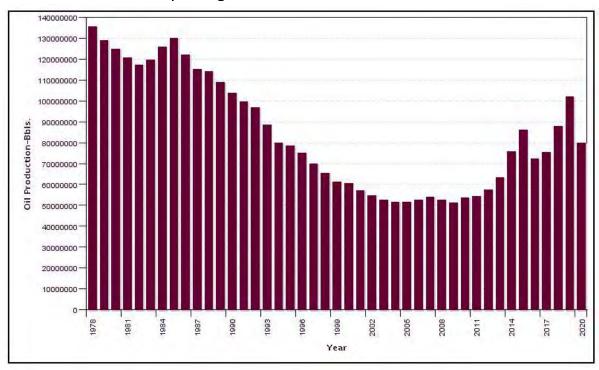


Figure 9: State of Wyoming oil production trends (1978-2020) (WOGCC, n.d.-a).



# Wyoming Gas Production for 1978-2020

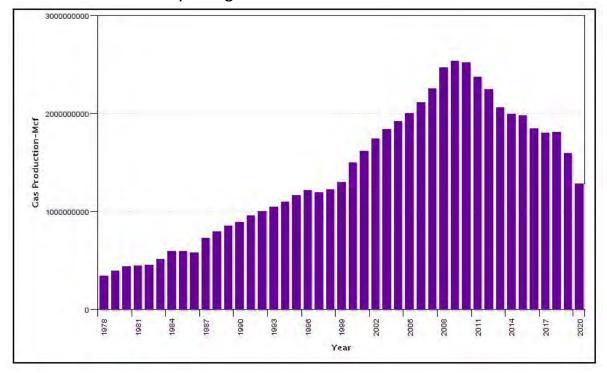


Figure 10: State of Wyoming gas production trends (1978-2020) (WOGCC, n.d.-b).

### 4.4.1.2 Resource Assessment and Legal Framework

The extraction of oil and natural gas from deposits is accomplished in three central phases of recovery: primary, secondary, and enhanced or tertiary recovery. Primary recovery relies on initial underground pressure to drive the product to the surface. As pressure falls, artificial lift technologies are used to bring the product to the surface. Occasionally the need for artificial lift is eliminated in the case of the artesian, or over-pressured, reservoir. Typically, only 10% of a reservoir's original oil in place is produced through primary recovery. Secondary recovery methods, such as water or gas injection, can extend a field's productive life and result in the extraction of an additional 20-40% of the original oil in place. Enhanced oil recovery techniques offer the potential to produce 30-60% more oil. These techniques include thermal recovery, hydraulic fracturing, gas injection, or chemical flooding.

The production of gas is similar to that of oil. The primary phase of production is driven by initial reservoir pressure and decreases as this pressure and reserves in place are reduced. The production of gas can be augmented in a manner like that of oil. Enhanced or tertiary recovery of gas can be further augmented through the utilization of fracturing and other stimulation methods. Enhanced recovery methods are limited by costs and unpredictable effectiveness.

These methods have improved drastically over the past decade allowing for more cost-effective and efficient recovery.

The Mineral Leasing Act of 1920, as amended, and the Mineral Leasing Act for Acquired Lands of 1947, as amended, give the BLM the sole responsibility and authority for oil and gas leasing on BLM, USFS, and other federal lands, and on private lands where mineral rights have been retained by the federal government (split estates). The BLM is a multiple use agency and must balance the development of mineral resources with other multiple uses on federally managed lands. Those uses include livestock grazing, recreation, development, and conservation of wildlife habitat. In conjunction with the BLM, the USFS regulates all surface-disturbing activities on USFS land, (30 U.S. Code § 226 (g)). Thus, during the mineral leasing stage and permitting process, the USFS is the lead agency applying stipulations on leasing of USFS land and conducts environmental analysis for leasing and permitting activities on USFS lands. The Mineral Leasing Act makes the disposition of oil and gas in the form and manner provided by the Act a mandatory Act. 30



U.S.C. § 181. Further, lease sales for each state where eligible lands are available must be held at least quarterly. 30 U.S.C. § 226.

#### 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.-c).

### 4.4.1.3 Oil and Gas Resource Management Objectives:

- A. The responsible extraction of oil and gas within the County is encouraged by the agencies and done so efficiently.
- B. Federal agencies coordinate with Fremont 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 the County are developed in a manner that protects other preexisting multiple uses.

### **4.4.1.4** Oil and Gas Priority Statements:

- 1. Coordination among the various federal agencies should occur to facilitate hydrocarbon production permits in a timely manner, as prescribed in federal law.
- 2. Federal agencies should pursue opportunities to encourage the nomination of more leases for sale and continue holding lease sales and awarding leases on Fremont County lands at least quarterly as is required by the Mineral Leasing Act.
- 3. Federal 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.
- 4. Federal agencies should support the use of enhanced oil recovery and transportation infrastructure (e.g., carbon dioxide pipelines, processing plants, steam flood facilities).
- 5. Federal agencies should allow nonnative seeding where appropriate and beneficial in reclamation plans.
- 6. Federal agencies should coordinate with the County and other surface land users regarding the development and reclamation of oil and gas infrastructure to maintain preexisting uses. Federal 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.
- Co-locate new roads and utility rights-of-way in existing corridors and where there has been previous disturbance to minimize new ground disturbance associated with energy development. When co-location is not possible, locate new roads outside of important habitats.
- 8. The County encourages surface occupancy of oil and gas development to already disturbed areas or edges of habitat.
- 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 the County. Federal agencies should work with local agricultural producers, Conservation Districts, and the County to ensure mitigation for oil and gas development is done properly and locally.
- 12. Federal agencies should coordinate with the Wyoming Oil and Gas Conservation Commission in the designation of drilling and spacing units.
- 13. Federal agencies should implement the July 16, 2020, National Environmental Policy Act regulations which state that EIS's should be completed within 2 years from the issuance of a Notice of Intent and 150 pages or less excluding appendices and 1 year from the



issuance of a Notice of Intent and 75 pages or less excluding appendices for Environmental Assessments.

# 4.4.3 Renewable Energy

#### 4.4.3.1 History, Custom, and Culture

Fremont 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).

### 4.4.3.2 Resource Assessment and Legal Framework

Solar and wind energy are growing industries across Wyoming. New development of renewable energy in the County will be considered based on expanding existing available energy infrastructure.

The BLM authorized renewable 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, 2015).

Fremont County does have a small amount of hydropower development that is generated from the Boysen Reservoir Hydro Plant. There is also a small hydropower unit on Pilot Butte Reservoir.

### 4.4.3.3 Renewable Energy Resource Management Objectives:

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

#### 4.4.3.4 Renewable Energy Priority Statements:

- 1. Federal agencies should consider the development of renewable energy in coordination with the County and stakeholders.
- 2. Federal agencies should support renewable energy to further develop energy infrastructure and energy independence without encumbering the underlying mineral estate.
- 3. Reclamation should be planned and reviewed in coordination with Fremont County before projects are approved.
- 4. When conflicting with other uses, renewable energy development projects should be evaluated against those other uses to achieve a balance between future energy production.



- 5. When evaluating renewable energy development and permitting agencies should consider possible effects on neighboring land uses and resources.
- Development and permitting of renewable resources should be prioritized in areas where there will be minimal, or less, impact on preexisting uses, wildlife migration corridors, migratory birds, and other resources.
- 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.

# 4.4.4 Pipelines and Transmission Lines

### 4.4.4.1 History, Custom, and Culture

Due to the development of oil and gas within Fremont County, there has been significant development of oil and gas transmission pipelines throughout the County, primarily throughout the eastern half of the County. The 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 <a href="here">here</a><sup>22</sup>.

Energy transmission lines are also found throughout Fremont County. These transmission lines are primarily used for local power transmission, with only a few for interstate power transmission. Those include the Interstate Transwest, Gateway East, and Gateway South projects that follow the Interstate 80 corridor, crossing just south of Fremont County.

### 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 be maintained and develop within Fremont 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. Dept 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 Federal Energy Regulatory Commission "FERC" requires gas pipeline companies to comply with state and local regulations as a condition of their federal certificates (NE Hub



Partners, L.P. v. CNG Transmission Corp., 239 F.3d 333, 339, 346 n. 13 (3d Cir.2001). Thus, unless pipelines cross federal lands and trigger NEPA review, 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)).

Regulations that concern a county's purview (the general welfare of its constituents) are not necessarily preempted if they indirectly affect pipeline safety (*Tex. Midstream Gas Svcs., LLC v. City of Grand Prairie*, 608 F.3d 200, 212 (5<sup>th</sup> Cir. 2010). In order 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). 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 Fremont County efficiently without the use of eminent domain authority when possible and in coordination with Fremont County.
- B. Reclamation is completed in a timely manner and protects existing uses on the land.

### **4.4.4.4** Pipeline and Transmission Line Priority Statements:

- Future and existing pipeline infrastructure for the transmission of materials in and through Fremont County should be developed and improved when it will not harm valid existing, and/or pre-existing uses or rights.
- 2. The County supports efficient and timely decisions regarding pipelines so long as it does not harm pre-existing uses or rights.



- 3. Encourage pipeline development to 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. Fremont County should be regularly updated regarding all pipeline permitting by the managing federal agency.
- 6. The use of eminent domain is not supported by the County.
- 7. Federal agencies should work with local agricultural producers, Conservation Districts, and Fremont County to ensure mitigation is done properly and locally.
- 8. 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.
- 9. Pipeline and transmission line development primarily utilize existing utility corridors and areas previously disturbed regardless of land ownership, while sensitive habitats and conflicting existing uses are avoided.



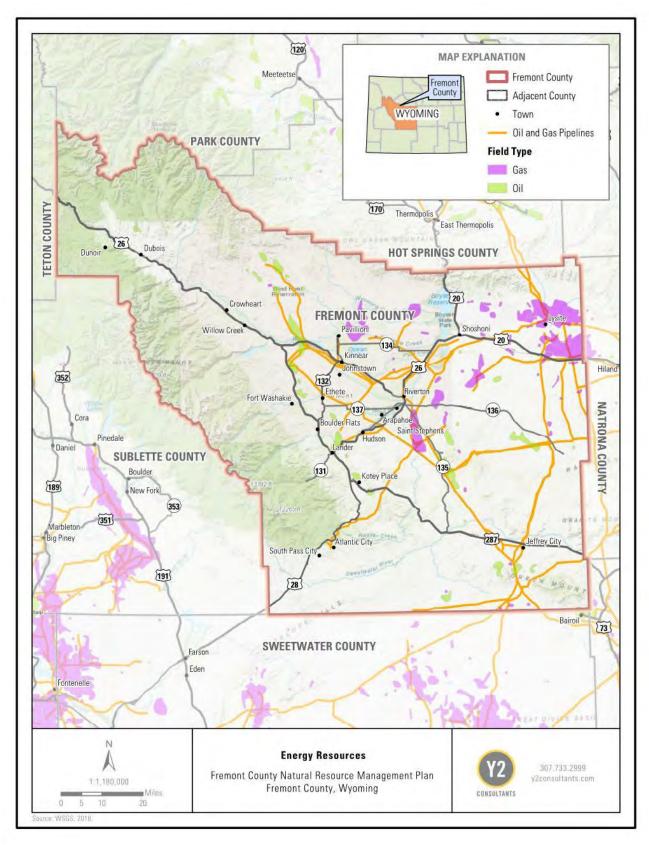


Figure 11. Energy developments within Fremont County (data from WSGS in 2020).



### **4.5 AIR QUALITY**

# 4.5.1 History, Custom, and Culture

Clean air in the County is important to citizens and visitors. Wildfires burning on federal lands can create air quality issues in the summer and fall. Dust from roads and rangelands can negatively impact air quality, mostly during drought conditions. Energy production can also have a negative impact on air quality. Clean air is key to people living in this County and to those who visit and wish to live here.

# 4.5.2 Resource Assessment and Legal Framework

Air quality is important to the health, safety, and welfare of Fremont County's residents. Under the Clean Air Act of 1970 (42 U.S.C. §7401 et seq.), the U.S. Environmental Protection Agency (EPA) is responsible for setting and enforcing National Ambient Air Quality Standards (NAAQS). Standards were established for total suspended particulate matter, carbon monoxide, ozone, nitrogen dioxide, and sulfur dioxide. The EPA, working with states and tribes, identifies areas as meeting (attainment) or not meeting (nonattainment) the NAAQS standards. The Clean Air Act requires states to develop a plan to attain air quality standards in their state. These plans are called State Implementation Plans (O. EPA, 2014).

In Wyoming, local enforcement of many air pollutant regulations is delegated to the WDEQ (R. 08 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 Fremont 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 Fremont County.

# 4.5.4 Air Quality Priority Statements:

- 1. Federal agencies should establish air quality baselines for Fremont County in coordination with the County.
- 2. All air quality related plans and decisions must be based on deviation from a baseline standard established for Fremont County.
- 3. Air quality degradation should be protected from non-area sources.
- 4. Field development plans should provide for air quality monitoring and data development should be coordinated with and the findings provided to Fremont County.
- All agencies should coordinate all air quality studies undertaken by or on behalf of a public land management agency or the Wyoming DEQ-AQD (Air Quality Division) with Fremont County.



- 6. Fremont County does not support the designation of any Class 1 Airsheds. If congressionally mandated, the air shed should not exceed beyond the boundary of the land designation.
- 7. Federal agencies should implement best management practices and take aggressive efforts for forest management to decrease the number of wildfires.
- 8. Federal agencies should acknowledge that wood burning is necessary for the welfare of Fremont County's citizens and should be maintained as an acceptable activity.
- 9. Federal agencies should consider the local economic consequences when making management or enforcement decisions regarding clean air. If the negative impacts to the local economy outweigh the positive effects to local clean air, then the management, enforcement, or alternative should not be utilized.
- 10. Dust mitigation plans and standards should be encouraged for surface disturbing activities where high yields of dust may result from the activity.

### **4.6 CLIMATE CHANGE**

# 4.6.1 History, Custom, and Culture

Fremont County relies heavily upon agriculture and livestock to support the local economy. Climate change, including increased temperatures, reduced precipitation, and changes in airflow has the potential to affect agriculture and the economy of Fremont County. Increased occurrence of wildfires over the past decade has led to reduced air quality and various health issues across Wyoming. Fremont 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 Fremont 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. Fremont 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 and should not unduly prioritize uncertain long-term modeled effects versus known immediate economic or community impacts.

# **4.6.4 Climate Change Priority Statements:**

- 1. When analyzing the impact a decision may have on climate change, federal agencies should include quantitative scientific data that meet the credible data criteria, even if the data were not produced by a federal agency.
- 2. When making decisions based on climate change analysis, the data relied upon by the 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 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**

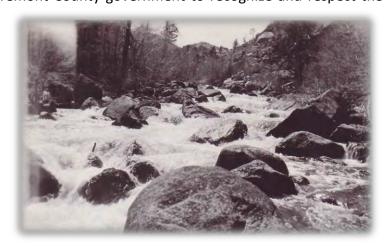
### **5.1 WATER RESOURCES OVERVIEW**

### 5.1.1 History, Custom, and Culture

Water development activities in Fremont County have provided water supplies for municipal, industrial, agricultural, domestic, livestock, recreational, flood control, and numerous other beneficial uses. Many of these developments have occurred on federal lands. Fremont County's culture regarding use of its water supplies is varied and diverse today, but had its foundations in agriculture and ranching, and businesses that supported those endeavors. Nearly all the first water right permits for early uses of water in Fremont County were for irrigation, livestock watering, and domestic use in the cabins and homes of those ranchers and farmers, and it is those industries that generated most of the early settlement in the County. These beneficial uses have been recognized through processes established under Wyoming State Water Law. It has been the historical practice of the Fremont County government to recognize and respect the

contributions of that culture to the growth and development that has occurred up to the present time.

Fremont County's water use is also closely tied to the hunting and fishing opportunities that have drawn much of its population to the county since the earliest times. The development of water facilities by those who secured those early water rights is a major factor in the historic and continued distribution of wildlife



across Fremont County, and in the culture supported by that wildlife. Similarly, water developments are also indispensable in the protection, preservation, and broad dispersal of the species that make up our hunting and fishing culture. Fremont County has traditionally recognized the contributions of those industries to the preservation of huntable and fishable wildlife populations. The County has also supported the enhancement of historic, previously secured water supplies, and/or the manipulation of them, within the framework of Wyoming law, to meet the needs of the present, diverse culture of the County, while at the same time diligently protecting and defending the water needs of those founding industries.

# **5.1.2** Resource Assessment and Legal Framework

Fremont 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 farming and urban developments. Healthy



watersheds provide recreation opportunities for residents and visitors, serve cultural needs, and provide habitat for native plants, wildlife, and fisheries.

Fremont County spans three river basins; the Wind/Bighorn River Basin to the north, the Platte River Basin covering a southern band of the County and the Green River Basin along the far southwest corner. (Wyoming State Geologic Survey, 2020). Refer below for the map of the watersheds in Fremont County (Figure 12).

Surface water supplies about 99% of the total off-stream use in Fremont County. Both the Wind River and Absoroka mountains contribute water to Fremont County. Snowpack in the Wind River mountains generates approximately 1.2 million acre-feet of water per year and directly contributes to the economy of the County. (MWH Americas et al., 2010).

Irrigation is the largest off- stream use of surface water in Fremont County and helps provide a delayed return of water to the streams, creating instream flows in late summer when the streams would have otherwise been dry without the irrigation return flows.

Groundwater is largely used for public supply. Total groundwater use in 1990 was 5.9 million gallons per day (USGS Water-Resources Investigations Report 95-1095). Groundwater supplies vary greatly within the County in both quality and quantity. Many times, adequate quantities are only available at great depth.

Adequate water supplies have affected the historical settlement of Fremont County and will continue to affect future settlement. The health of Fremont County's watersheds directly affects the current and future availability of quality water resources, water-dependent natural resources and the ability of watershed management to adapt to climate variability. A successful management strategy for Fremont County's watersheds must consider how the various watershed components and uses interrelate and influence each other.

#### **Climate**

The climate of Fremont County is mainly semi-arid. Technically, it is classified as Middle-latitude Desert. The central part of Fremont County, away from the mountain ranges that ring the basin, is semi-arid. The aridity is produced because of the County's central location in the North American Continent and the great distance from a source of moisture. The prevailing winds are from the west. Air masses from the Pacific Ocean are depleted of moisture by the time they reach Wyoming in the rain shadow of the Rocky Mountains. The Gulf of Mexico can, under certain conditions, be a source of moisture for Fremont County and Wyoming.

Occasionally, a cyclonic disturbance from the west can "stall out" just east of the Rocky Mountain Front over the High Plains. If the cyclonic depression is large enough much moisture can be back funneled up the mountains and produce prodigious amounts of moisture, usually in the form of snow. This is called an "upslope condition".

The approximate 9,769-foot difference between the lowest and highest point in Fremont County elevation has a major impact on precipitation and temperature. Many texts on geography and



climate simply label mountainous areas as "Highland climates: too variable to be rated". Precipitation varies from 60 inches per year on Gannett Peak to 8 inches per year in the central basin area of the County around Shoshoni. Most of the inhabited areas of the County receive between 7 and 14 inches per year (Huntington et al., 2017).

### **5.1.3 Water Overview Resource Management Objective:**

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

# **5.1.4 Water Overview Priority Statements:**

- 1. 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.
- 2. Federal agencies should support the recreational and consumptive use of water to support the local economy.
- 3. Federal agencies should support policies to improve groundwater health for consumptive use.
- 4. Any policies or management decisions that will restrict water rights holders from accessing or using their water right is not supported by Fremont County.



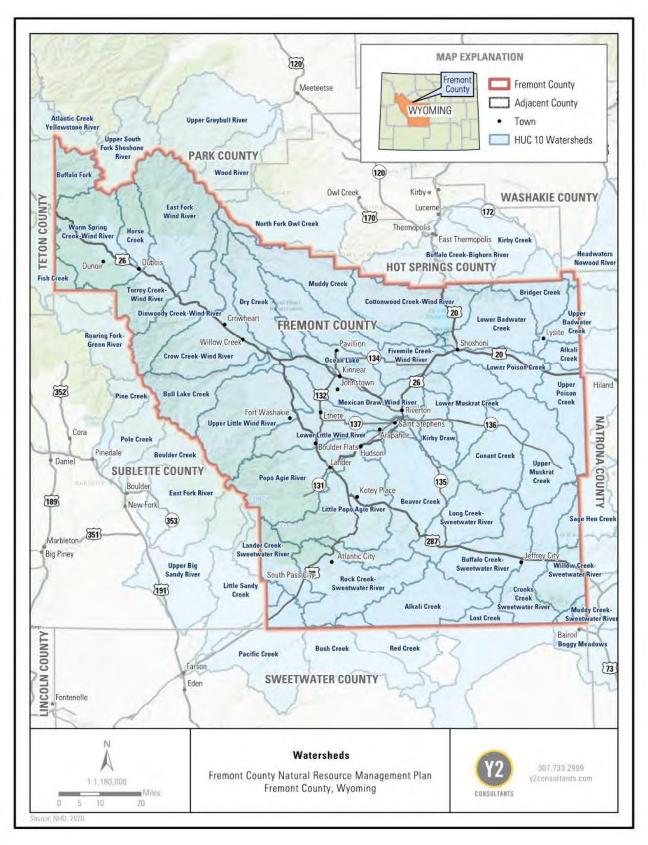


Figure 12. Watershed boundaries within Fremont County (WWDC, 2018).



#### **5.2 WATER RIGHTS**

# 5.2.1 History, Custom, and Culture

Nearly all the first water right permits for early uses of water in Fremont County were for irrigation, livestock watering, and domestic use in the cabins and homes of those ranchers and farmers. It is those industries that generated most of the early settlement in the county and those should be recognized and respected as contributions to the custom, culture, and growth and development that has occurred in present times.

Fremont County citizens have complied with State law regarding acquisition of State water rights since Statehood, and with territorial law prior to that. Water development activities in the county have provided citizen water supplies for municipal, industrial, agricultural, domestic, livestock, recreational, flood control, and numerous other uses. It is the custom of Fremont County citizens to continue to acquire and provide safe and adequate water supplies for the needs of residents and to stay informed about and engaged in, matters affecting those supplies.

# **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 5<sup>th</sup> and 14<sup>th</sup> 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 filed instream flow water rights on several waters within Fremont County. Those stream segments that have been filed for in Fremont County can be found on the map provided <a href="here">here</a><sup>23</sup> along with additional information. Most instream flow filings have been on important recreational streams, as well as streams harboring habitat for and 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 Fremont County.
- B. Federal agencies coordinate with Fremont 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. Fremont County supports Wyoming State water law as the legal basis for all water use within Fremont County.
- 2. Fremont County does not support any new interstate water compacts, trans-basin diversions, or interstate water transfers.
- 3. Support recognition of water rights as a private property right that may be owned by the water user separately from the federal agency.
- 4. Privately held 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.
- 5. Federal and state agencies should notify and coordinate with Fremont County if the agency plans to apply for an in-stream flow permit.
- 6. All instream flow designation filings by any entity should provide notice to Fremont County in a timely manner as per State Statute.
- 7. Fremont County supports collaborative processes between water rights holders to improve the entire systems and federal agencies should participate in these processes when applicable.
- 8. Fremont County does not support the imposition of instream flow requirements as a condition precedent for renewal of historical irrigation ditch rights-of-way.
- 9. Federal agencies should never attempt to condition an exaction of water rights. It is the position of Fremont 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 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).

From the beginning of irrigation development in Fremont County, it has been the custom of irrigators to match their irrigation activities with the availability of the water supply. Surface water supplies about 99 percent of the total off-stream use in Fremont County. Irrigation is the largest off-stream use of surface water and provides a delayed return of water to the streams later in the summer, creating higher flows instream at late summer times. During spring runoff, irrigators filled their ditches to capacity to conduct efficient irrigation and store water along the streams and rivers. Then as stream flows recede, the amount of water in the ditches is decreased (Plafcan et al., 1995).

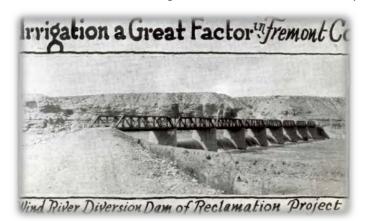
It has been the custom for County citizens to use trucks, horses, ATVs, snowmobiles, or other ORV's to access reservoirs, ditches, headgates, and other irrigation facilities to meet the legal obligation of monitoring and maintaining those facilities in a safe and sound manner. The maintenance of headgates and diversion structures at the points where irrigation facilities divert water from the streams and rivers is a historic custom rooted in the legal obligation to care for such structures.



### **Riverton Reclamation Project**

In 1904, a U.S. Government engineer, Goyne Drummond, after completing a thorough study of a portion of the Reservation between the Owl Creek and Wind River Mountains, found that the study area could be made agriculturally productive through irrigation. Pursuant to a 1905 agreement with the tribes, the U.S. Government withdrew from the area north of the Big Wind River from the Reservation and opened it to homesteading. A group of Chicago investors, the Wyoming Central Irrigation Company, contracted to build an irrigation project on the ceded portion and began construction in 1906. Wyoming Central completed what is now known as the Riverton Valley Canal in 1907, and the LeClair-Riverton Canal was completed in 1916. Widespread irrigation on the Midvale portion of the project did not get underway until after 1920 when the U.S. Reclamation Service (later called the Bureau of Reclamation) took over all funding and development responsibility for that portion of the project (Midvale Irrigation District, 2002).

The Midvale Irrigation District was organized in 1921 and through the Reclamation Service, the principal water storage and distribution facilities were constructed. At present, there are over 70,000 acres under irrigation within the Midvale project. The private LeClair-Riverton and



Riverton Valley Irrigation Districts irrigate an additional 20,000 acres outside the Midvale project boundaries but within the general Riverton area (Bureau of Reclamation, n.d.; Midvale Irrigation District, 2002).

All water used in the Midvale project and in the private Indian and non-Indian canals on the lower river comes from the Wind River and its tributaries above the Wind River Diversion Dam. The

estimated annual water runoff at the Diversion Dam is 870,000 acre-feet, all of which contribute to the supply for the Riverton, Thermopolis, and Worland areas (Bureau of Reclamation, n.d.; Midvale Irrigation District, 2002).

# **5.3.2** Resource Assessment and Legal Framework

Within Fremont County, there are four major irrigation districts: Midvale, Le Clair-Riverton, Riverton Valley, and Little Popo Agie (MWH Americas et al., 2010). The 2017 Agriculture Census listed 135,890 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 <u>Wyoming Water Development Commission Irrigation Survey System Reports</u><sup>24</sup> (Wyoming Water Development Office, 2019).

#### 1866 Act

In 1866 Congress passed legislation that recognized a pre-existing right to construct, operate, and maintain water systems on federal lands. A ditch granted through the 1866 Act comes with a property right and the constitutional protections given to property rights. Therefore, the USFS, BLM, or any other agency generally cannot regulate the use of an 1866 Act ditch, so long as the right of way is operated and maintained in accordance with the scope of the original rights granted. See Western Watershed Project v. Matejko, 468 F.3d 1099, 1104-06 (9<sup>th</sup> Cir. 2006). The scope of the easement for an 1866 Act ditch is defined by the physical extent of the on-the-ground easement, plus adjacent lands. The extent of adjacent lands included in the easement is a question of state law. In Wyoming, it is whatever is reasonable and necessary to maintain the ditch. In order for a ditch to qualify under the 1866 Act, it must have been completed and used before the lands were set aside as a National Forest. No formal agency documentation is necessary, but there must be proof that a current water right exists in the ditch. See 43 U.S.C. § 661 (repealed in part Oct. 21, 1976) (1866 Act) (also known as R.S. 2339 and 2340). Similar to R.S. 2477, the 1866 Act was repealed with the enactment of FLPMA, but the prior existing rights were explicitly retained by Congress (Western Watershed Project, 468 F.3d at 1106).

#### 1891 Act

In 1891 Congress again granted easement rights to ditch owners through federal lands that allow the ditch owner to construct, operate, and maintain water systems on federal lands. Act of March 3, 1891 ("1891 Act"), 26 Stat. 1095 (codified at 43 U.S.C. §§ 946–949) (repealed Oct. 21, 1976). Just like an 1866 Act ditch, the granting came with a property right and cannot be regulated, so long as the right of way is operated and maintained in accordance with the scope of the original rights granted. The scope of the ditch is defined by the physical extent of the on-the-ground system, plus fifty feet from the marginal limit thereof. Also, upon a satisfactory showing by the water company, the easement can include those adjacent lands deemed necessary for the proper operation and maintenance of the system. 1891 Act ditch rights are acquired through formal application and approval by the Secretary of Interior before October 21, 1976 (*Pine River Irrigation Dist. V. US*, 656 F. Supp. 2d 1298, 1321 (D. Colo 2009)). Also, like the 1866 Act ditches, the 1891 Act was repealed with the enactment of FLPMA, but the prior existing rights were explicitly retained by Congress.



#### Colorado Ditch Bill Act

The Colorado Ditch Bill Act of 1986 amended Title V of FLPMA to authorize the secretary of Agriculture to issue permanent easements without charge for water conveyance systems used for agricultural irrigation or livestock watering. The act requires applicants to submit information concerning the location and characteristics of the water conveyance system necessary to ensure proper management of National Forest System lands. Extensions or enlargements constructed after October 21, 1976, do not qualify for an easement and must be covered by other authorities (USFS, n.d.-b). In order to obtain a Ditch Bill easement, the ditch user had to relinquish any other easements the ditch user might have had under other federal statutes. Thus, a Ditch Bill applicant would have to waive any 1891 and 1866 rights they may have. Additionally, applications had to be submitted by December 31, 1996.

Granting easements under the Colorado Ditch Bill Act is not a USFS discretionary decision. If an applicant meets the Colorado Ditch Bill Act criteria, he or she is entitled to an easement and the decision to grant the easement does not constitute a federal action subject to NEPA analysis or review. Conditions of the easement, including operations and maintenance activities may require NEPA analysis and review (USFS, n.d.-b).

# **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 Fremont 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 agencies mandates and management actions governing or affecting water or water systems are developed in coordination with Fremont 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. Work 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. Support 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 lands, whether permanent or requiring periodic renewal should be continued and protected and any renewal of rightsof-ways for irrigation ditches should be done expeditiously with little impact to the historical use as allowed by law.
- 5. Federal agencies should allow ditch users to access and maintain their ditches unimpeded.



6. Federal agencies should coordinate with Fremont 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.

#### **5.4 DAMS AND RESERVOIRS**

### 5.4.1 History, Custom, and Culture

Dams and reservoirs are located across Fremont County and are used for various functions, including storage for irrigation, recreation, industrial, municipal, flood control, hydroelectric power, 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, Platte River Basin, and Greater Green River Basin Plans evaluate 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 in Fremont County (WWDC, n.d.).

### Wind/Bighorn River Basin

The Wind/Bighorn River Basin (WBRB) spans the majority of Fremont County. The following table lists the WBRB reservoirs within subbasins that fall within the County (MWH Americas et al., 2010).

Table 3. Wind-Bighorn Basin reservoirs within Fremont 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)
	Bull Lake Reservoir	Bull Lake Creek	dom-irr-mfg-	151,951
Upper Wind			pwr	
	Pilot Butte	Big Wind River	irr–pwr-mun	34,600
	Reservoir			
	Teapot Reservoir	eservoir Dry Creek irr		1,578
	Dinwoody Lakes	Dinwoody Creek	irr	3,900
Little Wind	Ray Lake	Little Wind	irr	6,980
		River		
	Washakie Reservoir	Little Wind	irr	7940
		River		



	Christina Reservoir	Little Popo Agie	mine-mil-irr-	3,860
Popo Agie		River	sto-dom	
	Frye Lake	Roaring Fork irr-dom-sto		1,698
	Shoshone Reservoir	Shoshone Creek   irr-sto		9,740
	Worthen Meadows	Roaring Fork mun-irr		1,504
	Reservoir			
Lower Wind	Boysen Reservoir	Big Horn River	dom-irr-mun-	757,851
			pwr-ind	
	Cameahwait	Cottonwood	fis-wil-irr-sto-	6,683
	Reservoir	Drain Draw	rec	
	Debatable	Willow Creek	irr	582
	Reservoir			
	Jack Pot Reservoir	Alkali Creek	irr-RR	772
	Middle	Aiddle Cottonwood irr		612
	Cottonwood	Drain Draw	rec	
	Reservoir			
	Prairie (Barquin)	Dry Muddy	irr	578
	Reservoir	Creek		
	Shell Reservoir	Shell Creek	irr	1,949

<sup>(\*)</sup> 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

#### **Platte River Basin**

The Sweetwater River subbasin of the Platte River Basin (PRB) spans the southern region of Fremont County. Though the Sweetwater River is located in this basin, there are no major reservoirs located within the PRB in Fremont County (WWDC, 2006).

#### **Green River Basin**

There is only a small area along the southern border of Fremont County where the Green River Basin (GRB) overlaps within the County. There are no major reservoirs within the County in the Green River Basin. Water resources within the GRB are under the influence of Upper Colorado River Drainage jurisdiction. Water rights appropriated prior to the Colorado River Compact in 1922 are exempt from curtailment (WWC Engineering, AECOM, ERO Resources Corp., et al., 2010).

### 5.4.3 Dams and Reservoirs Resource Management Objectives:

- A. The integrity and safety of all dams and reservoirs within Fremont County are preserved.
- B. Dams, reservoirs, and associated water sources are maintained, expanded, and/or developed within Fremont 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 state agencies should coordinate with Fremont County before 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 Fremont County should be maintained so long as that primary use is consistent with Wyoming Statute preferred uses.
- 3. Federal agencies should proactively manage dams and reservoirs within Fremont County to maintain and enhance capacity and use.
- 4. Fremont 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 agencies should coordinate with Fremont County whenever new dams or water storage projects are being proposed which could affect existing water uses.



### **5.5 WATER QUALITY**

### 5.5.1 History, Custom, and Culture

Water quality across Fremont County is important to the health and wellbeing of County residents and those resources and communities downstream. Settlers moved into the area partially due to the clean water that was available for homesteads and livestock. Many communities' municipal waters have been sourced from surface and groundwater. Due to fluctuation in the water sources used for these communities over time the maintained water quality of both sources is important (Plafcan et al., 1995).

# **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. Fremont 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 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)).

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, and the Federal District of Virginia. However, as



of the writing of this plan, the regulation is effective in all states, except Colorado. Prior to the 2020 regulations, the regulations being followed were the 2015 Clean Water Rule: Definition of "Waters of the U.S." which can be found <a href="https://example.com/here25">here25</a>.

### **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 <a href="here">here</a><sup>26</sup>. 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).

#### **Groundwater Quality**

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.

Groundwater in Fremont County varies greatly in availability and quality. Often, adequate quantity is only available at great depth. However, depth and quantity do not always assure quality. Many communities in Fremont County rely on groundwater as a source of municipal water. According to the WWDC 2018 Public Water System Survey Report, the town of Dubois draws from two wells at nearly 1.5 million gallons per day with a treated water capacity of 1.2 million gallons. Riverton draws off the Wind River with a system capacity of about 9 million gallons/day and additionally has deep water wells that provide water for municipal use. The town of Shoshoni draws off four wells from the Wind River formation with a storage capacity of 500,000 gallons (WWDC, 2018).

Private well owners are solely responsible for the quality of their drinking water. It is up to them to test their drinking water. All three conservation districts within Fremont County offer a well water testing cost-share program on an annual basis.

#### **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 <a href="here">here</a><sup>27</sup>. Harmful Cyanobacterial Blooms (HCBs) are of concern for waterway impairment in Fremont County, having occurred in the past. Conservation Districts within Fremont County actively work with stakeholders to achieve water quality improvements. In 2020, an impaired reach of the Middle Fork of the Popo Agie was delisted because of collaborative efforts.

Fremont County has seven reaches that are classified as impaired. Within the Wind/Bighorn Basin sections of the Middle Fork Popo Agie River, Poison Creek, and Muddy Creek are listed. Refer to Table 4 below for details on impaired reaches within the County.



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

River Basin	Waterbody	Class	Location	Miles	Impaired Use	Causes
Big Horn Basin	Brooks Lake	2AB	Near Togwotee Pass	209 acres	Cold Water Fishery, Aquatic Life other than Fish	Nutrients, pH
Big Horn Basin	Twin Creek	2AB	From Old Highway 287 downstream 15.6 miles to the confluence with the Popo Agie River	15.6 mi	Cold Water Fishery, Aquatic Life other than Fish	Sedimentation/ Siltation
Big Horn Basin	Little Popo Agie River	2AB	From the confluence with Willow Creek to a point 4.5 miles upstream	4.5 mi	Cold Water Fishery, Aquatic Life other than Fish	Oil and Grease, Hydrogen Sulfide
Big Horn Basin	Hornecker Creek	2AB	From the confluence with Middle Fork Popo Agie River upstream 1.5 miles to Sinks Canyon Road	1.5 mi	Recreation	E. coli
Wind/Bighorn River Basin	Middle Fork Popo Agie River	2AB	From the confluence with Baldwin Creek to a point 4.0 miles upstream	4 mi.	Recreation	Fecal Coliform
Wind/Bighorn River Basin	Poison Creek	2AB	From the confluence with Boysen Reservoir to a point 2.0 miles upstream2 mi.	2 mi.	Recreation	E. coli
Wind/Bighorn River Basin	Muddy Creek	2AB	From the confluence with Boysen Reservoir upstream to the Wind River Indian Reservation	11.8 mi.	Recreation	E. coli

#### **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 Fremont 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. 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).



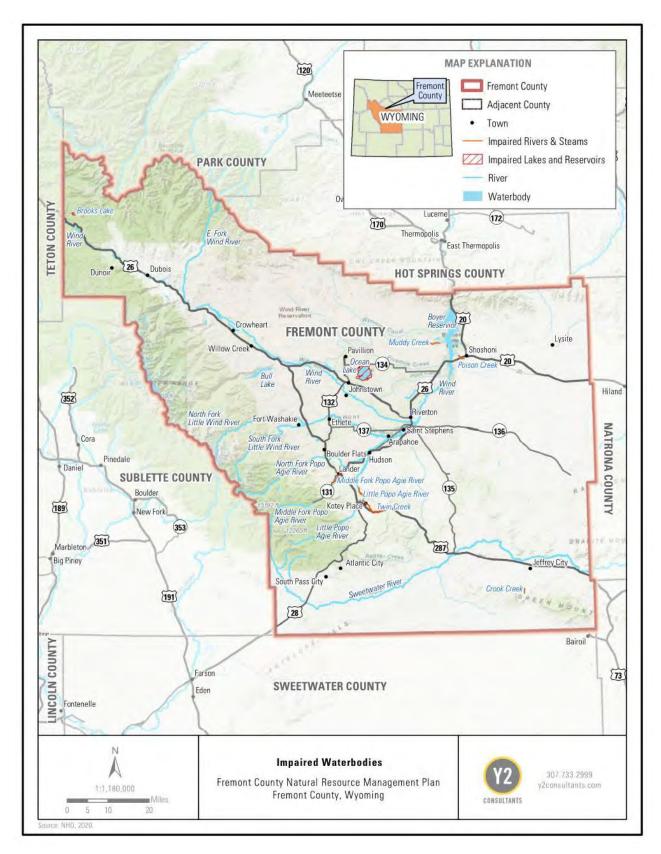


Figure 13. Impaired waters in Fremont County.



# **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 cultures of Fremont County.
- B. Fremont County is consulted and coordinated with regarding water quality in the county.

# **5.5.4 Water Quality Priority Statements:**

- 1. Federal agencies shall adopt and consistently use the September 11, 2020, Clean Water Act final rule defining Waters of the United States.
- Federal 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.
- 3. Fremont County opposes any action, lack of action, or permitted use that results in a significant or long-term decrease in water quality or quantity.
- 4. Federal agencies should support projects that improve water quality and increase the amount of dependability of the water supply.
- 5. Federal agencies should assist in protecting watersheds with respect to water quality with the assurance that water yield will not be decreased but improved.
- 6. Properly managed livestock grazing, timber harvesting, and other managed uses of watersheds should be supported that can positively impact water quality.
- 7. Fremont County should be consulted with regarding federal 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.
- 8. Land management actions and practices that contribute to or maintain healthy drainages and watersheds should be implemented.
- 9. Fremont County should be coordinated with to ensure that management of watersheds, including municipal watersheds, meets the multiple use needs of residents and promotes healthy forests and rangelands.
- 10. Federal 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.
- 11. 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.
- 12. All water quality plans and/or data undertaken by or on behalf of a federal agency should be coordinated with Fremont County and/or the Conservation Districts.
- 13. 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.



14. Federal 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 Fremont 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 Fremont County experienced 22 flood events which incurred \$790,000 in crop damage and \$13,769,789 in property damage. Fremont County is categorized as 'Medium Risk' for flooding in the Wyoming State Mitigation Plan. Several major floods have occurred within Fremont County, including the floods of 2010 and 2011 both of which received presidential declarations. The 2010 Wind River flood resulted from sudden spring snowmelt and just over \$7 million in damages in Fremont County and the Wind River Reservation. The 2011 flood was much more extensive and impacted the Wind River Reservation along with 15 counties. The 2011 flood spanned two months and early warning allowed communities to prepare, resulting in just over \$4 million in damages. Flooding along the Big and Little Wind Rivers has occurred nearly every spring between 2011 and 2017 (Wyoming Office of Homeland Security, n.d.).

# 5.6.2 Resource Assessment and Legal Framework

### Federal Emergency Management Agency

Multiple municipalities within Fremont County participate in the National Flood Insurance Program (NFIP). At the time this document was written the participating municipalities include Dubois, Hudson, Lander, Riverton, and Shoshoni (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 active and completed Risk MAP projects within Fremont County (FEMA, n.d.-c). For more information on flood hazard mapping within Fremont 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<sup>28</sup>.



# **5.6.3 Flood Plains Resource Management Objective:**

A. Flood plains are managed proactively in coordination with Fremont County to ensure the health, safety, and welfare of all residents within Fremont 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. Fremont 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 Fremont County when designating federal flood plains.
- 4. Emergency response regarding flooding should be coordinated with the Fremont 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 Fremont County. The headwaters of numerous streams and rivers are found in Fremont 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 fisheries in Fremont County.

The rivers within Fremont County have an extensive history associated with the development of the County. Early settlements and developments within Fremont 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, Indians, and fur company men, were held in the Wind River Basin and were the first temporary settlements in Fremont County. The first-ever recorded rendezvous site was held in 1829 on the Popo Agie River near what is now present-day Lander. The John Colter expedition entered Fremont County over the Northern Owl Creek Mountains, ascended the Wind River, and crossed over Union Pass to Jackson Hole. These water resources have also been important to historic cultural



development such as agriculture, municipal use, and recreation including hunting and fishing. Irrigation development in Fremont County started in the 1850s and the earliest water right filings are recorded in the 1860s. The first surface water laws were enacted in 1875. In 1894, the Carey



Act was passed to encourage settlement and irrigation development across western states. The rivers have also been important to the historic timber industry in the county. During spring runoff, when the high water came, the ties manufactured during the winter were transported downstream to processing yards. (States West Water Resources Corporation & WWDC, 2001; Tyrrell & States West Water Resources Corporation, n.d.; WWC Engineering, AECOM, & ERO Resources Corp., 2010; WWDC, 2006)

#### **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)).

There are three interstate water compacts within Fremont County: The Wind/Bighorn River falls within the 1950 Yellowstone River Compact, the small portion of the Green River Basin falls within the Colorado River Compact, and the Sweetwater Basin falls within the Platte River Compact.

# 5.7.2 Resource Assessment and Legal Framework

There are three major perennial rivers present within Fremont County. These include the Wind River, Popo Agie River, and Sweetwater River. Refer to Figure 14 for a map of the major rivers and tributaries in Fremont County (National Wild and Scenic Rivers System, n.d.-b)

There are several ephemeral and intermittent streams, which originate in the Plains Region of the county and 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 glaciers. The average annual runoff varies for two of three regions that occur in the county. In the Mountainous Region, the average annual runoff ranged from 0.90 to 22 inches/year, whereas in the Plains Region, the average annual runoff ranged from 0.06 to 0.72 inches/year. Available streamflow data are insufficient for computing average annual runoff in the High Desert Region (Plafcan et al., 1995).

#### Wind River

Located in the Wind/Bighorn River Basin, the Wind River is 185 miles long flowing from its headwaters at Wind River Lake near Togwotee Pass in the northeast corner of the County through the Absaroka Mountains. Several tributaries northeast of the Wind River Range join with the Wind River. The river flows southeast along the Wind River Basin through Fremont County and the Wind River Indian Reservation, where the Little Wind River merges at Riverton. Past Riverton, the Wind River flows north into the Boysen Reservoir. After the river flows north through the Wind River Canyon it becomes the Bighorn River at the Wedding of the Waters near Thermopolis. There are several tributaries to the Wind River within Fremont County, including East Fork Wind River, Bull Lake Creek, Beaver Creek, Fivemile Creek, Poison Creek, Dunoir Creek, Horse Creek, Dinwoody Creek, Crow Creek, and Muddy Creek.



#### Popo Agie River

The Popo Agie River is located across the center of Fremont County. The Middle Fork Popo Agie is fed by springs and snowmelt from the southern Wind River Range. The Middle Fork is joined by several tributaries, including Sawmill, Hornecker, Baldwin, Squaw, and Roaring Fork Creeks, before merging with the North Fork Popo Agie at Lander. The North Fork Popo Agie's headwaters are at Lonesome Lake in the Wind River Range and act as the boundary between Fremont County and the Wind River Indian Reservation to Lander. After the Middle Fork and North Fork merge in Lander the river becomes the Popo Agie or the Big Popo Agie River. The Popo Agie River joins the Little Popo Agie River near Hudson before the river's confluence with the Little Wind River near Arapahoe.

#### Sweetwater River

Part of the Platte River Basin, the Sweetwater River starts in southwest Fremont County near South Pass. The river flows in an eastward direction until it crosses into Natrona County and joins the North Platte River at the Pathfinder Reservoir. Tributaries to Sweetwater River include Willow Creek, Rock Creek, Buffalo Creek, Crooks Creek, and Long Creek.

#### **Interstate Water Compacts**

#### 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.).

#### Colorado River Compact

The Colorado River Compact of 1922 is an agreement among the states whose boundaries lie within the Colorado River Basin. The purpose of the agreement was to provide for the equitable division and apportionment of the use of the waters of the Colorado River System; to establish the relative importance of different beneficial uses of water, to promote interstate comity; to remove causes of present and future controversies; and to secure the expeditious agricultural and industrial development of the Colorado River Basin, the storage of its waters, and the protection of life and property from floods. Under the compact, the water of the Colorado River was divided in half; with half going to the upper basin states of Colorado, Utah, Wyoming, New Mexico, and parts of Arizona, and half to the lower basin states of California, Arizona, and Nevada. The dividing line between the Upper and Lower Basins is at Lee Ferry Arizona. Ultimately, the Compact dictates that the Upper Basin cannot deplete the flow at Lee Ferry below 75 million acre-feet in any running 10-year period (Water Education Colorado, 2015).



The Colorado River Compact specifically protects water rights predating the compact, stating, "Present perfected rights to the beneficial use of waters of the Colorado River System are unimpaired by this compact" (Colorado River Compact Article VIII). Thus, any perfected water rights in the Colorado River system that predate November 24, 1922, are not obligated to the Colorado River Compact and cannot be required to supply any shortage if a Lower Basin makes a call on the river. Additionally, the Upper Basin states of Wyoming, Colorado, New Mexico, Utah, and Arizona negotiated an Upper Colorado River Compact in 1948. The Upper Colorado River Compact further allocates the water distributed between the Upper Colorado River Basin states with Wyoming being guaranteed a 14% allocation of Colorado River Compact Water (totaling approximately 1.04-millionacre-feet). Upper Colorado River Compact Art. III (1948). The Compact also contains important (but so far unused) language relating to compact curtailment should the Upper Basin fail to meet its non-depletion obligation under the 1922 Compact. See id. at Art. IV.

Much has changed since the ratification of the Colorado River Compact and the Upper Colorado River Compact. The 2007 US Bureau of Reclamation Colorado River Interim Guidelines set forth the criteria as to when the Secretary of the Interior is to declare the Colorado River's water supply availability conditions for the Lower Division States and set out and defined coordinated operations of Lake Powell and Lake Mead. The guidelines are in place through 2026. 2007 US Bureau of Reclamation Colorado River Interim Guidelines Executive Summary p. ES-2. The three conditions are normal, surplus, and shortage conditions. Under the Interim Guidelines, Lake Powell and Lake Mead's operations are coordinated. Releases are based on forecasted, year-end reservoir levels in Powell and Mead. Lake Powell is divided into four tiers. Each of these tiers dictates how much water is released from Lake Powell for storage into Lake Mead (and thereby fulfilling the required 7.5 million-acre-feet obligation in the Colorado River Compact). Lake Mead is divided into a number of different tiers. At levels above 1,075 ft, normal or surplus conditions are declared, and Lake Mead is required to deliver at least 7.5 million-acre-feet. The critical levels at Lake Mead are those levels below 1,075 ft, the level at which shortages are imposed on Lower Basin water users, and 1,025' when a shortage condition is declared. Ultimately, the reason the Interim Guidelines are important to Upper Basin users is that higher levels of Lake Mead allow for Lake Powell to remain high, and the Upper Basin water users are given a greater buffer for when drought conditions may make it more difficult to deliver water through Lee Ferry (Falen Law Office, 2020).

Finally, in 2019, the Colorado River Basin States reached a dual drought contingency plan agreement based largely on the 2007 Interim Guidelines. The Upper Basin Drought Contingency Plan established a Demand Management Program that established 3,525 feet as the target operational level for Lake Powell. Lake Powell's operations will then be coordinated with other Upper Basin Reservoirs, including the Flaming Gorge, Aspinall, and Navajo Dams to protect Lake Powell's depth. In turn, the Lower Basin Drought Contingency Plan would require that the Lower Basin states would curtail their deliveries from Lake Mead when the lake reaches the levels specified in the 2007 Interim Guidelines (Falen Law Office, 2020).



## Platte River Recovery Implementation Program and North Platte Decree

In 1997, Colorado, Wyoming, Nebraska, and the Department of the Interior formed a unique partnership with the goal of developing a shared approach to managing the Platte River. The Platte River Recovery Implementation Program (PRRIP) was formed out of this in 2007 and is focused on implementing this shared vision for creating and maintaining habitats on the Platte. The PRRIP is managed by a governance committee comprised of representatives from Colorado, Nebraska, and Wyoming, water users, environmental groups, BOR, and USFWS. The PRRIP utilizes federal, and state-provided financial resources, water, and scientific monitoring, and research to support and protect four threatened and endangered species (Piping plover, Least tern, Whooping crane, and Pallid sturgeon) that inhabit areas of the Central and Lower Platte rivers in Nebraska while allowing for continued water and hydropower project operations in the Platte River basin. In December 2019, the U.S. Secretary of the Interior signed an amendment to the PRRIP Cooperative Agreement, along with the governors of Colorado, Nebraska, and Wyoming committing resources to extend the program through December 31, 2032 (Department of the Interior, 2019; Platte River Recovery Implementation Program, n.d.).

The Pathfinder Modification Project was completed in 2012 and was authorized by Appendix F<sup>29</sup> to the Final Settlement Stipulation relating to the Nebraska v. Wyoming lawsuit, as approved by the U.S. Supreme Court. The BOR has a Wyoming water right to store 1,070,000 AF of water in the Pathfinder Reservoir for the benefit of the PRRIP. Over the years, approximately 53,493 AF of the storage capacity was lost to sediment and the modification project would recapture the storage space. The modification project was accomplished by raising the elevation of the existing spillway by approximately 2.4 feet with the installation of an ogee crest. The recaptured storage stores water under the existing 1904 storage right for Pathfinder Reservoir (U.S. Supreme Court, 2000).

The Pathfinder Modification Project was essential to Wyoming in order for the state to meet its obligations under the PRRIP and the Modified North Platte Decree. The North Platte River Decree was modified in 2001, this modification expanded the limitation on irrigation in Wyoming to include both consumptive use and irrigated acreage above Guernsey Reservoir. The Modified Decree added a consumptive use cap for irrigation purposes above Guernsey Reservoir (except Casper/Alcova Irrigation District) and expanded the 1945 Decree's limitation on irrigated acreage above Guernsey Reservoir (with the same exception) to include tributaries between Pathfinder and Guernsey Reservoirs. The Court remained consistent in support of the historic sectionalized administration of the river, where available flows have been equitably apportioned between the states with certain specified limitations on acreage, consumptive use, and reservoir storage. The 2001 Modified Decree and related settlement stipulations also provide for an automatic priority call for the mainstem federal North Platte River reservoirs in Wyoming when forecasted water supplies are less than 1.1-millionacre-feet.

## **5.7.3** Rivers and Streams Resource Management Objective:

A. Rivers and streams are managed in coordination with Fremont 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 agencies should coordinate with Fremont 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. Support the recreational use and consumptive use of water to support the Fremont County economy.
- 6. Fremont County should be consulted on the Wyoming Department of Environmental Quality classification of waters within the County.



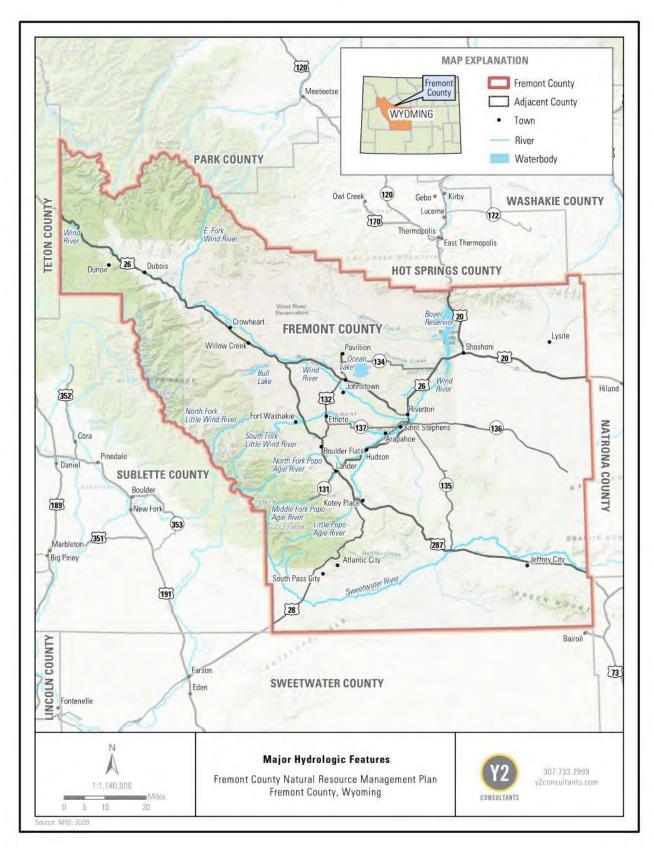


Figure 14. Major hydrology of Fremont County.



#### 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, 2016c). 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, improving 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 Fremont 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 Fremont County can be found on the National Wetlands Inventory data <a href="mailto:m

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<sup>31</sup>.

The Association of State Wetland Managers maintain 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 Fremont County.
- B. Jurisdictional Wetlands under the Clean Water Act are identified in accordance with the 2020 Water of the United States Rule and are not expanded within Fremont 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. Support the use of responsible grazing and vegetation management as a tool to manage wetlands and riparian areas.
- 4. Federal 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. Fremont County supports the 2020 definition created by the Environmental Protection Agency of a statutory wetland.
- 6. Irrigation-induced wet areas should not be classified as new jurisdictional wetlands.
- 7. Appropriate methods and practices to maintain and restore riparian areas to proper functioning condition should be used.
- 8. Credible data and scientific standards for wetland designation should be used by all managing agencies.
- 9. 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.



### 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 WGFDs mission is 'Conserving Wildlife, Serving People'. Wildlife in Wyoming not listed under the 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. This plan is not a legal document, a regulatory document, a recovery Plan under the ESA or NEPA decision document. (WGFD, 2017b). It 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 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) Involve broad public participation.

The species list includes 229 total species including eighty birds, nine amphibians, twenty-four reptiles, fifty-one mammals, twenty-eight fish, eight crustaceans, and twenty-nine 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 the Wyoming Game and Fish Department Native Species Status (NSS); Wyoming's contribution to the species' overall conservation; regulatory/monetary impacts of the species' listing under the ESA; the urgency of conservation action; ability to implement effective conservation actions; and 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 State Wildlife Action Plan. The Wyoming Species of Conservation Priority List can also be found on the WGFD website<sup>32</sup> (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 Endangered Species Act (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 is in Cheyenne, WY. 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). Fremont 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 Bridger-Teton and Shoshone 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.-d)

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**

## 6.3.1 History, Custom, and Culture

Wildlife is perhaps one of the first resources that attracted settlement to Fremont County. The earliest white inhabitants of Fremont County were the fur trappers. Central Fremont County was the site of the first rendezvous, a method by which commerce in the fur trade was advanced. Wildlife is the basis for a large portion of the tourism economy in the County, and subsistence hunting has been a part of the economy since the earliest settlements. Tourism dollars brought to the County by wildlife recreation are important to the service sectors of sporting goods stores, outfitters, guides, dude ranches, meat processors, taxidermists, motels, restaurants, and taverns. The economic viability of Fremont County rests directly upon the continued and enhanced use of the wildlife resource.

# **6.3.2** Resource Assessment and Legal Framework

Fremont County has diverse and abundant wildlife habitat that hosts several large species that are important to the region. Fremont County's big game species include black bear (*Ursus americanus*), elk (*Cervus canadensis*), moose (*Alces alces*), mountain lion (*Puma concolor*),



bighorn sheep (*Ovis canadensis*), mule deer (*Odocoileus heminous*), and white-tailed deer (*Odocoileus virginianus*). Upland game birds include ruffed grouse (*Bonasa unbelus*), dusky grouse (*Dendragapus obscurus*), and Greater sage-grouse (*Centrocercus urophasianus*). Various other wildlife present in the County include lynx (*Felis lynx*), bobcat (*Lynx rufus*), fox (*Vulpes vulpes*), beaver (*Castor canadensis*), and muskrat (*Ondatra zibethicus*).

## Common Wildlife

Big-game species are common throughout much of Fremont 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 Lander Region of the WGFD spans Fremont County and into portions of surrounding counties and is responsible for the management of big game species throughout Fremont 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. For additional information on population objectives and management of big game herds within and surrounding Fremont County refer to the 2018<sup>33</sup> and 2019<sup>34</sup> Lander Region Reports for each species.

### Elk

Elk (Cervus canadensis) are most often found along the northern, western, and southern edges



of Fremont County with some habitat mapped in the upper northeast corner. 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 Figure 15 and Table 5 for mapped elk habitat within the County.

Elk populations within the Lander Region are healthy and have been

maintained at or above objective over the last several years. The elk mid-winter trend count management objective is 9,025 animals. In 2018, the elk population for the region was 10,403 individuals, and the three-year running average in 2019 was 9,602 individuals (Hiatt, 2018).

#### Moose

Shiras moose (*Alces alces shirasi*) are found throughout much of Fremont County with mapped habitat in the northern portion of the county and a few small areas along the southwestern and southern borders. Moose are considered primarily browsers but will forage on grasses and forbs as well. Moose inhabit more riparian and wetland areas where willows and water are readily available. See Figure 16 and Table 5 for mapped moose habitat within the County.



Moose populations within the Lander Region have been near objective over the last several years. The moose mid-winter trend count management objective is 150. In 2018 the population for the region was 174 individuals, and the three-year running average in 2019 was 145 individuals (Hiatt, 2018).

#### Mule Deer

Mule deer (*Odocoileus hemionus*) are found throughout large portions of Fremont 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. See Figure 17 and Table 5 for mapped mule deer habitat within the County.

Mule deer have been below their population objective for the Lander Region for the last several years. The winter of 2016-2017 took a toll on deer populations throughout the western and central portion of Wyoming and in some areas, 80-90% of the 2017 fawn crop was lost. Chronic wasting disease (CWD) is also prevalent in Fremont County and is one contributing factor to mule deer population loss. The mule deer post-season management objective is 29,800. In 2018 the population for the region was 23,350 individuals. The 2019 proposed post-season population estimate was 24,630 individuals (Hiatt, 2018).

#### Pronghorn

Pronghorn (*Antilocapra americana*) are common throughout most of Fremont County except for along the Wind River Mountain Range. Pronghorn prefer the open shrublands that the southern portion of the county provides. They are intermediate foragers, eating grasses, forbs, and shrubs. See Figure 18 and Table 5for mapped pronghorn habitat within the County.

Pronghorn have been near the population objective for the Lander Region over the last several years. Pronghorn thrive in desert sagebrush landscapes but also tend to migrate to agricultural areas. The pronghorn post-season management objective is 66,500. In 2018 the population for the region was 69,850 individuals. The 2019 proposed post-season estimate was 67,490 individuals (Hiatt, 2018).

#### Bighorn Sheep

Bighorn sheep (*Ovis canadensis*) are found throughout the northern and western borders of Fremont County. Bighorn sheep are mainly browsers but will forage on forbs and grasses. Wyoming manages bighorn sheep according to the 2004 Wyoming State-wide Bighorn/Domestic Sheep Interaction Working Group Final Report and Recommendations created per Wyoming Statute 11-19-604. See Figure 19 and Table 5 for mapped bighorn sheep habitat within the County.

Within Fremont County, there is one bighorn sheep herd unit known as the Whiskey Mountain herd. The population objective for this herd was set at 1,350 sheep in 2002. There are no population estimates available over the last several years. This herd has been substantially below objective since a large pneumonia die-off in 1991. Persistent lamb pneumonia in the herd has continued to stunt recruitment over the years (Hiatt, 2018).



Table 5. Mapped wildlife seasonal range acreages across Fremont County.

Wildlife Species	Seasonal Range				
	Crucial Winter	Crucial Winter/Yearlong	Winter/ Yearlong	Spring/ Summer/ Fall	Yearlong
Elk	163,710 ac	136,211 ac	333,956 ac	1,065,310 ac	304,021 ac
Moose	19,733 ac	167, 094 ac	119,579 ac	1,118,882 ac	2,303 ac
Mule Deer	0 ac	496,218 ac	654,946 ac	1,297,858 ac	844,062 ac
Pronghorn	0 ac	470,256 ac	833,252 ac	970,089 ac	1,845,744 ac
Bighorn Sheep	0 ac	144,487 ac	179,684 ac	475,897 ac	198,264 ac

#### **Greater Sage-Grouse**

There are approximately 2,354,275 acres of designated core habitat for the Greater sage-grouse (*Centrocercus urophasianus*) (sage-grouse) within Fremont County (Figure 19). The Sage-grouse is 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 Fremont 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 <a href="https://example.com/here-state

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.

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 <a href="https://executive.order.org/length/96">https://executive.order.org/length/96</a>.

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 <a href="here">here</a><sup>37</sup> (WGFD, 2021).

### Wildlife Habitat Management Areas

The WGFD maintains approximately 450,000 acres of land under a deed, lease, or by agreement for wildlife habitat management areas (WHMA). These areas provide crucial winter habitat for big game and important production areas for small birds and mammals. WHMAs also provide public access to wildlife resources. There are seven WHMAs within Fremont County (Table 6). Additional information on these WHMAs can be found <a href="https://example.com/here-38">here-38</a>.



Table 6. Wildlife habitat management areas located in Fremont County.

WHMA	Acres
Red Canyon	1,988
Sinks Canyon	514
Ocean Lake	11,289
Sand Mesa	19,357
Whiskey Basin	12,833
Spence & Moriarity	35,872
Kirk Inberg/Kevin Roy	17,280

### **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<sup>39</sup>, 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)

Only a small portion of the Sublette Migration Corridor lies within the very southwest corner of Fremont County (see Figure 17). 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

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 including Fremont County 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 <a href="CWD Management Plan">CWD Management Plan</a> and for a map of areas that have had CWD detections refer here<sup>41</sup>.



#### Brucellosis

Brucellosis is a highly contagious bacterial disease that can occur in wildlife, cattle, and humans. Brucellosis has been detected in elk in hunt areas in Fremont County. There are several *Brucella* species but *Brucella abortus* is the bacterium that infects elk, bison, and cattle. Infection 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). Further information about brucellosis can be found on the WGFD website<sup>42</sup>.

Dubois falls within the designated surveillance area for brucellosis. There have been discussions about closing down the elk feedgrounds that are located within Teton and Sublette counties. This could have impacts on the Dubois area as it is possible that more elk would migrate to the area for winter range rather than staying on the feedgrounds. This could concentrate elk in agricultural areas in the Dubois area and potentially increase the possibility and prevalence of brucellosis in livestock and in the more local elk populations in the area, further spreading the disease throughout the State of Wyoming.

## Special Status/Sensitive Species

## Bur<u>eau of Land Management</u>

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 <a href="here">here</a><sup>43</sup>.



#### 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 <a href="https://example.com/here-44">here-44</a> and for Region 4 can be found <a href="https://example.com/here-45">here-45</a>.

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). Management indicator species for the Bridger-Teton National Forest include grizzly bear, bald eagle, peregrine falcon, and whooping crane. (USFS, 1990, 2015) 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<sup>46</sup>.

# **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 federal lands within Fremont County.
- B. Any plan regarding wildlife within Fremont County is developed in coordination with Fremont County and other stakeholders.

# **6.3.4 Wildlife Priority Statements:**

- 1. Fremont County supports that the State of Wyoming has primacy over wildlife management.
- 2. Fremont County requests to be informed annually of the health, status, and trends of its wildlife populations.
- 3. Management plans shall be generated to protect the overall health of natural resources, not specifically managed for one individual species.
- 4. Whenever requested, federal and state agencies should partner with Fremont County in timely creating plans and programs that address wildlife resource concerns, local wildlife management plans, and management of sensitive, candidate or listed species in the county.
- 5. 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.



- Fremont 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 Fremont County.
- 7. When creating management objectives based on the carrying capacity of the habitat, agencies should consider all other multiple uses in the area and create objectives that equitably balance all uses.
- 8. Support habitat monitoring efforts and refine available habitat data.
- 9. 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.
- 10. Fremont County encourages federal agencies to support habitat enhancement projects that include chaining, logging, seeding, burning, and other direct soil and vegetation prescriptions.
- 11. Fremont County supports continued research and management of big game herds for chronic wasting disease, brucellosis, and any future wildlife diseases.
- 12. Support the Wyoming State-wide Bighorn/Domestic Sheep Interaction Working Group Report (September 2004) with respect to management of domestic sheep allotments.
- 13. Federal plans and actions related to the greater sage-grouse shall be consistent with State of Wyoming Executive Orders on greater sage-grouse.
- 14. 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.
- 15. Any permitting or production restrictions for non-listed species of concern should be fully justified by credible data and subject to valid existing rights.



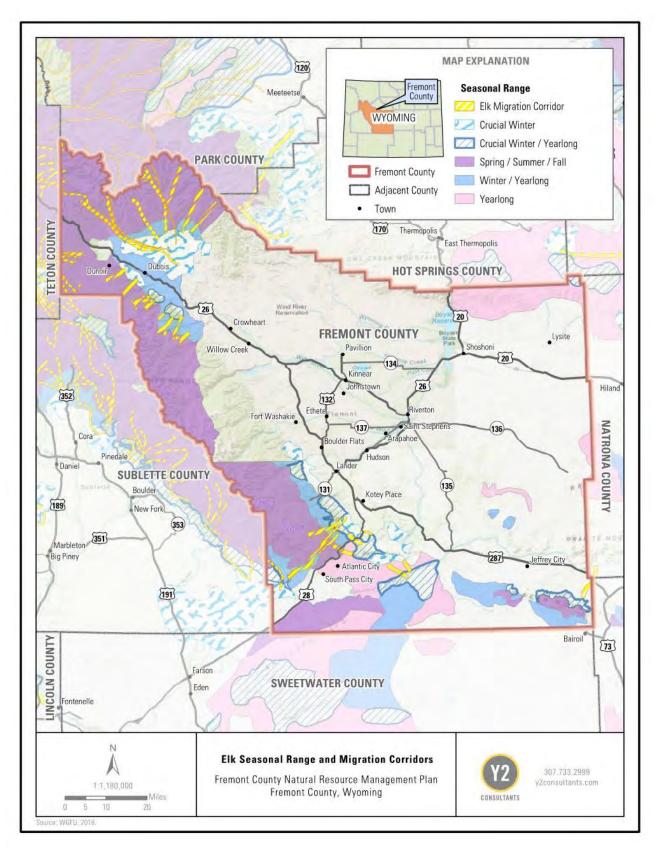


Figure 15. Elk seasonal range and migration corridors in Fremont County.



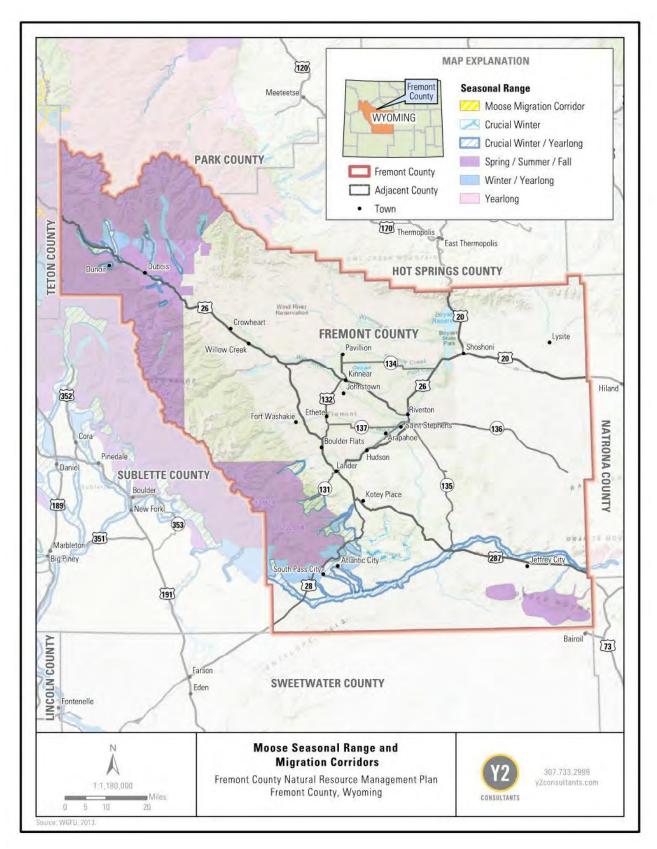


Figure 16. Moose seasonal range and migration corridors mapped within Fremont County.



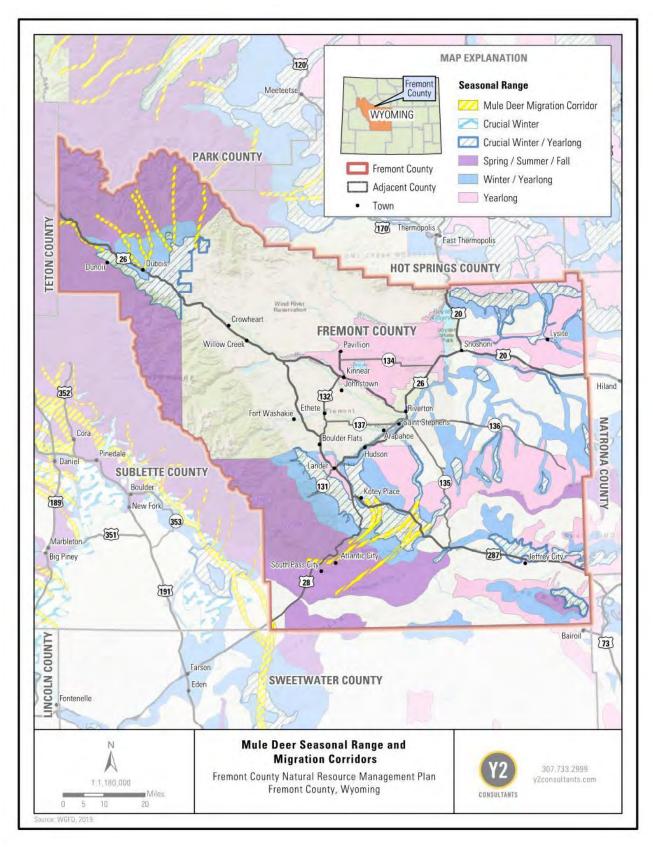


Figure 17. Mule deer mapped seasonal habitats and migration corridors in Fremont County.



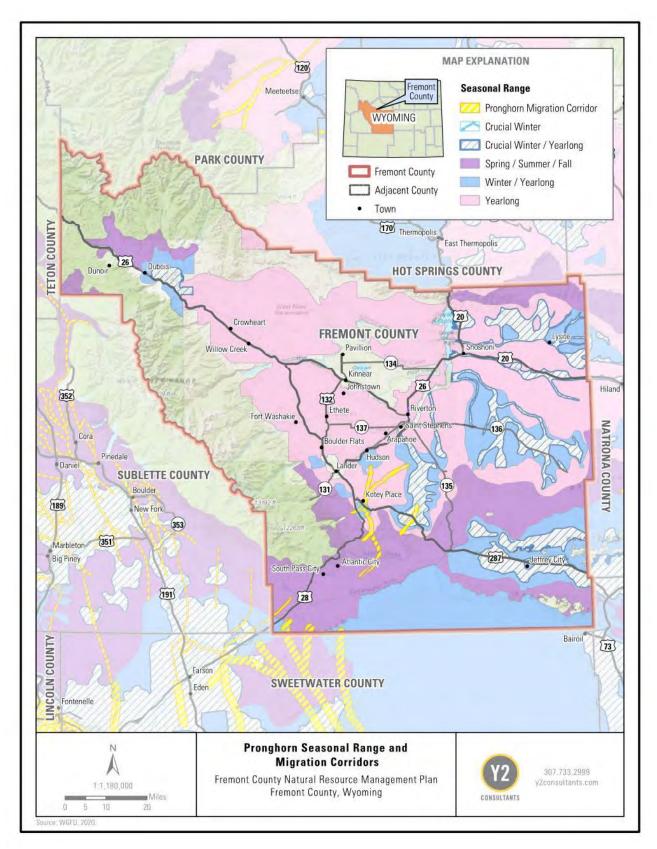


Figure 18. Pronghorn mapped seasonal habitat and migration corridors in Fremont County.



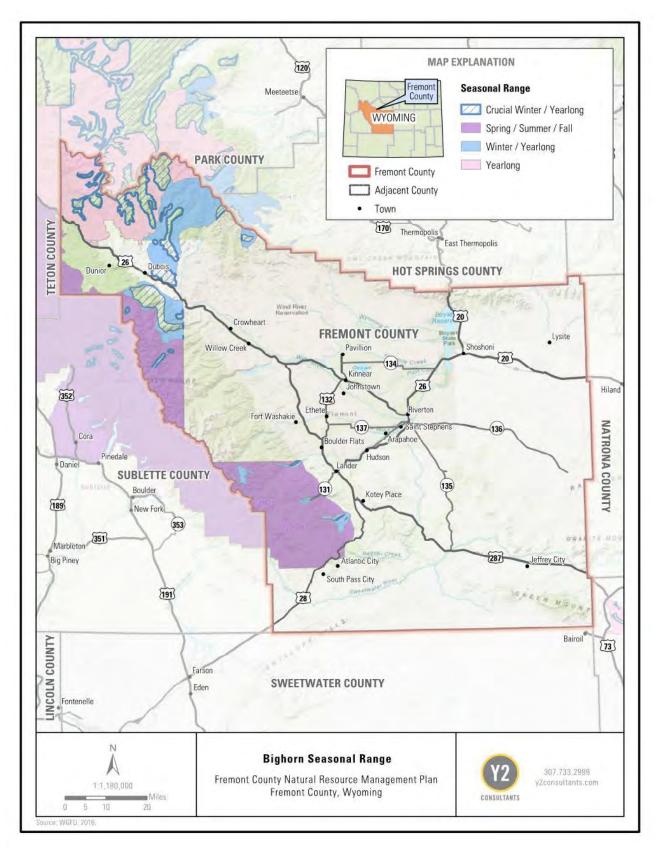


Figure 19. Bighorn mapped seasonal habitat and migration corridors in Fremont County.



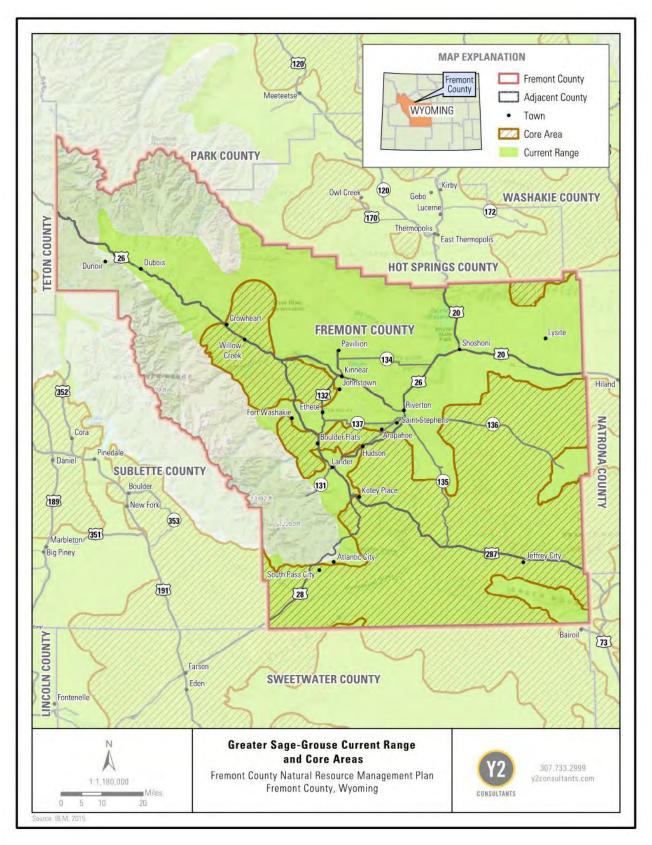


Figure 20. Greater Sage-Grouse mapped habitat and core area within Fremont County.



## 6.4 THREATENED AND ENDANGERED SPECIES/SENSITIVE SPECIES

## 6.4.1 History, Custom, and Culture

Threatened and endangered species have been a part of Fremont County since the early days of the ESA. Species, such as the grizzly bear, which is found in Fremont County, were first listed as threatened in 1975 and many still are currently listed. Gray wolves were once listed in the county and have since been removed from the list due to sound management practices and now provide a recreational opportunity for the county.

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.



Candidate species are "any species being considered for listing as an endangered or threatened species, but not yet the subject of a proposed rule" (50 C.F.R. § 424.02(b)).

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. 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.

- 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 <u>USFWS Information for Planning and Consultation (IPaC) database</u><sup>47</sup>. At the writing of this report there are fifteen endangered, threatened, candidate, or proposed species identified as species believed to or known to occur within Fremont County. Those species are:

- Bonytail (Gila elegans) Endangered
- Canada lynx (*Lynx canadensis*)- Threatened
- Colorado pikeminnow (Ptychocheilus lucius)- Endangered
- Desert yellowhead (Yermo xanthocephalus)- Threatened
- Grizzly bear (Ursus arctos horribilis)- Threatened
- Humpback chub (Gila cypha)- Endangered
- North American wolverine (*Gulo gulo luscus*)- Proposed threatened
- Pallid sturgeon (Scaphirhynchus albus) Endangered
- Piping plover (Charandrius melodus) Threatened
- Razorback Sucker (*Xyrauchen texanus*) Endangered



- Ute ladies' tresses (Spiranthes diluvialis)- Threatened
- Yellow-billed Cuckoo (Coccyzus americanus)- Threatened
- Western prairie fringed orchid (*Platanthera praeclara*) Threatened
- Whitebark pine (*Pinus albicaulis*) Proposed threatened
- Whooping crane (Grus americana) Endangered

Critical habitats for Canada lynx and Desert yellowhead are mapped within Fremont County. The 2007 Northern Rockies Lynx Management Direction Record of Decision<sup>48</sup> outlines the management plan decision for lynx habitat. This plan applies to the national forests within Fremont County. This link<sup>49</sup> shows the areas in the county mapped as critical habitat for these species.

## **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 USFWS published the 'Regulations Governing Take of Migratory Birds' on January 7, 2021, further defining the parameters of 'unlawful take'. The rule defines 'take' as 'to willfully pursue, hunt, shoot, wound, kill, trap, capture, or collect'. 'Take' of migratory birds no longer includes the incidental or accidental killing of migratory birds (USFWS, 2021). 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)

# 6.3.3 Threatened/Endangered Resource Management Objectives:

- A. Threatened, and endangered species are managed using credible data and in conjunction with multiple use mandates in coordination with Fremont County and other stakeholders.
- B. Species are managed to prevent the need for additional listings.

# **6.3.4 Threatened/Endangered Priority Statements:**

- 1. Species should not be introduced or reintroduced except when utilizing the 10J rule for experimental populations.
- 2. The County requests being a cooperating agency in all decisions and proposed actions that affect the County regarding sensitive, threatened, or endangered species; the



- reintroduction or introduction of listed species; habitat conservation plans; conservation agreements or plans; and candidate conservation agreements.
- Designation or reintroduction plans, guidelines, and protocols must not be developed or implemented without full public disclosure and involvement of the County and should utilize Section 6 authorities, allowing state management of the species whenever allowed by law.
- 4. Recovery efforts and/or conservation plans for threatened or endangered species should consider impacts to local interests.
- 5. 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 support the development of a recovery plan within 18 months of this document.
- 6. Copies of legal descriptions showing the exact boundaries of all designated critical habitat should be provided to local governments in Fremont County.
- A robust and full local economic analysis of all proposed critical habitat designations in Fremont County should be conducted in cooperation with the County utilizing credible data.
- 8. Support cooperation between private landowners and federal agencies using Candidate Conservation Agreements with Assurances (CCAAs) to reduce the risk of listing a species under the ESA or as a species of concern.
- 9. Support the petition of the immediate delisting of a species when population or recovery plan objectives have been met.
- 10. Single-species management should be avoided in all federal planning efforts.
- 11. Support control of zoonotic and vector-borne diseases negatively impacting special status, candidate, or listed species before restricting other multiple uses that could be conflicting.
- 12. Support the continued use of existing valid permits and lease rights on lands with listed species wherever possible.
- 13. The use of endangered species and/or other federal mandates to curtail the ability of Fremont County residents to use water and other natural resources according to the County's historic custom and culture is not supported.
- 14. Federal agencies should continue using the U.S. Fish and Wildlife Service 2020 regulatory definition of critical habitat and only those habitats that currently or periodically contain the resources and conditions necessary to support one or more life processes of a species should be defined as habitat.
- 15. In conformance with the U.S. Fish and Wildlife Service (USFWS) 2020 critical habitat exclusion regulations, the USFWS should conduct a robust exclusion analysis of all proposed critical habitat designations in Fremont County.
- 16. In conducting the exclusion analysis, the U.S. Fish and Wildlife Service should acknowledge Fremont County's special expertise on all economic and non-biological impacts and give any findings or data submitted by the County involving such impacts deference.



- 17. Upon conducting an exclusion analysis, if the agency finds that the economic and non-biological impacts of designating certain critical habitat outweigh the biological benefit to the species, the U.S. Fish and Wildlife Service should immediately exclude such habitat from critical habitat designation.
- 18. In conformance with 2020 Migratory Bird Treaty Act (MBTA) regulations, only intentional "takings" of migratory birds should be considered a violation of the MBTA, and enforcement actions should only be against those who intentionally and unlawfully "take" a migratory bird.

#### **6.5 FISHERIES**

# 6.5.1 History, Custom and Culture

Fisheries support recreation and tourism in Fremont 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. The major fisheries in the County include cutthroat, brook, brown, golden, and rainbow trout, as well as smallmouth bass, walleye, and northern pike. Fremont County spans three river basins; Wind/Bighorn River Basin to



the north, the Platte River Basin covering a southern edge of the County, and the Green River Basin along the southwest corner. (Wyoming State Geologic Survey, 2020)

# **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.

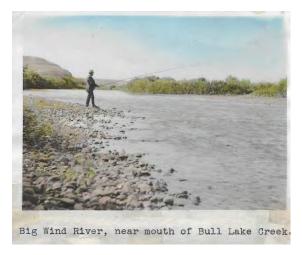
- Blue Ribbon (national importance) >600 pounds per mile
- Red Ribbon (statewide importance) 300 to 600 pounds per mile
- Yellow Ribbon (regional importance) 50 to 300 pounds per mile
- Green Ribbon (local importance) <50 pounds per mile

Most of the streams within Fremont County are classified as Yellow Ribbon streams. A section of the North Fork Popo Agie is classified as a Blue Ribbon. Sections of the Wind River (including two tributaries), Little Popo Agie River, and Big Popo Agie River are classified as Red Ribbon stretches.



Fremont County spans 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 (WTT). (MWH Americas et al., 2010)

Fremont County is partially located within the Platte River Basin subbasin known as 'Above Pathfinder Dam'. This subbasin is known for the many fisheries resources present, especially along the Miracle Mile, Kortes Reservoir, and Pathfinder Reservoir to the east of the County. This subbasin averaged 66,827 angler days/ year according to the 2006 Platte River Basin Plan. (WWDC, 2006)



The Green River Basin maintains many fishery resources and angling opportunities. Where the basin and Fremont County intersect, along the County's southwestern corner, most streams are classified as 'Yellow Ribbon'. (Western EcoSystems Technology, Inc., 2018)

Aquatic invasive species (AIS) can harm fisheries. AIS detected within Fremont County include New Zealand Mudsnail (Bighorn River and Lake Cameahwait near Boysen Reservoir, 2012 and 2015-2016), Brook Stickleback (Bridger Creek, 2012-2014), and Curly Pond Weed (Boysen Reservoir, 2013-

2015). 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  $\underline{\text{here}}^{50}$  (WGFD, 2020).

# **6.5.3 Fisheries Resource Management Objective:**

A. Fishery resources are managed for healthy and biodiverse fisheries that support recreation, tourism, and other multiple uses on federal lands within Fremont County in coordination with the County.

# **6.5.4 Fisheries Priority Statements:**

- 1. Management plans for fisheries should use independent scientific data, peer-reviewed science, and/or those data meeting the 'credible data' agency specifications to generate plans.
- 2. Management objectives for fisheries should be based on the carrying capacity of the habitat including all multiple use mandates on federal lands.
- 3. Support fisheries habitat monitoring efforts and refine available fisheries habitat data.
- 4. Fisheries should be expanded within Fremont County as appropriate.



### **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, human safety, and other agriculture operations. For these reasons, it is important to properly manage predators to ensure safe communities and stock, and healthy functioning ecosystems.

During the settlement of the western states, depredation was an issue across livestock operations. Predators were controlled on an individual basis until the early 1900s when stock growers began asking for government assistance. By the 1960s, the importance of proper management of predators became known (deCalesta, n.d.). The common public mindset began to shift to the control of predators threatening stock operations and communities, while allowing natural predator populations to exist (deCalesta, n.d.).

Fremont County residents from the earliest times have recognized the natural relationships between predators and their prey, and it has been their custom to use common sense to carry out actions to keep those relationships in balance. It has also been the custom of County residents to recognize when the impact of predators on the weaker and less competitive prey species in the county begins to have detrimental effects. It continues to be a custom for Fremont County citizens to use such methods as ATVs, snowmobiles, other ORV's, airplanes, helicopters, firearms, leg-hold traps, snares, and other outdoor gear and equipment to control predator populations to the extent allowable.

# **6.6.2** Resource Assessment and Legal Framework

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.). The Wyoming State Legislature established predator control statutes in Title 11, Chapter 6. Article 3 defines predatory animals within the state as any coyote, jackrabbit, porcupine, raccoon, red fox, skunk, or stray cat; and gray wolves except where they are designated as trophy game animals. The statutes provide for general provisions, district boards, and the Wyoming State Animal Damage Management Board. The district for the County is the Fremont County Predator Management District. Fremont County also maintains an appointed Predator Management Board.

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. The more common predatory animals in Fremont County and the surrounding area include mountain lion and black bear (game animals), bobcat (furbearer), birds of prey (variable classification per



species); and 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 Fremont County.

### 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 <a href="https://example.com/heres1">heres1</a>.

# **6.6.3 Predator Resource Management Objective:**

- A. Predator populations are managed to maintain healthy ecological levels, while prioritizing the reduction of livestock and wildlife depredation occurrences and protecting the health, welfare, and economic wellbeing of the citizens of Fremont County.
- B. Federal agencies coordinate with Fremont County in the determination of any impact of management of predator species.

# **6.6.4 Predator Priority Statements:**

- 1. Trapping, calling, aerial hunting, and other acceptable means of predator control are historic methods of controlling predatory animals on all lands and should be permitted as a management method.
- Support control of predatory animals to reduce property damage and to protect wildlife and protect the local economy and tax base, including the viability of the agriculture community.
- After desired population numbers for Endangered Species Act 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 manage the movement outside of their designated range.
- 4. Any plan for the management of a predator that has naturally, or through introduction or re-introduction, repopulated the County must provide for its control by any means when it travels from its designated range or becomes a threat to people, property, livestock, or other wildlife species.
- 5. 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.



- 6. Support selective predator control as a valid means of increasing the productivity of lands within Fremont County and as a valid method of attaining sustainability of the wildlife and domestic livestock populations.
- 7. 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. Only when predation is determined to not be the cause of decline should restrictions on the resource industries be considered prior to predator management.
- 8. Federal predator control should be scheduled to reduce conflict with Wyoming Game and Fish Department's hunting seasons.

#### **6.7 WILD HORSES AND ESTRAY LIVESTOCK**

# 6.7.1 History, Custom, and Culture

Wild horses have roamed the rangelands of Fremont County for many years. It is believed that some of the herds within the county descend from the New World Spanish horse breeds. While these horses are an icon of the west, it is critical to Fremont County health, safety, welfare, and economic viability that these horses are managed to appropriate numbers to maintain the health of the county's rangelands and ensure other multiple uses can occur.

Determinations of the wild horse ranges and locations within Fremont County have been made in accordance with the Wild-Free Roaming Horses and Burros Act. Fremont County has the most Herd Management Areas (HMAs) of any county in Wyoming, with nine HMAs having at least some portion falling within Fremont County. The abundance of wild horses over the appropriate management level within many of the HMAs over the years has led to concerns with other multiple uses on federal lands including livestock grazing and wildlife habitat.

## 6.7.2 Resource Assessment and Legal Framework

#### Wild-Free Roaming Horses and Burros Act

The Wild-Free Roaming Horses and Burros Act 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). When the WFRHBA was passed, the BLM's population survey methods indicated a population of 17,300 wild horses and 8,045 burros, as compared to the 2020 estimated populations of 79,568 horses and 15,546 burros With an additional 47,845 horses and burros in 'off-range' holding facilities as of August 2020. (BLM, n.d.-f)



Under 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 (AML) 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). The removal of wild horses from public rangelands is carried out to ensure rangeland health in accordance with land-use plans that are developed in an open, public process. These land-use plans are how the BLM carries out its core mission, which is to manage the land for multiple uses while protecting the land's resources. Livestock grazing on BLM-managed land has declined by about 29% (12.2 million Animal Unit Months (AUMs) to 8.7 million AUMs in the Fiscal Year 2019) since 1971 when the WFRHBA was passed. (BLM, n.d.-f)

Once the inventory occurs and the 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 appropriate management levels (AMLs)." 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]II 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 (10<sup>th</sup> Cir. 2016). The first determination is that overpopulation exists in a given area of public land. *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.* 

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 conservatively estimates the growth rate of the wild horse population to be 20 percent annually.

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. Other multiple-use grazers are proven to be better managed to protect the health of the rangeland resources than wild horses and burros. Livestock grazing is managed with stringent livestock numbers and limited time/season of grazing. Wildlife grazers are managed through hunting seasons and herd objectives. Wild horses are on the same range 365 days a year with numbers significantly higher than healthy rangelands can sustain but can be managed through gathers. However, 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 and negative impacts to other multiple uses and sustained yield as mandated by FLPMA. HMAs are not fenced, which also then allows horses to cause degradation on private and state lands too.

#### Herd Areas and Herd Management Areas

Herd Areas were designated in 1971 as places where wild horses and/or burros were found during the initial flights in 1971. Federal lands identified in 1971 but not managed for wild horses and burros are called Herd Areas (HAs). As additional surveys were done and data gathered, it was determined that some of these lands and animals were actually on private lands and/or were private animals. Areas with private animals that were 'claimed' during the claiming period were not carried forward as HAs. HAs were carried forward in land use plans and determinations were made as to whether or not to manage animals on these federal lands. Federal lands identified in 1971 that are managed for wild horses and burros are called Herd Management Areas (HMAs). In HMAs, specific laws and regulations pertaining to the management of wild horses and burros are applied.

After the WFRHBA of 1971 was enacted, there were thirteen HAs designated that have boundaries that lie within Fremont County. Those HAs are Arapaho Creek, Antelope Hills, Continental Peak, Copper Mountain, Crooks Mountain, Dishpan Butte, East Beaver, Gold Creek, Green Mountain, Muskrat Basin, Rock Creek Mountain, Stewart Creek/ Chain Lakes, and Triangle.

Wyoming BLM manages 16 wild horse herd management areas (HMAs) on nearly 5 million acres. The combined AML for all HMAs in the state is 3,725 animals. The BLM designates both Herd Areas (HAs) and HMAs. 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). 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.

T There are nine HMAs identified within Fremont County (BLM, n.d.-d.). These include the Antelope Hills HMA, Conant Creek HMA, Crooks Mountain HMA, Dishpan Butte HMA, Divide Basin HMA, Green Mountain HMA, Muskrat Basin HMA, Rock Creek HMA, and a small corner of the Stewart Creek HMA. Several of these HMAs are managed as the North Lander Complex (Dishpan Butte, Rock Creek, Conant Creek, and Muskrat Basin). The management of a complex makes accountability for management more difficult as there can become a gray area in AML.



The HMAs and HAs present in Fremont County that are managed for horses are shown and described further in Table 7 and Figure 21 below.

Table 7. Wyoming Herd Areas and Herd Management Areas managed for wild horses that fall within

Fremont County as of 2020. (BLM, 2020)

	Herd A	rea (HA)	Herd Management Area (HMA)				
Herd Area Name	BLM Acres	Total Acres	BLM Acres	Total Acres	Horse AML Range*	2020 Estimated Population	% of AML**
Antelope Hills	180,962	193,711	150,782	158,567	60-82	473	577%
Conant Creek			49,528	57,702	60-100	243	243%
Crooks Mountain	75,800	83,843	54,721	58,415	65-85	744	875%
Dishpan Butte	-	-	92,282	99,719	50-100	248	248%
Divide Basin	-	-	561,213	778,500	415-600	1,282	214%
Green Mountain	112,124	137,764	99,363	116,712	170-300	328	109%
Muskrat Basin	-	-	176,421	193,325	160-250	998	399%
Rock Creek	-	-	19,107	24,584	50-86	130	151%
Stewart Creek	215,105	247,553	157,500	167,797	125-175	475	271%
Total	583,991	662,871	1,360,917	1,655,321		4921	

<sup>\*</sup> High End AML is reported as the maximum number of animals sustainable on a yearlong basis.

#### **U.S. Forest Service**

There are no wild horse HAs or HMAs on USFS lands within the state of Wyoming.

#### **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 not 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. Wild horses within Fremont County are managed for a viable, healthy herd resulting in the thriving natural ecological balance (including the standards and guidelines for rangeland health) and multiple use as required by the Wild Horse and Burro Act in coordination with Fremont County.
- B. Herd Management Areas and Herd Areas are maintained in Fremont County and managed within the Appropriate Management Level.
- C. Private property is protected from destruction from wild and feral horses within Fremont County.



<sup>\*\*%</sup> of AML: If estimated population is above High AML, this value is the estimated population divided by the High AML (as a percentage of High AML). If estimated population is below Low AML, this value is the estimated population divided by the Low AML (as a percentage of Low AML). "Within AML" means that the estimate is between Low AML and High AML.

## **6.7.4 Wild Horse and Estray Livestock Priority Statements:**

- 1. Fremont County strongly opposes any proposal to establish new or expand Herd Management Areas or Herd Areas within the County.
- 2. All unauthorized feral horses (horses not assigned to herd units) are in trespass and must be removed from public lands immediately.
- 3. An inclusive Herd Management Plan must be developed for each herd.
- 4. Any Herd Management Plans must include provisions for periodic gathers of all horses in the unit to limit populations to meet Appropriate Management Levels.
- 5. The Bureau of Land Management should complete an inventory of wild horses at least every two years.
- 6. When a herd management area exceeds its appropriate management level, the Bureau of Land Management should take the appropriate action to decide that overpopulation exists in the herd management area and within 60 days of discovery, determine whether action is necessary to remove excess animals.
- 7. The Bureau of Land Management should perform a gather within 6-months of declaring that a gather is needed.
- 8. Wild horses assigned to herd units must be identified in coordination with Fremont County to ensure that feral, estray, or fugitive horses are not assimilated into wild horse herds on public lands.
- 9. Any equine animal released from private individuals, tribes, or neighboring lands onto public lands after 1971 shall be considered as estray and be removed.
- 10. Fremont County supports the continued use of long-term fertility control such as spaying of mares.
- 11. If livestock grazing animal unit months (AUMs) have been reduced due to excess wild horses, once excess horses are removed, livestock grazing AUMs should be reinstated as soon as resources recover.
- 12. When active use animal unit months (AUMs) are reduced in a grazing allotment due to drought or other resource condition, a proportional reduction of horses should also be implemented whenever there are any cattle and/or sheep AUM reductions.



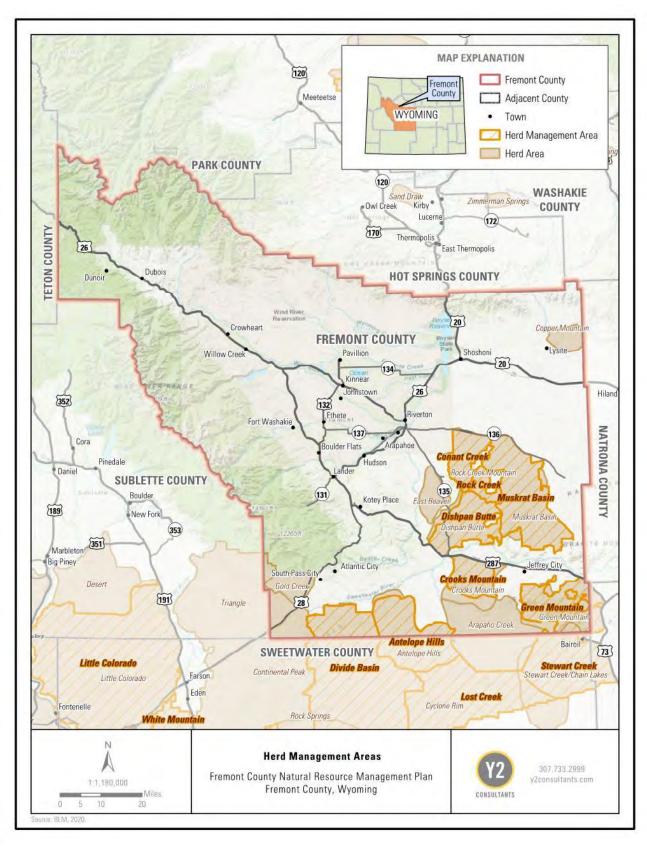


Figure 21. Herd Areas and Herd Management Areas in Fremont County.



## **CHAPTER 7: SOCIOECONOMICS**

#### 7.1 TOURISM AND RECREATION ON PUBLIC LANDS

## 7.1.1 History, Custom, and Culture

Fremont County citizens have a long history of using federally or State managed lands and waters for recreation. Hunting, fishing, trail riding, camping, and nature appreciation activities have their roots in the survival skills of early settlers. It has been the historic custom of county citizens to responsibly use horses, ATVs, snowmobiles, or other off-road vehicles (ORVs) to engage in recreational activities in the county. Cabins in many parts of the county have been in place since the early 1900s and winter access to them has customarily been by snowmobile since the 1950s.

Outdoor recreation today is no longer the primary mode of survival in Fremont County (except for commercial guides), however, it has deep cultural roots and is one reason many citizens choose to live here. Events such as the One-Shot Antelope Hunt, Boysen Fishing Derby, and Sled Dog Races are evidence of this strong outdoor recreation culture. The vast majority of lands in Fremont County are federally or State managed, and citizens have become accustomed to free and open access to these lands year-round.

Fremont County's economy relies in large part on federally or State managed lands and waters for recreation and outdoor education. Tourism, including sporting goods stores, outfitters, guides,



lodging tax revenues, meat processors, taxidermists, bed and breakfasts, motels, the Bighorn Sheep Center, dude ranches, off-road vehicle dealers, and air service are just some of the examples of the reliance so many Fremont County entities have on continued outdoor recreation. Many user groups such as hunters and anglers pay for the management of the resource through the purchase of licenses, equipment, and fees. Protecting user days and recreational opportunities for commercial and non-commercial recreationists is important for everyone.

# **7.1.2** Resource Assessment and Legal Framework

Fremont County is a recreational and tourism destination with a multitude of activities and areas to explore from high deserts to snowcapped mountain tops. Things to do in Fremont County include visiting the Wind River and Absaroka Mountains, backcountry and Nordic skiing, viewing wildlife such as the iconic bighorn sheep, bird watching, recreating at Boysen State Park, visiting the historic California Trail, camping, testing your luck at one of the casinos, dog sledding, driving tours, fat biking, fishing, gold panning and visiting ghost towns, traveling through to visit Grand Teton and Yellowstone National Parks, hiking, horseback riding and dude ranches, hunting, visiting the Mormon Trail, mountain and road biking, attending the Mountain Man Rendezvous,



visiting one of the many museums in the County, and many other activities. Visit the <u>Wind River</u> <u>Country website</u><sup>52</sup> to learn more about the different activities within Fremont County.

Tourism is important to the local economy. In 2019, tourism in Fremont County employed approximately 1,450 people, 6% of Fremont County's total private-industry employment). Travels spent approximately \$139.8 million in Fremont County which generated \$7.1 million in state and local taxes. In 2019, approximately 499,000 people overnighted in Fremont County. (Wyoming Office of Tourism, 2019) The Wind River Visitors Council is a Lodging Tax Board responsible for promoting the travel and tourism industry in Fremont County through expenditures of the Lodging Tax. The Council was formed by a Joint Powers Agreement in 1989 between the Fremont County Commissioners, the cities of Lander and Riverton, and the towns of Dubois, Shoshoni, and Hudson.

Hunting and fishing is a very important economic activity for Fremont County. Hunting occurs for species such as elk, mule deer, pronghorn, moose, black bear, mountain lion, sage-grouse, trapping of furbearers, other grouse species, and other small game. Fishing occurs on most if not all the rivers, streams, and lakes within the County in some form. Many public access areas have been developed on private lands, in partnership with the WGFD, to provide people the opportunity to fish the river or put their boats in to float and/or fish the river. Hunting and fishing are major economic drivers for Fremont County. In 2015, hunters and anglers spent a combined \$22.5 million (\$12.3 million from hunters and \$10.2 million from anglers). Hunters spent approximately 73,000 days hunting and anglers spent 120,000 angler days. (Wyoming Wildlife Federation, 2015)

There are many different trails in Fremont County for recreationists to explore. The most well-known of these trails is the Continental Divide National Scenic Trail (CDNST) which spans from the Mexico border to the Canadian border following the Continental Divide. Many recreationists hike segments of the trail on day trips or short backpacking trips. Some are more adventurous and attempt to hike the entire 3,100-mile trail. The CDNST crosses through South Pass, the Absaroka Mountain Range, and many other areas along the Wind River Range in Fremont County.

The use of OHVs is a common form of recreation across Fremont County. The use of OHVs increased 42% between 2001 and 2007 and has continued to increase since then (Cordell et al., 2008). The increased use of such vehicles can bring in additional recreational revenue to the County but can also incur additional costs to public land managers for trail maintenance and the County for increased emergency management services and potential search and rescue services, and road maintenance. Motorized vehicle (including OHVs, ATVs, and ORVs) use on public lands present unique challenges for management, including additional maintenance, increased fire potential, resource degradation, and trail user designations and management.

Camping is also a popular activity within Fremont County particularly during the spring, summer, and fall months. There are numerous campgrounds in Fremont County managed by a variety of federal and state agencies. Dispersed camping is also very popular. However, without any registration, it is difficult to quantify the benefits or impacts of dispersed camping in the county.



## 7.1.3 Tourism and Recreation Resource Management Objectives:

- A. Recreational resources within Fremont County are managed to promote access and availability to the public for both tourism and recreational uses, while also protecting other important industries including agriculture, mineral development, and tourism.
- B. Federal agencies coordinate with Fremont County when decisions could impact recreation or tourism within the County.

## 7.1.4 Tourism and Recreation Priority Statements:

- 1. Outdoor recreation and tourism should be supported as part of a balanced plan of state and local economic support and growth that balances the historical and cultural framework of multiple uses in Fremont County.
- 2. Federal agencies should make accessible, and consider creating, new recreational and tourism opportunities for the public in Fremont County.
- Federal agencies should coordinate with Fremont County and recreation users to promote responsible recreational use and respect of private property rights through signage, maps, trail markers, information kiosks, and other marketing tools that explain the historical and recreational significance of areas, sites, and roads within Fremont County.
- 4. Federal agencies should coordinate with Fremont County to promote year-round multiple recreational uses and tourism interests on federal lands that continue and enhance opportunities within the County.
- Fremont County supports improved accessibility, maintenance, and development of
  motorized and non-motorized trails to facilitate recreation and access to natural
  resources for residents and visitors, resulting in at least a no net loss of the open roads
  system in the County.
- Federal agencies should identify areas heavily used for dispersed camping and coordinate with Fremont County on how to best utilize and expand these resources where appropriate.

#### 7.2 LAW ENFORCEMENT AND EMERGENCY RESPONSE

## 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 Fremont County. The Fremont County citizens have relied on the elected County Sheriff since 1890 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.

Due to Fremont County traditionally relying on the Fremont County Sheriff as the top law enforcement officer and coordinator in the area, it is incumbent upon federal agencies to consult, cooperate, and fully coordinate with the County and Sheriff. Working through the authorities of the County will ensure that the safety of the citizens of Fremont County will be protected. Further, this coordination will assist federal agencies in their mission within Fremont County.



In addition to law enforcement, Fremont County has traditionally assumed a role in responding to natural disasters and emergency situations within the county. Throughout history, the citizens of Fremont County had dealt with various natural hazards. Photos, journal entries, and newspaper accounts from the early 1900's show that the residents of the area dealt with flooding, severe windstorms, harsh winter storms, forest fires, and earthquakes. Thus, the risk of natural disasters is always present in the area. In turn, a modern coordinated effort between Fremont County and the local management agencies in the area is vital for the health, safety, and welfare of the citizens and visitors of Fremont County. (Fremont County, n.d.-a)

## 7.2.2 Resource Assessment and Legal Framework

#### **Law Enforcement**

Law enforcement is critically important to the citizens of Fremont County. Law enforcement in the County includes actions on both public and private lands. Public lands within Fremont County are subject to law enforcement coordination when issues related to natural resource management and public lands arise, such as livestock theft or search and rescue operations. State law enforcement officials operating in Fremont County include Wyoming Highway Patrol, Wyoming Livestock Board, Wyoming Game and Fish Department Game Wardens, Wyoming Department of Criminal Investigation, and State Park Rangers. Federal law enforcement officials operating in Fremont County include BLM, USFWS, USFS, U.S. Marshals, and the EPA. As the use of public lands has increased, so has the need for law enforcement and coordination of federal law enforcement agents with the County Sheriff. The Fremont County Sheriff's Office has MOUs with both the BLM and USFS to clearly lay out the roles, responsibilities, and coordination of these federal agencies with Fremont County in law enforcement situations.

The Property Clause of the United States Constitution sets out the jurisdictional powers of state, local, and federal law enforcement officers on federal lands. Generally, federal lands have either proprietary or concurrent jurisdiction, meaning that local law enforcement is either the exclusive law enforcement agency in the area or that both local law enforcement and federal agency law enforcement share jurisdiction together to enforce laws on federal lands. Other federal lands, such as post offices or military bases have exclusive jurisdiction, and only the federal government may enforce federal laws within those areas (United States Constitution Article IV, Section 3, Clause 2). The Assimilative Crimes Act allows federal law enforcement agencies who lack an appropriate federal charge to use an appropriate state law in federal court whenever necessary (18 U.S.C. § 13).

FLPMA gives the BLM authority to retain BLM law enforcement officers who enforce federal law within BLM jurisdiction. Those officers have the authority to enforce federal laws but do not have the authority to enforce state laws without written authorization from the local law enforcement agency in charge. FLPMA and the BLM's regulations specifically give BLM law enforcement officers traditional police powers such as enforcing federal laws, carrying firearms, serving search warrants, making arrests with or without a warrant, and conducting searches of places or people with or without a warrant in accordance with applicable laws and seizing evidence. (FLPMA, 1976)



NFMA gives the USFS similar law enforcement authority as the BLM. USFS law enforcement officers also have the authority to enforce federal laws and regulations within the national forests, but not state laws. Many of the USFS law enforcement regulations can be found in 36 C.F.R. Part 261. Their primary responsibility is "the protection of natural resources, protection of USFS employees and the protection of visitors." (USFS, n.d.-c)

The Wyoming Livestock Board is responsible for the protection of livestock interests in the State from disease and theft. Seven members are appointed by the Governor and approved by the Senate for six-year terms. The State is divided into "appointment districts" as set by the Legislature. The Livestock Board Law Enforcement has several benefits that help with law enforcement regarding livestock in the County. These include:

- They are livestock law specialists;
- They can conduct casework across county lines;
- They collaborate with other states livestock investigators;
- They partner with county Sheriff Departments on cases; and
- They provide training for other state law enforcement agencies.

There are four game warden regions within Fremont County: Dubois, Lander, South Riverton, and North Riverton. Game wardens enforce State statutes and Wyoming Game and Fish Commission regulations covering big game, game birds, waterfowl, trophy game, furbearers, small game, fish, nongame species, and watercraft. Game wardens can assist local and federal law enforcement as needed particularly during times of emergency such as wildfire evacuation.

#### **Emergency Management**

Fremont County has an emergency management coordinator that coordinates all emergency management throughout the county whether it be natural disasters, fire, emergency services, or search and rescue.

#### **Natural Disasters**

When a natural disaster is declared, the federal government, led by the Federal Emergency Management Agency (FEMA), responds at the request of and in support of States, Tribes, Territories, Insular Areas, and local jurisdictions impacted by a disaster. FEMA coordinates the federal government's role in preparing for, preventing, mitigating the effects of, responding to, and recovering from natural disasters (Federal Register, n.d.).

Fremont County has a <u>Municipal Multi-Hazard Mitigation Plan</u><sup>53</sup> that assesses risk potential for different hazards including floods, landslides, drought, severe winter storms, wildland fire, earthquakes, and other natural disasters. The purpose of the plan is to promote sound public policy designed to protect citizens, critical facilities, infrastructure, private property, and the environment from multi-hazard events. The plan lays out several goals that cover the topics of protecting life and property, increasing public awareness, protecting natural systems, strengthening partnerships, efficiently communicating, and supporting emergency services. (Fremont County, n.d.-a)



#### Search and Rescue

Search and Rescue (SAR) is defined as the employment, coordination, and utilization of available resources and personnel in relieving distress, preserving life, and removing survivors from the site of a disaster, emergency, or hazard to safety in case of lost, stranded, entrapped, or injured people (Wyoming Homeland Security, 2019). The Wyoming Office of Homeland Security serves as the account manager for SAR programs and operates using guidance from W.S. 19, Chapter 13, Article 3 and the Wyoming Search and Rescue Council. The Wyoming Search and Rescue Council was established to assist Wyoming sheriffs, who are charged by state statute to conduct SAR operations. Council members are appointed by the governor.

The Fremont County SAR operates under the authority of the Fremont County Sheriff's Office to search for, provide aid, and rescue (or recover) persons who are lost, stranded, in distress, or in imminent danger.

#### <u>Fire</u>

Wildland fire within Fremont County is discussed in detail in this plan in Section 3.5 Wildfire Management, along with the details of the Fremont County Community Wildfire Protection Plan (FCWPP). The purpose of the FCWPP is to identify and prioritize wildfire at-risk communities based on fire risk and make recommendations for reducing the chances of unplanned fire threatening these areas. The Fremont County Municipal Multi-Hazard Mitigation Plan also discusses fire management within Fremont County and is further described above in the natural disasters section.

There are several fire districts within Fremont County. The Fremont County Fire Protection District provides emergency services to approximately 6,000 of Fremont County's 10,000 square miles. The District was formed in 1993 and brought together twelve rural and small-town fire departments into one organization. Fire Departments from the communities of Lysite, Lander Rural (providing response from two stations on the South and Northwest entrances of Lander), Missouri Valley, Kinnear, Crowheart, Pavillion, Midvale (with a second station in the Lost Wells Butte subdivision), Atlantic City, Hudson, North Portal, Fort Washakie, and Shoshoni all came together to form the District. The District maintains approximately 200 firefighters. The District is operated by an Administrative Board consisting of three Commissioners, who are elected by the patrons living within the District's boundaries. They serve four-year terms and hire the District Fire Chief who oversees the daily operations of the District. (Fremont County Fire Protection District, n.d.)

There are several other fire districts outside of the Fremont County Fire Protection District including districts in Dubois, Jeffery City, and Riverton.

# **7.2.3 Law Enforcement and Emergency Response Resource Management Objective:**

A. Public lands are managed to protect the health, safety, and welfare of Fremont County citizens and visitors in coordination with Fremont County and the Fremont County Sheriff's office.



## 7.2.4 Law Enforcement and Emergency Response Priority Statements:

- 1. All federal and state law enforcement and emergency management actions within Fremont County should be coordinated through the Fremont County Sheriff's office.
- 2. Federal agencies should coordinate with the Fremont County Emergency Management coordinator on all emergencies within the County.
- 3. All federal agencies should be aware of and make use of the Fremont County Municipal Multi-Hazard Mitigation Plan and any other applicable law enforcement or emergency management plan within the County.
- 4. The Fremont County Sheriff should be recognized as the primary law enforcement official in the County and shall be notified and given access immediately when there is a lifethreatening situation, criminal act, project structure failure, resource contamination, natural phenomenon, and/or cultural resource site disturbance on public lands.
- 5. Fremont County requires that federal agencies allow prompt, safe, and unfettered access to federal land for law enforcement and emergency services.
- 6. Federal agencies should support the development of communication technologies (i.e., cell phone towers, internet, etc.) on public lands within Fremont County to ensure communications are available during law enforcement and emergency events.
- 7. Fremont County shall be the lead for search and rescue efforts in accordance with Wyoming Statutes §§ 19-13-301, 19-13-302, and 19-13-304, and search and rescue efforts should be unimpeded on all lands within Fremont County.

## 7.3 CULTURAL, HISTORICAL, AND PALEONTOLOGICAL RESOURCES

# 7.3.1 History, Custom, and Culture

Human activity has occurred within Fremont County for approximately 12,000 years. Evidence of past human activity includes physical remains such as archeological sites and historic structures, traditions of Native Americans who occupied the area starting around 12,000 years ago. The land and its resources within the County have historically influenced how people live and settle in the area. Early Native Americans, fur trappers and traders , pioneers moving west, as well as miners and oil and gas workers each played an important part in shaping modern-day Fremont County. The historic Oregon, California, and Mormon trails that are throughout the County provide a significant cultural resource within the County including artifacts, headstones, and ruts left in the landscape.

# 7.3.2 Resource Assessment and Legal Framework

Fremont County's traditional lifestyle has centered on agricultural pursuits, recreational activities, and other resource-based industries for generations. Preservation of the remaining historic sites is important to maintain and protect the custom and culture of historic and present Fremont County inhabitants. Historic preservation of property enhances economic values and provides the basis for heritage tourism. The County is concerned with protecting historical resources that have intrinsic value based on their age, heritage, or other unquantifiable significance. These resources also highlight the unique character of the local setting and may contribute toward attracting businesses and tourism.



#### **Historic and Archeological Resources**

Many historical and cultural resources are protected by law. Two acts primarily protect these historic and archeological resources. The Archeological Resources Protection Act (ARPA) and the National Historic Preservation Act (NHPA).

The ARPA was passed in 1979 and provides regulations on the management of historic sites on federal land and the issuance of permits to excavate archeological discoveries.

The NHPA was passed in 1966 and authorizes the Secretary of the Interior to maintain and expand a National Register of Historic Places. This act established policies 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 National Register of Historic Places is managed by the National Park Service. The NHPA requires federal agencies 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 typically must 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 include properties or sites:

- 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
- 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 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 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, Indigenous tribes, applicants for federal assistance, and members of the public to 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 (4<sup>th</sup> 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, the federal agency, Fremont County Historic Preservation Commission, and any other involved parties. The ACHP may participate in controversial or precedent-setting situations.

In 2014 the NHPA 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, including the listing criteria for placement of sites in the National Historic Register and the requirements under Section 106.

Fremont County has an established Fremont County Historic Preservation Commission. The Commission was established by the Fremont County Commissioners in 1988. The mission is to promote the preservation of significant historic and prehistoric sites and structures to maintain a link with our Wyoming heritage. The goals of the Commission are to conduct resource surveys of structures and areas for the purpose of determination of those sites with architectural, historical, cultural, and/or archaeological significance. The duties assigned to the Commissioner include:

- Making proposals to the County Commissioners of certain criteria for the evaluation and designation of districts, buildings, structures, sites, or projects located in Fremont County.
- Acting as advisors on historic preservation to local government, residents, and property holders.



- Promoting historic preservation awareness through a wide range of activities such as walking tours, educational seminars, and published materials.
- Acting as the grassroots group to review any and all applications to the National Register of Historic Places in Fremont County. (Fremont County, n.d.-b)

Currently, Fremont County has 46 sites listed in the National Register (Wyoming SHPO, n.d.). The sites are listed in Table 8 and additional information about the site can be found <a href="https://example.com/here-54">here-54</a>.

Table 8. National Register Historic Sites located within Fremont County (list as of 2021).

Location			
Atlantic City			
Fremont County			
Fremont County			
Near Dubois			
Shoshoni			
Atlantic City			
Fremont County			
Near Dubois			
Fremont County			
Riverton			
Fort Washakie			
Fremont County			
Fremont County			
Fremont County			
Lander			
Lander			
Lander			
Fremont County			



Quien Sabe Ranch	Northeast of Shoshoni			
Riverton C&NW Railroad Depot*	Riverton			
Shoshone Episcopal Mission*	Fort Washakie			
South Pass City*	South Pass City			
South Pass National Historic Landmark*	Fremont County			
Split Rock Prehistoric Site	Fremont County			
Spring (Diamond A) Ranch	Near Dubois			
St. Michael's Mission*	Ethete			
T Cross Ranch*	Near Dubois			
Torrey Lake Historic District*	Near Dubois			
Torrey Lake Petroglyph District*	Near Dubois			
Twin Pines Lodge and Cabin Camp*	Dubois			
Union Pass*	West of Dubois			
Welty's General Store*	Dubois			
Wind River Agency Blockhouse	Wind River Indian Reservation			
Wind River Diversion Dam Bridge*	Wind River Indian Reservation			

<sup>\*</sup>Location is available to the public.

## Paleontological Resources

Paleontology is part of Fremont County's history and fossils, and other paleontological resources can be found in many places throughout the county. 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)

- Forest Service Fossils and Paleontology<sup>55</sup>
- Bureau of Reclamation Fossil Resources<sup>56</sup>
- U.S. Fish and Wildlife Service Historic Preservation<sup>57</sup>
- BLM Paleontology<sup>58</sup>
- National Park Service, Fossils and Paleontology<sup>59</sup>



# 7.3.3 Cultural, Historical, and Paleontological Resource Management Objectives:

- A. Cultural, historical, geological, and paleontological resources are preserved and protected for current and future public education and enjoyment in Fremont County without infringement upon property rights.
- B. Fremont County is coordinated with whenever there are significant cultural, historical, or paleontological artifacts found or designated on federal lands.

## 7.3.4 Cultural, Historical, and Paleontological Priority Statements:

- 1. When making management decisions, federal agencies should seek a balance between protecting cultural, historical, and paleontological resources and preserving private property rights and pre-existing uses within Fremont County.
- 2. All significant cultural, historical, or paleontological discoveries found on federal lands within Fremont County should remain in the County.
- 3. Public land agencies should promote cultural, historical, and paleontological resources located on public lands that have played a significant role in creating Fremont County with educational material, signage, and information kiosks where appropriate.
- 4. Federal agencies and the State Historic Preservation Office should coordinate management decisions regarding cultural resources with the Fremont County Historic Preservation Commission.
- 5. When developing management strategies to prevent potential adverse effects to significant and high-quality cultural resources, federal agencies should first attempt to achieve those objectives through avoidance and confidentiality of location before other protections are considered.
- 6. Fremont County encourages the maintenance of cultural resources and their physical attributes such as trails, cabins, livestock facilities, etc.
- 7. Federal agencies should preserve on public land in coordination with Fremont County remnants of historic economic drivers that show the history, custom, and culture of Fremont County such as trails, grazing allotments, cabins, and historic mining and oil and gas equipment.

#### 7.4 ECONOMIC VIABILITY

## 7.4.1 History, Custom, and Culture

Federally managed lands have significant impacts on Fremont County. The economic stability of Fremont 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. Making up approximately 15% of the County, the limited amount of private property greatly restricts the tax revenue of the County. That limited tax base must be protected, and the continued vitality of that tax base is dependent upon 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 Fremont 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.

## 7.4.2 Resource Assessment and Legal Framework

The economy of Fremont County relies on access to public lands and resources. In 2017, the total market value of livestock and crop sales were \$82,427,000. Livestock made up approximately 59% (\$49 million). There were 1,152 farms totaling approximately 1.2 million acres with the average farm size being 1,011 acres. Ninety-five percent of the farms in the County were family farms. Approximately 89,022 cattle and calves were in Fremont County, 23 hogs, 3,877 meat chickens/layers/pullets, and 16,589 sheep and lambs (these do not account for seasonal use of public land). Cattle and calves accounted for \$43 million of the total \$49 million in livestock sales. (USDA, National Agricultural Statistics Service, 2017)

Oil and gas along with mining services are also important to the economy of Fremont County. The total assessed valuation for Fremont County in the fiscal year 2014 was \$917.6 million, with more than 50% of the total valuation from mineral production. In terms of mineral production, crude oil represented approximately 61% of total mineral assessed valuation, and oil and gas facilities accounted for more than 93% of total county industrial property assessed valuation. However, due to the nature of the ebb and flow of the energy industry, this leads to many temporary jobs that fluctuate as energy prices fluctuate (University of Wyoming Extension et al., 2015).

Hunting, fishing, wildlife viewing, and outdoor recreation and education have always been a key part of Fremont County as described above in 6.1 Tourism and Recreation on Public Lands. Recent studies have shown that hunters, anglers, and wildlife viewers spend an estimated \$788 million in Wyoming, with the total economic importance up to \$1 billion in business activity. Wildlife-related activities account for an estimated 9,600 jobs in Wyoming with a total labor income of \$262 million. In Fremont County hunters and anglers contribute approximately \$10.2 million to Fremont County.

The economic data provided below is supplied by Headwaters Economics and was provided by the Wyoming State Administration and Information department. Economic data is constantly changing and updates to this section will be made as appropriately deemed by the County. The 2015 Socioeconomic Report for Fremont County can be found in Appendix D and will be updated as necessary by the County.



## **Summary of Population and Employment**

From 1970 to 2019, the population in Fremont County grew from 28,406 to 39,261 people, a 10% increase. In this same time period, employment grew from 11,914 to 23,440, a 97% increase, and personal income grew from \$610.9 million to \$1,848.1 million, a 203% increase. (Headwaters Economics, 2020)

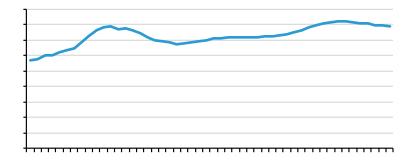


Figure 22. Population trends in Fremont County (Headwaters Economics, 2020).

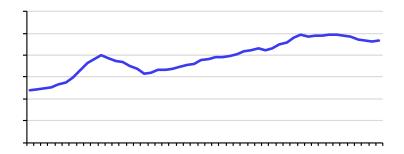


Figure 23. Employment trends in Fremont County (Headwaters Economics, 2020).

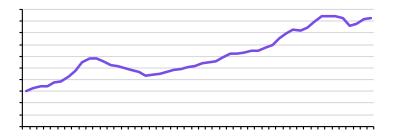


Figure 24. Personal income trends in Fremont County (Headwaters Economics, 2020)

## **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 three industry sectors that added the most new jobs were services (5,347 jobs), government (4,835 jobs), and retail trade (3,663 jobs). (Headwaters Economics, 2020)

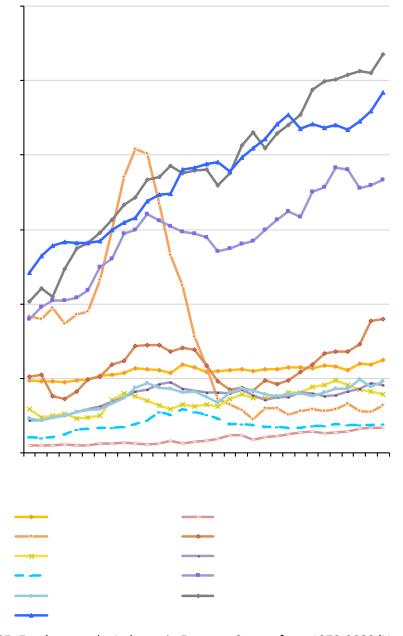


Figure 25. Employment by Industry in Fremont County from 1970-2000 (Headwaters Economics, 2020).

From 2001 and 2019, total employment increased from 21,155 jobs to 23,440 jobs. Non-services-related jobs (e.g., farming, mining, and construction) decreased 3% from 4,418 to 4,300 jobs. Service-related industries (e.g., transportation and warehousing, utilities, retail) increased 9% from 12,278 jobs to 13,403 jobs. Since 2001, the three industry sectors that added the most new jobs were government (816 new jobs), real estate and rental/leasing (558 new jobs), and finance and insurance (237 new jobs). (Headwaters Economics, 2020)



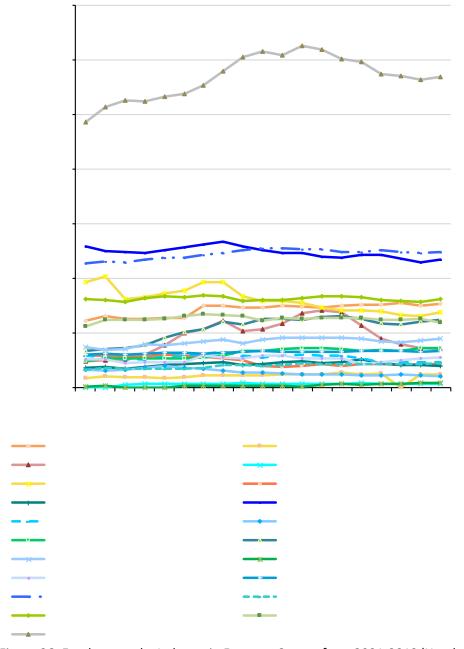


Figure 26. Employment by Industry in Fremont County from 2001-2019 (Headwaters Economics, 2020)

# **Earnings by Industry**

From 1970 to 2000, the three industry sectors that added the most earning to Fremont County were government (\$227.6 million), services (\$180.2 million), and retail trade (\$92.6 million). (Headwaters Economics, 2020)



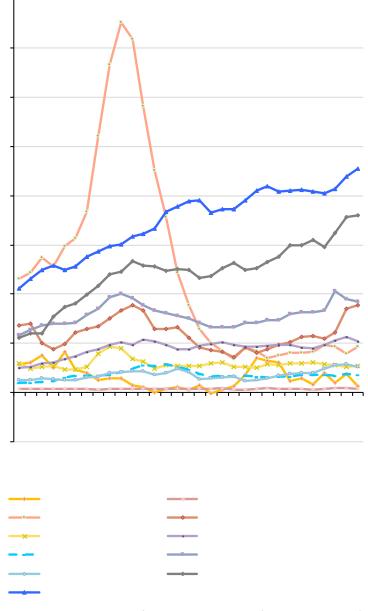


Figure 27. Earnings by Industry for Fremont County from 1970-2000 (Headwaters Economics, 2020).

From 2001 through 2019, earnings in non-services-related industries grew from \$161.4 million to \$190.0 million, an 18% increase. Earning in services-related industries grew from \$465.1 million to \$481.7 million, a 6% increase. In 2019, the three industry sectors with the largest earnings were government (\$389.6 million), health care and social assistance (\$119.4 million), and retail trade (\$70.3 million). (Headwaters Economics, 2020)



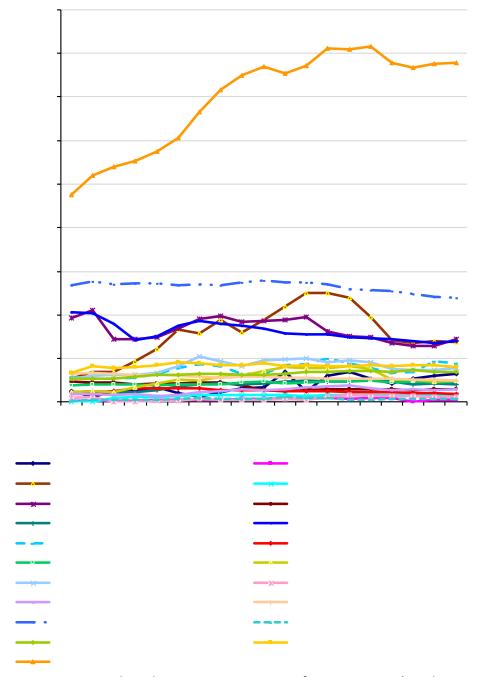


Figure 28. Earnings by Industry in Fremont County from 2001-2019 (Headwaters Economics, 2020).

## **Employment and Wages by Industry (2019)**

In 2019, 15,223 jobs had an average wage of \$42,181. Non-services-related jobs paid the highest wages (\$59,502) and services-related jobs paid the lowest (\$36,015). Trade, transportation, and utility jobs employed the largest number of people (8,098) and natural resources and mining employed the smallest (1,732 jobs). (Headwaters Economics, 2020)



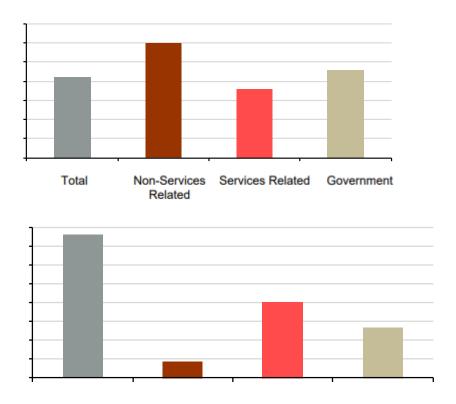


Figure 29. Wages and employment by industry for Fremont County in 2019 (Headwaters Economics, 2020).

## **Employment Changes During Recessions**

Five national recessions occurred between 1976 and 2010 and the most recent occurred in 2020. From 1976 to February of 2020, employment grew from 11,253 to 17,928 jobs, a 59% increase.

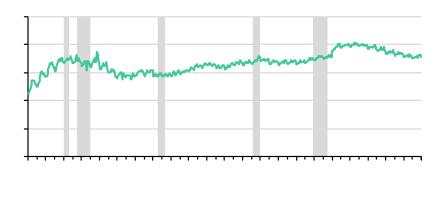


Figure 30. Employment trends during National Recessions for Fremont County (Headwaters Economics, 2020)



#### **Unemployment**

Since 1990, the annual unemployment rate has ranged from a low of 3% in 1979 to a high of 11.9% in 1986. The annual unemployed rates are depicted in Figure 30 below. In the most recent decade, the lowest monthly unemployment rate was May of 2019 at 3.8% and the highest monthly unemployment rate was April of 2020 at 9.3%. (Headwaters Economics, 2020)

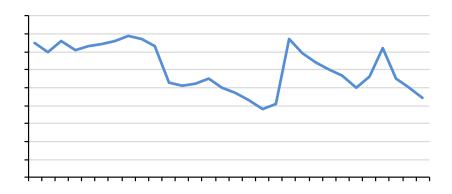


Figure 31. Average annual unemployment for Fremont County (Headwaters Economics, 2020)

#### 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. Fremont County received \$1,199,929 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 carry out community wildfire protection plans (P.L. 115-141 (2012)). The USFS provides a FAQ regarding SRS funding <a href="here">here</a> 60.

#### 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 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 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).

On July 16, 2020, the Council on Environmental Quality issued a final rule in the Federal Register finalizing major regulatory reforms to NEPA, including new rules clarifying 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. See id. This means that those projects that the government has a minor role in are not included. Further, minor actions that typically do not 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 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 EIS. The regulatory requirements for an EIS are more detailed and rigorous than the requirements for an EA. NEPA does not mandate particular 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.

The often lengthy delays in completing NEPA analysis can result in economic harm to the county and sometimes degradation to the natural resources. 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, 2020). CEQ regulations now 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. § 1501.10, 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) join 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)

# 7.4.3 Economic Viability Resource Management Objectives:

- A. Federal agencies evaluate and consider Fremont County's economic viability in all federal decisions.
- B. Fremont 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.

## 7.4.4 Economic Viability Priority Statements:

- Consultation and coordination with Fremont 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. Fremont County supports continued access to natural resources development/use on federal lands 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 Fremont County's economic base.



- 4. Federal 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. Federal agencies should implement the July 16, 2020, National Environmental Policy Act regulations which state that EIS's should be completed within 2 years from the issuance of a Notice of Intent and 150 pages or less excluding appendices and 1 year from the issuance of a Notice of Intent and 75 pages or less excluding appendices for Environmental Assessments.

## **CHAPTER 8: AGRICULTURE**

## **8.1 AGRICULTURAL PRODUCTION**

## 8.1.1 History, Custom, and Culture

The cultivation of crops first appeared in Fremont County by early semi-nomadic tribes. Later, vegetables were grown near Lander to sell to the miners at South Pass. Ranching, like crop cultivation, came to Fremont County early in its history. William Boyd brought in the first stock



of cattle in 1869 and William Tweed was the first to introduce sheep in 1870.

Food production is the primary use of agricultural lands within Fremont County, either as crops for human consumption or as crops for livestock forage. In addition to food production, agricultural lands contribute to Fremont 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 Fremont 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 Fremont County's economic and cultural heritage. Agricultural use is the dominant land use in the County. In comparison with Wyoming's other 22 counties in 2017, Fremont County ranks first in the production of fruits and nursery crops; second in hay and aquaculture production; fourth in poultry and vegetables products; and seventh in grains. Fremont County is ranked fifth in the total value of livestock and crops. (National Agricultural Statistics Service, 2017)



Agricultural production is an important part of the Fremont County economy providing both revenue and employment. In 2017 the market value of agriculture products in Fremont County totaled \$82,427,000. The 2017 market value for livestock products was \$48,984,000 and for crop products was \$33,443,000. In 2017 there were 1,165,154 acres of farmland within Fremont County. (National Agricultural Statistics Service, 2017)

Irrigated agricultural lands rely on the distribution of water from rivers and reservoirs through canals and pipelines. Some of these may reside on or pass through federal and state lands where permitting issues are triggered for maintenance and expansion. According to the U.S. Census of Agriculture for Fremont County had 135,890 acres of irrigated land, or 12% of the farmland in the County. This is the largest acres of any county in Wyoming. This makes the retention and proper management of water rights a priority for the citizens of Fremont County. The lawful application of water rights for agricultural purposes as mandated by the prior appropriation water doctrine is responsible for the bounty and diversity of Fremont County's economy (Census of Agriculture, 2012; National Agricultural Statistics Service, 2017).

## 8.1.3 Agricultural Production Resource Management Objectives:

- A. Agricultural production is Agricultural use of federal lands is a major component of multiple use of federal lands and is maintained as a viable and major component of the economy, custom, and culture of Fremont County.
- B. Federal actions affecting agriculture are to be made in coordination with Fremont County.

## **8.1.4** Agricultural Production Priority Statements:

- Support development of all plans and policies that directly or indirectly affect 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
  Fremont County.
- Federal agencies should quickly process permits on federal lands for the construction, maintenance, or expansion of irrigation distribution systems to private lands, and allow maintenance.
- 3. 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.
- 4. Any agricultural property damage or crop loss caused by an escaped prescribed burn, fire suppression efforts, or damage caused by government agency action, resulting in economic loss in Fremont County should be considered justification for economic compensation and restoration by the responsible party to the property owner at current market values.
- 5. 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 Fremont County area for over 50,000 years. The vegetation in Fremont 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, Native Americans obtained the horse and



became forage managers as well as wildlife managers, manipulating the vegetation and animal populations. Both historically and recently, the Native Americans and European settlers have relied on the grazing lands of Fremont 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.

Livestock grazing has been an important industry in Fremont County since early settlement. Livestock agriculture was first introduced to the county in the late 1860s. It continues to be a vital part of the custom and culture of Fremont County as well as a critical economic driver. The most efficient operations use a combination of private and federal lands. Historically, ranchers within Fremont County have grazed animals on open ranges and mountains on federal and state lands during summer months and moved the stock to private lands during the winter months where livestock can be fed hay from the irrigated pastures. Such operations are some of the most efficient, sustainable, and economically productive for producing livestock.

Permitted grazing on public lands is a critical piece of livestock operations in Fremont 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 operations and can lead to the development of private lands that provide important wildlife and open space benefits.



The contribution of the ranching industry to Fremont 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 Fremont County's economy and government, as well as preserving the culture and heritage of area residents. In 1997 the Bureau of Land Management authorized a total of 285,221 animal unit months (AUM) in Fremont County, although it should be noted that permitted use figures and actual use figures often vary significantly. There are 292 BLM and 45 USFS grazing allotments in Fremont County encompassing approximately 2.6 million acres and 539,969 acres respectively (Figure 32). 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 Fremont 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 Fremont 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.



Low-productivity rangelands make for a narrow profit margin. When agencies make a management decision without considering the economic impact on a rancher or a group of ranchers, operations and the community can be negatively impacted. When federal agencies reduce permitted livestock numbers for any operator, their entire operation is impacted. Reduction in livestock on public lands directly affects the economy, environment, and culture of Fremont County.

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, mitigation of 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 Fremont 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 (10<sup>th</sup> 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 the 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. Public lands within Fremont County maintain and enhance livestock grazing to retain its contribution to the local economy, customs, culture, and heritage as well as a secure national food supply.
- B. Fremont County is consulted and coordinated with regarding changes in livestock grazing within the County.

## **8.2.4 Livestock Grazing Priority Statements:**

- 1. Federal 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.
- 2. Any allotments that have been turned back to a federal agency that are meeting resource objectives should be reissued within 1-year.
- 3. 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.



- 4. Current livestock forage allocation on public lands should be maintained or enhanced.
- 5. 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-theground and scientific analysis.
- 6. Fremont County opposes the relinquishment, retirement, or transfer of permitted grazing animal unit months in favor of conservation, wildlife, wild horses, or other uses.
- 7. 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.
- 8. 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.
- 9. Fremont County opposes any agency efforts to restrict the development of rangeland improvements.
- 10. 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.
- 11. 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.
- 12. 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.
- 13. 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.
- 14. Livestock grazing animal unit months should not be reduced to compensate for or mitigate the impacts of wild horses, wildlife, and other causal factors.
- 15. 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.
- 16. 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.
- 17. Changes in the season of use or forage allocation must not be made without full and meaningful consultation with the permittee.
- 18. Historic stock trails should be designated in all applicable planning documents as valid access routes for the purpose of trailing livestock between grazing areas.



- 19. 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.
- 20. 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.



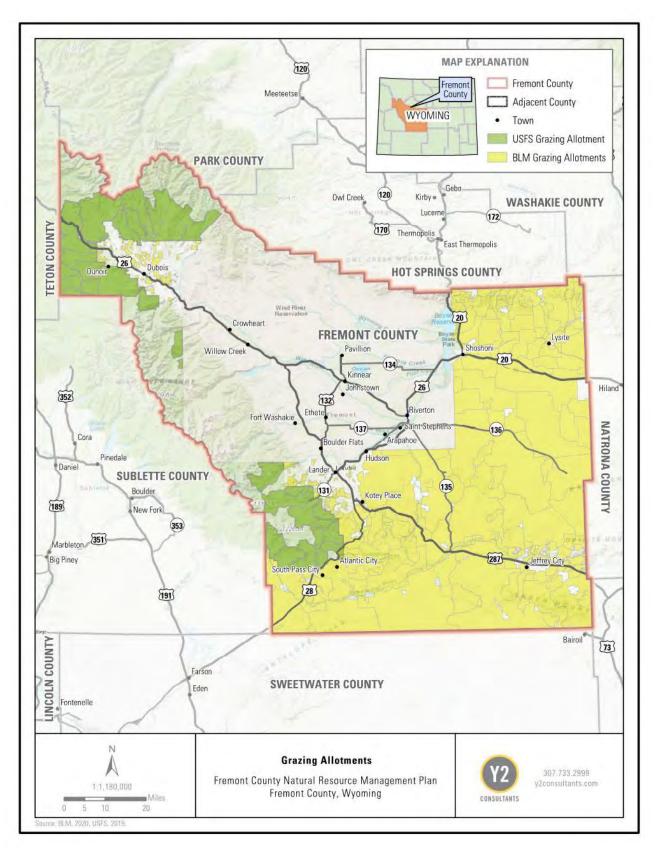


Figure 32. Fremont County BLM and USFS grazing allotments.



## **8.3 NOXIOUS AND INVASIVE WEEDS AND PESTS**

## 8.3.1 History, Custom, and Culture

Fremont 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. To do so, a fundamental goal of weed and pest management has been to hold each party responsible for the control of the weeds and pests on their land and assist various property owners and managers in the County with weed and pest management.

Fremont County, by and through the Fremont 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 Fremont 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.

Fremont County Weed and Pest (FCWP) also offer educational and consultation services to work with landowners to identify weeds and discuss treatment options. FCWP also offers cost-share programs and equipment rentals to County residents for weed management. (Fremont County, n.d.-c)

## 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 & 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)

Sufficient funding for a long-term strategy implementing weed and pest control tactics has been lacking for many federal and state agencies. Various s state and federal agencies support weed and pest management by utilizing funds from discretionary or general fund sources. This only secures short-term funding for specific weed and pest infestations that generally last no more than one season.

Fremont County is working to suppress and eradicate all federally designated, State of Wyoming designated, and Fremont County declared weeds and pests. The current federal noxious weeds list is maintained on the <u>USDA Plants Database</u><sup>61</sup> (NRCS, 2019). The State of Wyoming designated list can be found <u>here</u><sup>62</sup> and the Fremont County declared weeds and pests are presented below.

# Fremont County Declared Weeds and Pests (W.S. 11-5-102(a)(viii)) (list as of the writing of this plan in 2021)

- baby's breath (*Gypsophilia paniculata*)
- Cheatgrass (*Bromus tectorum*)
- dame's rocket (Hesperis matronalis
- puncturevine (*Tribulus terrestris*)
- sulphur cinquefoil (*Potentilla recta*)
- swainsonpea (Sphaerophysa salsula)
- tall buttercup (*Ranunculus acris*)
- mosquito (Culicidae family)

There are three cooperative weed management areas (CWMAs) within Fremont County that follow the same lines as the Conservation District boundaries within the County and are known



as the Dubois Crowheart Weed Management Area, Lower Wind River Weed Management Area, and the Popo Agie Weed Management Area. A CWMA is a partnership of federal, state, and local government agencies, tribes, and individuals, and various interested groups that managed invasive weeds in a defined area (North American Invasive Species Network, n.d.).

While not listed as a noxious species in the state due to its widespread distribution, cheatgrass (*Bromus tectorum*) is listed as a noxious weed in Fremont County and is a serious threat. Cheatgrass. Cheatgrass has reduced the productivity of native range plants and accelerated fire cycles within the County. While widespread control of the species is impossible all efforts should be made to minimize its potential to take new footholds and authorize the development of management programs and partnerships with federal, state, and local land managers.

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 Fremont County are housed under the United States Department of the Interior and the United States Department of 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).

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 and invasive species and pests are managed, in coordination with Fremont County and the Fremont County Weed and Pest District.

## 8.3.4 Noxious and Invasive Weeds and Pests Priority Statements:

- 1. Federal agencies should participate with cooperative weed and pest management areas to enhance cooperative weed and pest management efforts throughout Fremont County.
- Federal agencies should coordinate with Fremont County and other agencies to allow Weed and Pest Control District access across federal lands to access infestations on public and private lands and develop a good neighbor program that allows safe reporting of infestations on federal and private lands.
- 3. Prescribed grazing may be utilized to control invasive, noxious, and nuisance plant species. State and federal land managers should provide flexibility and work with permittees to achieve this as a control method when deemed appropriate for management of a target species.
- 4. Support cooperative weed and pest management areas for collaborative weed and pest management planning between agencies, local government, and private owners.
- 5. Federal monitoring efforts should be utilized to accurately identify the extent of noxious weed infestations, and the identification of dispersal mechanisms where possible.
- 6. Federal agencies should support the control, prevention, and management of aquatic nuisance species (i.e., zebra mussels, quagga mussels) and other invasive species on all waters within Fremont County.
- 7. Support the use of aerial devices (i.e., drones, fixed-wing, helicopters, and other aircraft) for weed monitoring and control where feasible.
- 8. Support herbicide use in wilderness areas and wilderness study areas.
- 9. Prevent the introduction and spread of noxious invasive species and pests within Fremont County.
- 10. Promote early detection and rapid response of new invasive species to Fremont County or regions of the county.



11. Federal agencies should be consistent with the definition of noxious weeds and pedefined by the Wyoming Department of Agriculture.	ests as



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## **DEFINITIONS**

**Adjudicated** - adjudged; tried and decided (American Dictionary of The English Language, Noah Webster 1828).

Ad valorem tax - a property tax based on the assessed value of the property (W.S. § 39—13-101).

**Affected party** - Fremont County and/or its individual citizen(s) who is, or will be, directly affected by an agency proposed action or the action itself.

**Allotment management plan (AMP)** - a document prepared in consultation with the lessees or permittees involved, which applies to livestock operations on the public lands or on lands within National Forests in the eleven contiguous Western States and which:

- 1) prescribes the manner in, and extent to, which livestock operations will be conducted in order to meet the multiple-use, sustained-yield, economic and other needs and objectives as determined for the lands by the Secretary concerned; and
- 2) describes the type, location, ownership, and general specifications for the range improvements to be installed and maintained on the lands to meet the livestock grazing and other objectives of land management; and
- 3) contains such other provisions relating to livestock grazing and other objectives found by the Secretary concerned to be consistent with the provisions of this Act and other applicable law (43 U.S.C 1702(k)).

**Animal Unit Month (AUM)** - the amount of forage necessary for the sustenance of one cow or its equivalent for a period of 1 month (43 CFR § 4100.0-5).

**Board** - the Fremont County Board of County Commissioners.

**Common Sense** - sound practical judgment; that degree of intelligence and reason, as exercised upon the relations of persons and things and the ordinary affairs of life which is possessed by the generality of mankind and which would suffice to direct the conduct and actions of the individual in a manner to agree with the behavior of ordinary persons (Black's Law Dictionary 5<sup>th</sup> Ed., p. 250).

**Consistency** - agreement or harmony of parts or features to one another or a whole: specifically: the ability to be asserted together without contradiction (Merriam-Webster's Collegiate Dictionary, Deluxe Edition (1998), p. 386).

**Consult** - the act of asking the advice or opinion of someone (Black's Law Dictionary Deluxe 7<sup>th</sup> ed., p. 311).



**Cooperate** - to act or work with another or others: act together (Merriam- Webster's Collegiate Dictionary, Deluxe Edition (1998), p. 399).

Cooperating agency – any federal, state, local, or tribal agency other than the lead federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment. The selection and responsibilities of a cooperating agency are described in 40 CFR § 1501.6. A State or local agency of similar qualifications or, when the effects are on a reservation, an Indian Tribe, may by agreement with the lead agency become a cooperating agency (40 CFR §1508.5).

**Coordinate** - equal, of the same rank, order, degree or importance; not subordinate (Black's Law Dictionary5<sup>th</sup> edition, p. 303).

**Credible data** - 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.

**Custom** - a practice that by its common adoption and long, unvarying habit come to have the force of law (Black's Law Dictionary, Deluxe 7<sup>th</sup> edition, 390).

**Culture** - the integrated pattern of human knowledge and behavior passed to succeeding generations; it is the customary beliefs, social forms, and material traits of a social group (Webster's 9<sup>th</sup> New Collegiate Dictionary, 1991, p. 314).

**Economic Viability** - the condition of a society, and/or community, to be economically capable of working, functioning, growing, developing, and prospering as an independent unit. It is a critical component of social and community stability. *See* S. Rept. No. 105.22; 30 Cong. Rec. 984 (1897); *The Use Book* at 17.

Federally or State managed lands - lands and natural resources that fall under federal or state management, including, but not limited to, the National Forest System (Reserves, National Forest, Wilderness, Wild and Scenic); Bureau of Land Management lands (including wilderness study areas and areas of critical concern); Bureau of Reclamation lands; State School lands and other State trust lands (including Game and Fish lands).

**Goal** - a desired condition as it relates to land use. Historical land use of the majority of the land in a region shall be a determining factor in defining goals (W.S. § 9-8-102).

**Local Government** - any county, city, or town, or any combination of the above as formed under the provisions of the Wyoming Joint Powers Act (W.S. § 9-8-102).

Land Use Planning - the process which guides the growth and development of an area and assures the best and wisest use of that area's resources now and in the future (W.S. § 9-8-102).



**Local Land Use Plan** - any written Statement of land use policies, goals, and objectives adopted by local governments. Such plans shall relate to an explanation of the method of implementation; however, these plans shall not require any provisions for zoning. Any local Land Use Plan may contain maps, graphs, charts, illustrations, or any other form of written or visual communication (W.S. 9-8-102).

**May** - the discretion or choice between two or more alternatives (Black's Law Dictionary 5<sup>th</sup> edition, p. 883).

Multiple use – the management of public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output (43 U.S.C. Code §1702 – Definitions).

**Natural right** - a right that is conceived as part of natural law and that is therefore thought to exist independently of rights created by government or society, such as the right to life, liberty, and property (Black's Law Dictionary Deluxe 7<sup>th</sup> ed., p. 1323).

**Objective** - a desired level of achievement or measurable step towards achievement of a goal (W.S. § 9-8-102).

**Permit** - a certificate evidencing permission; a license (Black's Law Dictionary Deluxe 7<sup>th</sup> ed., p. 1160).

Policy - the method that should be applied to obtain a desired goal (W.S. § 9-8-102).

**Private property** - property — protected from public appropriation — over which the owner has exclusive and absolute rights (Black's Law Dictionary Deluxe 7th ed., p. 1233).

**Property** - any external thing over which the rights of possession, use, and enjoyment are exercised (Black's Law Dictionary Deluxe 7<sup>th</sup> ed., p. 1232).

**Property right** - a right to specific property, whether tangible or intangible (Black's Law Dictionary Deluxe 7<sup>th</sup> ed., p. 1323).



**Public lands** - those lands managed by the federal or state government and agencies and not specifically reserved from the public.

**Public property** - nation, State or community owned property not restricted to any one individual's use or possession (Black's Law Dictionary Deluxe 7" ed., p. 1233).

**Resolution or County Resolution** - a formal expression of a decision by the Fremont County Board of County Commissioners which may carry the force and effect of law.

**Right** - the interest, claim, or ownership that one has in tangible or intangible property (Black's Law Dictionary Deluxe 7<sup>th</sup> ed., p. 1322).

**Riparian** - of, on, or relating to the banks of a natural course of water (American Heritage Dictionary 4<sup>th</sup> ed.).

Secretary - the Secretary of Agriculture and/or the Secretary of Interior, or their delegates.

**Shall** - Imperative or mandatory. It excludes the idea of discretion (Black's Law Dictionary, 5<sup>th</sup> edition, p. 1233). Shall indicates that the agency has "duty to; more is required to" do a specific action. *Blacks Law Dictionary* p. 689 (4<sup>th</sup> Pocket Ed. 2011). "Shall" further intimates an absence of discretion. *In re MN*, 1717 P.3d 1077 (Wyo. 2007). Therefore, shall is only appropriate whenever there is a specific law or regulation that removes all discretion from an agency's decision and the County may legally require the agency follow the certain policy or objective.

**Should** – denotes a guideline or recommendation whenever noncompliance with the specification is permissible (Blumenthal, 2021).

**Social Stability** - the condition of a society and/or community being firmly established, permanent and steadfast, not subject to insecurity, emotional illness, or outside disruption, and with the strength to stand and endure in its established way of life.

**Sustain(ed)** - to nourish and encourage; lend strength to (Black's Law Dictionary Deluxe 7<sup>th</sup> ed., p. 1322).

**Sustained yield** - the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use (43 U.S.C § 1702(h); 16 U.S.C. § 531(b)).



## **ACRONYMS**

ACEC - Areas of Critical Environmental Concern

ACHP – Advisory Council on Historic Preservation

AIS – Aquatic Invasive Species

AML – Appropriate Management Level

APHIS - Animal and Plant Health Inspection Service

ARPA - Archeological Resources Protection Act

ATV- All-Terrain Vehicle

**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

**BRB** - Bear River Basin

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

CDNST- Continental Divide National Scenic Trail

CEQ - Council on Environmental Quality

cfs - Cubic Feet per Second

CLG - Coalition of Local Governments

CMNWR - Cokeville Meadows National Wildlife Refuge

CTNF - Caribou-Targhee National Forest

CWA - Clean Water Act

CWD - Chronic Wasting Disease



DCCD- Dubois-Crowheart Conservation District

DDCT – Density and Disturbance Calculation Tool

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

FCCWPP - Fremont County Community Wildfire Protection Plan

FCLUP - Fremont County Land Use Plan

FCWP - Fremont County Weed and Pest

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

FRTA- Federal Roads and Trails Act

FSA - Farm Service Agency

GGRB - Greater Green River Basin



GHG - Greenhouse Gas

GLO - General Lands Office

**GPC - Groundwater Pollution Control** 

GRAIP - Geomorphic Road Analysis and Inventory Package

GRC - Greys River Collaborative

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 - Liquified 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

LWRCD - Lower Wind River Conservation District

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

NCPN - Northern Colorado Plateau Network

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

NISC - National Invasive Species Council

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

OBGA - Outcome-Based Grazing Authorization

OHV - Off-Highway Vehicle

OMB - Office of Management and Budget

OSLI - Office of State Lands and Investments

PACD - Popo Agie Conservation District

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

PRRIP - Platte River Recovery Implementation Program



PRB- Platte River Basin

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

SAR – Search and Rescue

SHPO - State Historic Preservation Officer

SIA - Specialist Interest Areas

SLIB - State Lands and Investment Board

**SNF- Shoshone National Forest** 

SRMA - Special Recreation Management Area

SRS- Secure Rural Schools Act

SSRB - Snake/Salt River Basin

SVAP - Stream Visual assessment Protocol

SWAP - State Wildlife Action Plan

TCP - Traditional Cultural Property

TGA – Taylor Grazing Act

TMDL - Total Maximum Daily Load

**UAA- Use Attainability Analysis** 

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

WBRB - Wind/Bighorn River Basin



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

WHMA - Wildlife habitat Management Area

WLB - Wyoming Livestock Board

WOGCC - Wyoming Oil and Gas Conservation Commission

WOTUS - Waters of the United States

WPLI - Wyoming Public Lands Initiative

WQD - Water Quality Division

WSA - Wilderness Study Area

WSEO - Wyoming State Engineers Office

WUI - Wildland Urban Interface

WWDC - Wyoming Water Development Commission

WWDO - Wyoming Water Development Office

WYDOT - Wyoming Department of Transportation



#### APPENDIX A. WEBSITE LINKS IN DOCUMENT

- 1) <a href="https://www.epa.gov/sites/default/files/2014-12/documents/wy-chapter1.pdf">https://www.epa.gov/sites/default/files/2014-12/documents/wy-chapter1.pdf</a>
- 2) <a href="https://law.justia.com/codes/wyoming/2010/Title11/chapter16.html">https://law.justia.com/codes/wyoming/2010/Title11/chapter16.html</a>
- 3) <a href="https://sites.google.com/view/popoagieconservationdistrict">https://sites.google.com/view/popoagieconservationdistrict</a>
- 4) <a href="https://duboiscrowheart.org/contact-us/">https://duboiscrowheart.org/contact-us/</a>
- 5) https://lowerwindrivercd.org/contact/
- 6) https://eplanning.blm.gov/public\_projects/lup/18602/49179/53514/ROD\_8-8-14.pdf
- 7) https://www.bia.gov/bia
- 8) https://www.stateforesters.org/districts/wyoming/
- 9) <a href="https://eplanning.blm.gov/public projects/lup/18602/57735/62476/Areas Critical Environmental Concern.pdf">https://eplanning.blm.gov/public projects/lup/18602/57735/62476/Areas Critical Environmental Concern.pdf</a>
- 10) https://www.fs.usda.gov/Internet/FSE DOCUMENTS/stelprdb5350226.pdf
- 11) <a href="https://cms9files.revize.com/fremontwy//Commission/Opportunities/WSA%20Recommendation%20B.pdf">https://cms9files.revize.com/fremontwy//Commission/Opportunities/WSA%20Recommendation%20B.pdf</a>
- 12) https://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/stelprdb5446024.pdf
- 13) https://eplanning.blm.gov/public projects/lup/18602/109984/134780/LFO ROD MAP 30 Visual Resource Management Classes.pdf
- 14) <a href="https://eplanning.blm.gov/public projects/lup/18602/57735/62504/Recreation Management Areas.pdf">https://eplanning.blm.gov/public projects/lup/18602/57735/62504/Recreation Management Areas.pdf</a>
- 15) <a href="https://www.fs.usda.gov/Internet/FSE">https://www.fs.usda.gov/Internet/FSE</a> DOCUMENTS/stelprd3837056.pdf
- 16) http://www.wyo-wcca.org/files/5614/6783/6940/FremontCounty WSAs SMALL.pdf
- 17) https://eplanning.blm.gov/public projects/lup/18602/109984/134795/LFO ROD MAP 45 Eligible and Suitable WSR Segments.pdf
- 18) https://www.forestsandrangelands.gov/strategy/
- 19) <a href="http://www.fremontcountywildfire.com/wp-content/uploads/2019/07/FCCWPP">http://www.fremontcountywildfire.com/wp-content/uploads/2019/07/FCCWPP</a> 2019 Update FINAL-Signed-Document.pdf
- 20) https://www.fs.usda.gov/working-with-us/secure-rural-schools
- 21) https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm
- 22) <a href="https://www.arcgis.com/apps/webappviewer/index.html?id=3f7ab99343c34bd3ac5ae6">https://www.arcgis.com/apps/webappviewer/index.html?id=3f7ab99343c34bd3ac5ae6</a> ac8c04d95a/
- 23) <a href="https://wgfd.wyo.gov/Fishing-and-Boating/Instream-Flow-XStream-Angler/Instream-Flow-Map">https://wgfd.wyo.gov/Fishing-and-Boating/Instream-Flow-XStream-Angler/Instream-Flow-Map</a>
- 24) https://wwdc.state.wy.us/surveys/surveys.html
- 25) <a href="https://www.federalregister.gov/documents/2015/06/29/2015-13435/clean-water-rule-definition-of-waters-of-the-united-states">https://www.federalregister.gov/documents/2015/06/29/2015-13435/clean-water-rule-definition-of-waters-of-the-united-states</a>
- 26) http://deg.wyoming.gov/wqd/
- 27) <a href="http://sgirt.webfactional.com/wqd/water-quality-assessment/resources/reports/">http://sgirt.webfactional.com/wqd/water-quality-assessment/resources/reports/</a>
- 28) https://www.archives.gov/federal-register/codification/executive-order/11988.html
- 29) <a href="https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/water-planning/upper-platte/north-platte-river-settlement/amendment-1953-pathfinder.pdf">https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/water-planning/upper-platte/north-platte-river-settlement/amendment-1953-pathfinder.pdf</a>



- 30) https://www.fws.gov/wetlands/data/mapper.html
- 31) https://www.archives.gov/federal-register/codification/executive-order/11990.html
- 32) <a href="https://wgfd.wyo.gov/WGFD/media/content/PDF/Habitat/SWAP/Wyoming-SGCN.pdf">https://wgfd.wyo.gov/WGFD/media/content/PDF/Habitat/SWAP/Wyoming-SGCN.pdf</a>
- 33) <a href="https://wgfd.wyo.gov/WGFD/media/content/PDF/Hunting/JCRS/JCR\_BGLANCOMP\_201">https://wgfd.wyo.gov/WGFD/media/content/PDF/Hunting/JCRS/JCR\_BGLANCOMP\_201</a> 8.pdf
- 34) https://wgfd.wyo.gov/WGFD/media/content/PDF/Hunting/JCRS/LanderJCR 2019.pdf
- 35) <a href="https://wgfd.wyo.gov/Habitat/Sage-Grouse-Management/Sage-Grouse-Local-Working-Groups">https://wgfd.wyo.gov/Habitat/Sage-Grouse-Management/Sage-Grouse-Local-Working-Groups</a>
- 36) <a href="https://wgfd.wyo.gov/WGFD/media/content/PDF/Habitat/Sage%20Grouse/Governor-Gordon-Greater-Sage-Grouse-EO-2019-3">https://wgfd.wyo.gov/WGFD/media/content/PDF/Habitat/Sage%20Grouse/Governor-Gordon-Greater-Sage-Grouse-EO-2019-3</a> August-21-2019 Final-Signed 2.pdf
- 37) <a href="https://onesteppe.wygisc.org/">https://onesteppe.wygisc.org/</a>
- 38) <a href="https://wgfd.wyo.gov/Public-Access/WHMA">https://wgfd.wyo.gov/Public-Access/WHMA</a>
- 39) https://drive.google.com/file/d/1TLuj1UGcRTjOvBklmP4qwjehSVmGjch8/view
- 40) https://wgfd.wyo.gov/WGFD/media/content/PDF/Vet%20Services/Approved-CWD-Mgmt-Plan-July-16-2020.pdf
- 41) <a href="https://wgfd.wyo.gov/Wildlife-in-Wyoming/More-Wildlife/Wildlife-Disease/CWD-in-Wyoming-Wildlife/CWD-Map">https://wgfd.wyo.gov/Wildlife-in-Wyoming/More-Wildlife/Wildlife-Disease/CWD-in-Wyoming-Wildlife/CWD-Map</a>
- 42) https://wgfd.wyo.gov/Wildlife-in-Wyoming/More-Wildlife/Wildlife-Disease/Brucellosis
- 43) https://www.blm.gov/policy/im-wy-2010-027
- 44) https://www.fs.usda.gov/detail/r2/landmanagement/?cid=stelprdb5390116
- 45) https://www.fs.usda.gov/Internet/FSE DOCUMENTS/stelprdb5370041.pdf
- 46) https://www.fs.usda.gov/Internet/FSE DOCUMENTS/stelprd3842886.pdf
- 47) https://ecos.fws.gov/ipac/location/2Y74VVJ5DRA3BOTIYKEP232DHY/resources
- 48) https://www.fs.usda.gov/Internet/FSE DOCUMENTS/stelprdb5379223.pdf
- 49) https://ecos.fws.gov/ipac/location/2Y74VVJ5DRA3BOTIYKEP232DHY/resources
- 50) <a href="https://wgfd.maps.arcgis.com/apps/webappviewer/index.html?id=935acbec194f4d428">https://wgfd.maps.arcgis.com/apps/webappviewer/index.html?id=935acbec194f4d428</a>
  <a href="mailto:23af3db59272409">23af3db59272409</a>
- 51) https://www.wyadmb.com/Predator%20Regs%20I.htm
- 52) https://windriver.org/things-to-do/
- 53) <a href="https://www.fremontcountywy.org/government/departments/emergency management/fremont county municipal multi hazard mitigation action plan.php#outer-192">https://www.fremontcountywy.org/government/departments/emergency management/fremont county municipal multi hazard mitigation action plan.php#outer-192</a>
- 54) https://wyoshpo.wyo.gov/index.php/nr-by-county-test/13-fremont-county
- 55) https://www.fs.usda.gov/science-technology/geology/paleontology
- 56) https://www.usbr.gov/cultural/fossil.html#:~:text=To%20date%2C%20Reclamation%20 has%20documented,have%20occurred%20on%20Reclamation%20land.
- 57) https://www.fws.gov/historicPreservation/crp/index.html
- 58) https://www.blm.gov/paleontology
- 59) https://www.nps.gov/subjects/fossils/fossil-protection.htm
- 60) https://www.fs.usda.gov/working-with-us/secure-rural-schools
- 61) https://plants.sc.egov.usda.gov/java/noxiousDriver
- 62) https://wyoweed.org/noxious-species/listed-species/state-designated-noxious-weeds/



## **APPENDIX B. STEERING COMMITTEE MEMBERS**

Committee Member	Affiliation
Michael Jones	Fremont County Commissioner
Doug Thompson	Steering Committee Chair
Gary Horton	Natural Resources
Reg Phillips	Rancher/Dubois Crowheart Conservation District
Jim Allen	Outfitter/Former State Legislature
Arlen Lancaster	The Nature Conservancy/Popo Agie Conservation District
Jason Wilson	Lucid Optics



# **APPENDIX C. PUBLIC COMMENTS RECEIVED**

Comment Received From	Comment Received	Response
Steve B.	Under the heading NRMP Development, 2nd paragraph, it suggests a 450-day comment period, I suspect it should be 45 days.	Comment addressed in document.
Steve B.	Under the heading Amending the NRMP, the 1st sentence indicates that the plan can be amended the same public process as described in the NRMP Development section. The 3rd sentence then says that it can be amended by presenting a request to the County Commissioners who can then amend without public participation. The two (2) sentences are inconsistent.	Language was updated for clarity.
Steve B.	Under the heading County Overview, the 5 <sup>th</sup> line down says 'Tribal lands represent nearly 26%t of the county's land area (1,579,491 acres) State' please remove the t after % and the _ after the .	Comment addressed in document.
Steve B.	On the next line it says, 'Nearly 85% of the'. Please add a space between % and of.	Comment addressed in document.
Steve B.	Under the 2 <sup>nd</sup> paragraph, the 3 <sup>rd</sup> to the last sentence should be broken out as a paragraph and could be re-written to better include the recreational aspects of the county as this section is designed to clearly describe the custom and culture of the county. I suggest: 'Fremont County is a recreation paradise. Big game hunting, sport fishing, hiking, backpacking, climbing and mountain bike riding are important recreational resources that bring people from across the world to Fremont County. Additionally, Fremont County is one of the main entrances to Yellowstone and Grand Teton National Parks.'	Comment addressed in document.
Steve B.	The first 2 sentences of the final paragraph on this page could be re-written with some punctuation changes to provide a bit clearer structure and to make it easier to read. I suggest the following: 'The total population of Fremont County according to 2019 U.S. Census data is 39,261 persons. Most of the population of Fremont County lives within	Comment addressed in document.



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•	
om and culture and the	
ces uses throughout the area.'	
and the fellows are 25	AA
	Map was updated to include all cities,
•	towns, and census related places.
•	
<del></del>	
•	
er maps throughout the	
	Comment addressed in document.
	Comment addressed in document.
	Comment addressed in document.
ve the word 'that' it is not	
<u> </u>	
•	Comment addressed in document.
place of women's suffrage.'	
	Comment addressed in document.
anging it to: 'It is interesting	
e very first formal action of	
hat day was the establishment	
nty roads, the 'Green River	
een River to North Fork, the	
from Lost Soldier to Lander	
om North Fork to Stinking	
not flow very well. I suggest	Comment addressed in document.
st sentence of the 2 <sup>nd</sup> to last	
en mover what is left of the	
graph to become the 2 <sup>nd</sup>	
en remove the final sentence	
it is not necessary. So, the	
ok like: 'Development	
or that portion of the project.	
	ans however, Fremont County erural population which has som and culture and the ces uses throughout the area.'  The property of cities, towns and census and the seems to me that the map are are those places listed on page are those places listed. I de LOST CABIN, MIDVALE, SWEETWATER CROSSING. We move DUNOIR AND KOTY this map with the ces could then be the base the maps throughout the concept of control of the policy of



	T	
	This project was known as the Riverton	
	Reclamation Project.	
	With the announcement that the	
	government was going to open a portion of	
	the Reservation to homesteading, the	
	Pioneer Townsite Company platted and laid	
	out the border town of Shoshoni. The official	
	opening of the date of the new town was	
	September of 1905 nearly one year before	
	the opening of the Ceded portion of the	
	Reservation. It is reported that the town	
	became an instant tent city with over two	
	thousand residents prior to the opening of	
	the Reservation.	
	In 1906'	
Tory T.	Page 41, Federal Highway Administration.	Policy statement was added that
,	The Wyoming Department of Transportation	Fremont County supports the
	(WYDOT) is planning major, long-term	establishment of wildlife crossings on
	highway improvements designed to	highways within the County.
	minimize the number of deer/vehicle	Ingriways within the country.
	collisions near Dubois. These improvements	
	will greatly involve highway-bordering	
	landowners, State lands, and the	
	Reservation. Yet there is no mention of this	
	proposal or how it would impact Fremont	
Steve B.	County in the FCLUP.  2 <sup>nd</sup> paragraph, 3 <sup>rd</sup> line says 'Recreational and	Comment addressed in document.
Steve B.		Comment addressed in document.
	subsistence hunting and recreational fishing,	
	trail riding, camping'. I think the 'and'	
	should be removed before recreational	
	fishing and replaced with a comma. So, it	
	should be 'Recreational and subsistence	
	hunting, recreational fishing, trail riding,	
C: D	camping'	
Steve B.	Under the heading 2.3 Fremont County	Comment addressed in document.
	Custom and Culture, line 2 of the 1 <sup>st</sup>	
	paragraph, says 'Early residents of the area	
	brought with them the cultures of their	
	former homelands. Indian, Spanish,	
	French'. This makes it sound like some of	
	the early settlers to Fremont County came	
	from India. I doubt that is the case so I think	
	this should be re-written as Fremont County	
	was in fact the 'homeland' of the Native	
	Americans who were living here when the	
	County was settled.	



Steve B.	Under heading 3.1.3 Conservation Districts,	Information was removed here as it is
	the 3 <sup>rd</sup> paragraph, last line beginning 'The	covered elsewhere in the document.
	Midvale Irrigation' can be removed as it	
	does not belong here and is covered quite	
	well elsewhere in the document.	
Steve B.	2 <sup>nd</sup> paragraph, 1 <sup>st</sup> line needs 2 commas.	Comment addressed in document.
	Between lands and, and between use	
	greatly. The 1 <sup>st</sup> line should be 'Federally9	
	managed lands, and natural resource	
	availability and use, greatly impact	
Cl B	Fremont.'	
Steve B.	2 <sup>nd</sup> paragraph line 3. Change the 1 <sup>st</sup> word	Comment addressed in document.
	from recreational and add a comma. It	
Steve B.	should say 'recreation, tourism'	Company and addressed in the surrection
Steve B.	3 <sup>rd</sup> paragraph 1 <sup>st</sup> line 2 <sup>nd</sup> to last word, 'for'	Comment addressed in document.
	can be removed 'policies that allow grazing'	
Steve B.	is appropriate.  3 <sup>rd</sup> paragraph 3 <sup>rd</sup> line, remove the comma	Comment addressed in document.
Steve b.	between values and provide and replace it	Comment addressed in document.
	with 'and'. The line should be 'scientific and	
	historical values and provides for abundant	
	wildlife and fish, and recreation on the	
	federally or state managed lands.'	
Steve B.	4 <sup>th</sup> paragraph, 2 <sup>nd</sup> line. Third from the last	Comment addressed in document.
	word 'the' between of and federally can be	
	removed. It should say 'The local economy,	
	as it relates to the use of federally or state-	
	managed lands'	
Steve B.	3 <sup>rd</sup> paragraph last line can be removed as it	Comment addressed in document.
	really is pretty subjective and does not add	
	to anything except to suggest that the	
	author is mad.	
Steve B.	4 <sup>th</sup> paragraph 3 <sup>rd</sup> line, the last word, 'will'	Comment addressed in document.
Steve B.	4 <sup>th</sup> paragraph 3 <sup>rd</sup> line, the last word, 'will' should be changed to 'may'. I doubt we can	Comment addressed in document.
Steve B.	4 <sup>th</sup> paragraph 3 <sup>rd</sup> line, the last word, 'will' should be changed to 'may'. I doubt we can say with certainty that an agency from far	Comment addressed in document.
Steve B.	4 <sup>th</sup> paragraph 3 <sup>rd</sup> line, the last word, 'will' should be changed to 'may'. I doubt we can say with certainty that an agency from far away will not take our interests into	Comment addressed in document.
	4 <sup>th</sup> paragraph 3 <sup>rd</sup> line, the last word, 'will' should be changed to 'may'. I doubt we can say with certainty that an agency from far away will not take our interests into consideration.	
Steve B. Steve B.	4 <sup>th</sup> paragraph 3 <sup>rd</sup> line, the last word, 'will' should be changed to 'may'. I doubt we can say with certainty that an agency from far away will not take our interests into consideration.  4 <sup>th</sup> paragraph last 2 lines. End the sentence	Language was left as written. It is
	4 <sup>th</sup> paragraph 3 <sup>rd</sup> line, the last word, 'will' should be changed to 'may'. I doubt we can say with certainty that an agency from far away will not take our interests into consideration.  4 <sup>th</sup> paragraph last 2 lines. End the sentence at governments and remove the remainder	Language was left as written. It is important that we reference the
Steve B.	4 <sup>th</sup> paragraph 3 <sup>rd</sup> line, the last word, 'will' should be changed to 'may'. I doubt we can say with certainty that an agency from far away will not take our interests into consideration.  4 <sup>th</sup> paragraph last 2 lines. End the sentence at governments and remove the remainder of the last 2 lines.	Language was left as written. It is important that we reference the federal system that we are in.
	4 <sup>th</sup> paragraph 3 <sup>rd</sup> line, the last word, 'will' should be changed to 'may'. I doubt we can say with certainty that an agency from far away will not take our interests into consideration.  4 <sup>th</sup> paragraph last 2 lines. End the sentence at governments and remove the remainder of the last 2 lines.  The last sentence of the 1 <sup>st</sup> paragraph	Language was left as written. It is important that we reference the federal system that we are in.  Information was moved into the
Steve B.	4 <sup>th</sup> paragraph 3 <sup>rd</sup> line, the last word, 'will' should be changed to 'may'. I doubt we can say with certainty that an agency from far away will not take our interests into consideration.  4 <sup>th</sup> paragraph last 2 lines. End the sentence at governments and remove the remainder of the last 2 lines.  The last sentence of the 1 <sup>st</sup> paragraph beginning with 'The loss of the use' should	Language was left as written. It is important that we reference the federal system that we are in.  Information was moved into the resource assessment and legal
Steve B.	4 <sup>th</sup> paragraph 3 <sup>rd</sup> line, the last word, 'will' should be changed to 'may'. I doubt we can say with certainty that an agency from far away will not take our interests into consideration.  4 <sup>th</sup> paragraph last 2 lines. End the sentence at governments and remove the remainder of the last 2 lines.  The last sentence of the 1 <sup>st</sup> paragraph beginning with 'The loss of the use' should be removed as it is not a History, Custom or	Language was left as written. It is important that we reference the federal system that we are in.  Information was moved into the
Steve B.	4 <sup>th</sup> paragraph 3 <sup>rd</sup> line, the last word, 'will' should be changed to 'may'. I doubt we can say with certainty that an agency from far away will not take our interests into consideration.  4 <sup>th</sup> paragraph last 2 lines. End the sentence at governments and remove the remainder of the last 2 lines.  The last sentence of the 1 <sup>st</sup> paragraph beginning with 'The loss of the use' should be removed as it is not a History, Custom or Culture. I'm sure we cover this under the	Language was left as written. It is important that we reference the federal system that we are in.  Information was moved into the resource assessment and legal
Steve B.	4 <sup>th</sup> paragraph 3 <sup>rd</sup> line, the last word, 'will' should be changed to 'may'. I doubt we can say with certainty that an agency from far away will not take our interests into consideration.  4 <sup>th</sup> paragraph last 2 lines. End the sentence at governments and remove the remainder of the last 2 lines.  The last sentence of the 1 <sup>st</sup> paragraph beginning with 'The loss of the use' should be removed as it is not a History, Custom or	Language was left as written. It is important that we reference the federal system that we are in.  Information was moved into the resource assessment and legal



		T
	remove the word 'and' between nation and	
	in. it should say 'across the nation in the	
	form'	
Steve B.	Under the 2 <sup>nd</sup> paragraph, 3 <sup>rd</sup> line, change the	Comment addressed in document.
	word 'towards' to 'toward'	
Steve B.	1 <sup>st</sup> complete paragraph following the bullet	Comment addressed in document.
	item, 2 <sup>nd</sup> line says 'programs to help secure	
	funding and has annually' I suggest adding	
	'done so' between has and annually so that	
	the sentence becomes 'programs to help	
	secure funding and has done so annually'	
Steve B.	Under the heading United States Forest	Comment addressed in document.
	Service, 1 <sup>st</sup> paragraph, line 3, the final 4	
	words are 'but not are limited' should be re-	
	written as 'but are not limited'	
Steve B.	Under 3.2.4 item 1, line 2 says 'No road or	Wildlife management objectives
	trail should be closed, including temporarily,	would not be a valid reason for road
	unless public safety or health demands its	closure as a public safety or health
	closing' I wonder if there isn't a valid	demand within the County.
	reason to opine here on whether wildlife	,
	management objectives might also be a	
	valid reason for road closure?	
Steve B.	Item 4 says 'Federal agencies should partner	Language in priority statement was
	with private landowners to enforce trespass	updated to clarify County's position.
	laws and prevent illegal crossings into	, , , ,
	private property' I wonder if we really	
	want to encourage Federal Law	
	Enforcement to have a significant presence	
	in Fremont County to police trespass	
	violations?	
Steve B.	Item 9, the 2 <sup>nd</sup> to last line says 'and access	The economically feasible access
	should be economically feasible with respect	portion of the priority statement was
	to the method and timing of such access.'	removed.
	What does 'economically feasible access	
	mean in this context?	
Steve B.	Under 3.3.2, the last line of the 1 <sup>st</sup> paragraph	Sentence was removed from
	is out of place here. Perhaps it can be	document as it was out of place.
	relocated to somewhere else in the	accument as it was out of place.
	document if it is deemed important.	
Steve B.	Under 3.3.1, 3 <sup>rd</sup> paragraph, 3 <sup>rd</sup> line says	Comment addressed in document.
	'expectations in the continued levels of	
	wilderness use and they will be protected.'	
	Is poorly phrased and should say	
	'expectations in the continued levels of	
	wilderness use and protection.'	
	אוועבוזוביט עטב מווע אוטנפננוטוו.	<u>l</u>



Steve B.	The BLM reference documents i.e. (BLM,	Citations were updated and fixed
	n.dc) used throughout this section of the	within the document and language
	document related to WSA's are not quite	was left as written for WSAs.
	clear. When you go to the index to find	
	these reference locations, it goes to a BLM	
	site that is no longer active, but you can go	
	to the BLM home site and type in the	
	various WSA's and find information. Perhaps	
	the references at the back of the document	
	should be updated to go to the correct site.	
	Additionally, the verbiage for each of the	
	WSA's seems to be a condensed version that	
	is not necessarily in keeping with the	
	verbiage on either the BLM site or within the	
	WYGISC site for the Public Lands Initiative.	
	Perhaps these can either copy the actual	
	language from either document or the	
	condensed version can be re-written to be	
	more inclusive of the total content of the	
	sites.	
Steve B.	Under the heading Wyoming Public Lands	A link was added to the document
Steve B.	Initiative. I have looked all over the web and	
		referring to the WPLI
	cannot find any reference material that	recommendations for the County.
	would suggest there was ever a final report.	
	Since each WSA has a comment about how	
	the WPLI seeks to change the WSA, it seems	
	like there should be a way to read the final	
	report to substantiate what is written.	
Steve B.	Under the heading Timber Industry Future,	Section was moved to recommended
	this entire section is out of place in the	place.
	History, Custom and Culture section. This	
	entire section should be moved under	
	section 3.4.2 on page 59 under the 2 <sup>nd</sup>	
	paragraph and prior to the heading Age	
	Class Diversity.	
Tory T.	The FCLUP states, "Fremont County does not	Reworded to discuss the small scale
	have a viable timber industry at this time."	versus large scale timbering
	This statement is not accurate. There has	operations.
	been a working lumber mill at the bottom of	
	Union Pass for many decades. There is a	
	separate and successful firewood operation	
	nearby. There is another new firewood	
	operation begging for workers. The John	
	Sharp sawmill has run for years. Several	
	logging operations are doing well by	
	delivering truckloads of firewood to locals. I	
	routinely see loaded log trucks heading for	
	Lander and Riverton. There are small-scale	
	Lander and inverton. There are small scale	<u> </u>



private sawmills here and there around Dubois. The Forest Service issues many firewood cutting permits annually to local residents. Steve B. Comment addressed in document. Under 3.4.1, 2nd paragraph. The flow of this paragraph is poor. I suggest the 2nd and 3rd lines be removed and the 4th line be moved to just after '1946' in the 3rd to last line. Then in the 3rd to last line, remove the sentence that begins with 'Between 1946 and ...'. So, the paragraph would instead say: 'Settlement of the Dubois area began in the 1880's and small sawmill operations were started in the upper Wind River Valley by 1890. Jim Seward who had been logging the Sheridan area began Fremont County's timber industry, the principal economic stimulus to the growth of Dubois in 1905. The main products of the industry were timbers and ties, used primarily in the construction of railroads. The ties were hand-hewn in the forest by lumberjacks called "tie-hacks", whose customs in that industry came with them from their former homelands. During spring runoff, when the river was full of water, the ties manufactured during the winter were transported downstream to processing yards. The fist tie drive from Dubois downstream to Riverton on the Big Wind River took place in 1915 and such tie drives were commonplace until 1946. Such timbering and tie driving activities, remnants of which are promoted in the County museums, provided a substantial County industry for a great many years.'



Tory T.	The FCLUP makes the argument that only timber harvesting can create openings that create browse for wildlife, provide a mosaic of vegetation, and trigger diversity among plants. These arguments are sometimes true, but the same arguments can be made for fire, either prescribed or wild. Following the wildfires of 1988, I remember riding through the Teton Wilderness in 1989 and was astounded by the knee-deep diversity of plants filled with happily browsing deer and elk.	Language was added to include other management practices like fire.
Steve B.	There are several duplicates here on this page. 2006 Purdy Fire, 2011 Nowlin and 2013 Fairfield.	Comment addressed in document.
Tory T.	Wildfire prevention and protection of private property through programs such as the Fremont County Community Wildfire Protection Plan, the National Cohesive Wildland Fire Management Strategy, the Firewise Program, and other fire protection programs should be a top priority of the FCLUP.	Objective was added to document highlighting the importance of utilizing these programs.
Steve B.	Perhaps semantics, but under 3.6.4 number 4., do we want to say lands 'must be made available'? Or would we want to say: Fremont County should be notified of and consulted with whenever lands are made available for disposal under the Recreation and Public Purposes Act.	Priority updated to "Fremont County should be notified of and consulted with whenever lands are made available for disposal."
Steve B.	In the last line of the 1 <sup>st</sup> paragraph, the word 'create' should be replaced with 'make up'	Comment addressed in document.
Steve B.	In the 1 <sup>st</sup> paragraph, I think the words 'mineral eligibility of' should be 'eligibility of mineral'.	Comment addressed in document.
Steve B.	in the 1 <sup>st</sup> paragraph, line 3, the 1 <sup>st</sup> 2 words should be 'may also', not also may.	Comment addressed in document.
Steve B.	In the 1 <sup>st</sup> paragraph, line 4, the 5 <sup>th</sup> word, before, should be 'prior to'.	Comment addressed in document.
Steve B.	In the 2 <sup>nd</sup> paragraph, line 2, I believe the correct term is 'taconite' not magnetite.	Mineral list from old plan and magnetite was in the original list.
Steve B.	Under item 8, My past experience as a mining professional in many dry areas of the county indicated that native plants are preferred and are the most likely to be successful in a xeric environment. Unless there is some scientific evidence to support	Language was updated for more broad use.



	seeding with Non-native species, I believe the last line under 8 should be removed.	
Steve B.	Under item 11. Does Fremont County support only Uranium mining?	Wording in priority statement was updated to include all new mineral development within the County.
Steve B.	Under the 1 <sup>st</sup> paragraph, line 8, 9 and 10. I think we can eliminate from (concludingthru in certificate) without impacting the section.	Language was removed from paragraph.
Steve B.	In the 3 <sup>rd</sup> paragraph, in the 6 <sup>th</sup> line, recreation, and development, and the 1 <sup>st</sup> and should be removed. That section should say 'recreation, development, and'.	Comment addressed in document.
Steve B.	Under the 3 <sup>rd</sup> paragraph, lines 3, 4 and 5, I think we can eliminate from (holdingthru value") without impacting the section.	Comment addressed in document.
Steve B.	Under the 3 <sup>rd</sup> paragraph, line 8, I think we can eliminate ("The PSA thru tort law")) without impacting the section.	Comment addressed in document.
Steve B.	Under 4.4.4, the last 2 lines in paragraph 3 are cumbersome. I suggest: These transmission lines are primarily used for local power transmission however the Interstate TransWest, Gateway East and Gateway South projects follow the Interstate 80 corridor just south of Fremont County.	Comment addressed in document.
Steve B.	Under 4.4.4.2, the 2 <sup>nd</sup> line is difficult to understand. I suggest it be rewritten to say 'It is crucial that these avenues for transmission can be maintained and developed within Fremont County.'	Comment addressed in document.
Steve B.	Under the 3 <sup>rd</sup> paragraph, eliminate the 1 <sup>st</sup> word as it is unnecessary.	Comment addressed in document.
Steve B.	The 3 <sup>rd</sup> and 4 <sup>th</sup> paragraphs should be rewritten with recent information. I think there is data from 2014 at least that can be used.	Information was updated where appropriate to 2014 statistics.
Steve B.	Under 4.4.1.4, item 5. As I expressed on Page 79. I do not believe the preponderance of scientific information in a xeric environment would support this.	Priority statement was left as is based on steering committee input.



Tory T.	At some point – whether in 10 years, 50 years, or 100 years – Fremont County will have an opportunity and need to help plan for renewable energy development on federal lands. The FCLUP seems to have little interest in planning for this or attracting renewable energy companies. You can be sure other states and counties are already planning with energy companies for future sites. Will Fremont County plan for renewable energy too late in the game?	The steering committee agrees and believes that the plan does address renewable energy potential in the County.
Steve B.	Item 6 seems to be counter to 4.5 Air Quality, 4.5.1 History Custom and Culture?	Steering committee reviewed and disagreed that this inconsistent and believes this is more of a jurisdictional concern rather than air quality.
Steve B.	Item 10. Would this impact county roads on public land? Would the County be liable?	Language was updated to say plans are encouraged rather than required.
Steve B.	Under 4.6.4, item 4. Does this still represent our thoughts if credible scientific evidence suggests it has an impact on public health, safety and welfare?	The scope of priority 4 narrowly focuses on regulation of greenhouse gas through climate change analysis and does not touch upon specific actions or impacts from particular projects.
Lander Climate Action Network	Section 4.6.6 is also unnecessary, as again, the IPCC has demonstrated that every ton of greenhouse gas emissions is changing the planet, and "Immediate, rapid and sustained reductions in greenhouse gas emissions are required to limit global temperature rise," which the Management Plan has already acknowledged could harm the local economy.	The steering committee disagrees that it is conflicting and are seeking to ensure restrictions on projects are tied to increased emissions.
Tory T.	As an irrigator with State water rights, I concur with much of Chapter Five. Water management is critical for Fremont County and its future. Glacial retreat in the Wind River Mountains has been studied and documented for over 30 years. This alarms me because my late summer irrigation water depends on mountain snowpack and glaciers. I have been working via the cost share program with Fremont County, the Dubois-Crowheart Conservation District, and the Federal Government for several decades in order to improve my irrigating program. I	The steering committee agrees with this and believes the document adequately discusses these issues and the opportunities to protect these resources.



<b>-</b>		<u></u>
	want to protect my water rights and well as	
	to conserve water. Fremont County could	
	step up its interest and help to other	
	irrigators to protect and improve their	
	irrigation water use. This would greatly help	
	local culture and custom.	
Tory T.	Water Overview Objectives and Priority	The scope of this document is to
	Statements spell out what the federal	address public lands management.
	government is supposed to do but mention	
	almost nothing about what Fremont County	
	is supposed to do. There is a problem with	
	the draft FCLUP when it comes to many of	
	the Chapter Five's objectives and	
	statements. Early in the draft plan the scope	
	and discussion are mainly focused on the	
	Forest Service and the Bureau of Land	
	Management. When dealing with water	
	problems, opportunities, laws, and such, the	
	discussion rightfully is about private land	
	and state laws. This is an example of my	
	earlier comment about the inadequate	
	scope of the FCLUP to only federal lands.	
Tory T.	Water quality is another area where federal,	This plan is focused on public land
1019 1.	state, county, private, and reservation lands	management.
	all need to work in harmony to address	management.
	problems and opportunities. For example,	
	the Cyanobacteria water quality problem	
	affecting the Wind River should not be only	
	looked upon as a federal land issue.	
Ctovo D		Comment addressed in document.
Steve B.	Under item 3, there is an errant 't' between	Comment addressed in document.
	should and support that should be removed.	
Steve B.	Under 5.1.2, the 2 <sup>nd</sup> 3 <sup>rd</sup> , 4 <sup>th</sup> and 5 <sup>th</sup>	Language was updated for clarity.
	paragraphs are poorly written. I suggest	
	replacing these with:	
	Fremont County spans three river basins;	
	the Wind/Bighorn River Basin to the north,	
	the Platte River Basin covering a southern	
	band of the County and the Green River	
	Basin along the far southwest corner.	
	(Wyoming State Geologic Survey, 2020).	
	Refer below for the map of the watersheds	
	in Fremont County (Figure 12).	
	Surface water supplies about 99% of the	
	total off-stream use in Fremont County.	
	Both the Wind River and Absoroka	
	mountains contribute water to Fremont	
	1	I .



	County. Snowpack in the Wind River mountains generates approximately 1.2 million acre-feet of water per year and directly contributes to the economy of the County. (MWH Americas et al., 2010).  Irrigation is the largest off- stream use of surface water in Fremont County and helps provide a delayed return of water to the streams, creating instream flows in late summer when the streams would have otherwise been dry without the irrigation return flows.  Groundwater is largely used for public supply. Total groundwater use in 1990 was 5.9 million gallons per day (USGS Water-Resources Investigations Report 95-1095).	
	Groundwater supplies vary greatly within the County in both quality and quantity.  Many times, adequate quantities are only available at great depth.	
	Adequate water supplies have affected the historical settlement of Fremont County and will continue to affect future settlement. The health of Fremont County's watersheds directly affects the current and future availability of quality water resources, water-dependent natural resources and the ability of watershed management to adapt to climate variability. A successful management strategy for Fremont County's watersheds must consider how the various watershed components and uses interrelate and influence each other.	
Steve B.	On Page 93 under Climate, the last paragraph shows 'Gannett Peak to 8' and then says most of 'the County receives between 7 and 14'. This should be consistent at 7 or 8, not both.	Language was left as written in document due to variance across the County.
Steve B.	Under 5.2.2, in the last paragraph, there is a citation (Wyo. Stat. 413-101) that should be moved to the correct location following the previous sentence. It should be 'Beneficial use shall be the basis, the measure, and limit of the right to always use water (Wyo. Stat. 41-3-101).'	Citation was left as written in document.



Steve B.	Under 5.3.2, the 2nd paragraph, the first 4 lines are an almost exact copy of what is stated on page 94 and should be removed as redundant.	Information was left as written as it is in two different sections of the document which may be used independently.
Steve B.	Under 5.5.1, the 1 <sup>st</sup> line, the word 'its' should be inserted between of and residents at the end of the sentence so it would say 'Water quality across Fremont County is important to the health and wellbeing of its residents'	Comment addressed in document.
Steve B.	Under 5.5.1, at the end of the paragraph is a citation (Plafcan et al.,1995). I took the time to read this report and cannot really find where the information provided in the paragraph or line preceding it is contained in the reference. Perhaps a data check here is in order.	Source document is correct, and information was summarized from the report.
Steve B.	Under Subdivision Review, from line 10 on, is generally incorrect for Fremont County and must be re-written. Here is my suggestion on what line 9 on should say: 'development. The review is also an educational tool for land developers and future homeowners. According to statute 18-5-306(b) a subdivision review should include soils suitability, erosion control, sedimentation and flooding problems.'	Comment addressed in document.
Steve B.	Under 5.7.1, the 2 <sup>nd</sup> paragraph, the 4 <sup>th</sup> thru 6 <sup>th</sup> lines can be removed as they pretty well copy what has been described in section 2.2. So, remove from the sentence starting with 'Many rendezvous, and ending with Jackson Hole.'	Information was left in this section as it is independent from section 2.2.
Steve B.	Under 5. 7.1, the 2 <sup>nd</sup> paragraph, the last line can be removed as it is spelled out quite will already in section 3.4. So remove from 'The firs tie to the end of the page ending in WWDC,2006)'.	Comment addressed in document.
Steve B.	Under Pop Agie River, 3 <sup>rd</sup> line, after 'Baldwin' we should include 'Squaw Creek' to the list.	Comment addressed in document.
Steve B.	Under 6.5.2, 2 <sup>nd</sup> paragraph, 2 <sup>nd</sup> line should be changed to 'the North Fork Popo Agie is'	Comment addressed in document.



Steve B.	Under 6.6.1 it says 'However, predators have negative impacts on livestock operations, developing communities, and other agriculture operations.' Do we have some historic reference to indicate that predators have threatened communities in Fremont County? If not, this should be removed.	Developing communities was taken out of language and human safety was added.
Steve B.	Under 6.7.1, 2 <sup>nd</sup> paragraph, 3 <sup>rd</sup> line the word 'have' should be changed to 'having'.	Comment addressed in document.
Steve B.	Under 6.7.1, 2 <sup>nd</sup> paragraph, 4 <sup>th</sup> line change 'portions' to 'portion', remove the word 'with' and change the word 'abundance' to 'preponderance'.	Comment addressed in document.
Steve B.	Under 6.7.2, the last line on the page seems to be out of place. Why is this here? I believe it should be removed.	Language was left as written as it is important to note that HMAs are not fenced and therefore can cause horses to roam onto private lands.
Steve B.	Further down in this paragraph it references the Leopold Report generally indicating that the report suggests predator control is important while the report more generally indicates that 'not controlling predators' is important for wildlife management. I think we need to look this section over for correctness.	Reworded sentence for clarity.
Steve B.	In the 4 <sup>th</sup> paragraph, the 1 <sup>st</sup> line, I think this could be re-worded to say 'There are nine HMA's indemnified within Fremont County (BLM, n.dd).	Comments addressed in document.
Steve B.	The 1 <sup>st</sup> 2 paragraphs are a rehash of what is said on page 146. I suggest we remove the 1 <sup>st</sup> 2 paragraphs as they do not provide any additional information.	Language was left as written as the steering committee felt it was better to have the information presented as is.
Steve B.	Under Herd Areas and Herd Management Areas, the 2 <sup>nd</sup> paragraph describes historic information that is then re-described in the 4 <sup>th</sup> paragraph. I think we can remove the 2 <sup>nd</sup> paragraph without impacting the significance of the topic.	Information left as written as the second paragraph describes Herd Areas and the fourth paragraph describes Herd Management Areas which are different.
Tory T.	Wild Horses and Estray Livestock. The FCLUP does a good job of defining the history and current management of wild horses. The FCLUP should also include a discussion of laws which currently prohibit but would allow in the future of the removal and slaughter for processing of wild horses and	The steering committee discussed, and the plan is focused on the impacts and management of wild horses.



	burros using humane and best management practices.	
Steve B.	Under 8.3.1, in the 1 <sup>st</sup> paragraph, the 2 <sup>nd</sup> line is difficult to follow. I suggest re-writing it to say: 'To do so, a fundamental goal of weed and pest management has been to hold each property owner or manager in the County responsible for the control of weeks and pests on their land and to offer assistance to property owners where necessary.'	Comments addressed in document.
Tory T.	I want to point out at this point of my FCLUP comments the good work both the Fremont County Weed and Pest District and the Dubois-Crowheart Conservation District have done through the years. Both have been a pleasure to work with in helping me be a better farmer. Many new Fremont County residents who have moved into our county would not know knapweed from carrots. This is another area where a comprehensive FCLUP and educational program could help landowners be better stewards of their property.	Language was added into the plan that discussed the educational programs.
Popo Agie Conservation District	We recommend including the acronym after the districts, which are used in the next paragraph, and recommend striking the referenced towns and cities because the conservation districts serve many communities within their boundaries, i.e., "Fremont County includes three Conservation Districts: Popo Agie Conservation Districts: Popo Agie Conservation District (PACD) in Lander, the Dubois-Crowheart Conservation District (DCCD) in Dubois, and the Lower Wind River Conservation District (LWRCD) in Riverton."	Comment addressed in document.
Popo Agie Conservation District	Jeffery City should be spelled Jeffrey City.	Comment addressed in document.
Popo Agie Conservation District	Replace "operation" with "operate", i.e., The Midvale Irrigation District along with two privately	Comment addressed in document.



Lander Climate Action Network	owned irrigation districts (LeClair and Riverton Valley) operate within LWRCD (DCCD, 2021; LWRCD, 2021; PACD, 2021).  Additionally, Section 4.4.1, Oil and Gas Resource Management Objectives, is incongruent with Section 4.6.1, as encouraging extraction of oil and gas within the County will lead to increased climate change which has "the potential to	The steering committee considered this and disagreed that this is incongruent with section 4.61. Extraction of oil and gas does not necessarily lead to an increase in climate change. There are
	drastically affect agriculture and the economy of Fremont County."	opportunities and technologies to sequester and capture greenhouse gases associated with fossil fuels.
Lander Climate Action Network	Part B's objective that "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" is incongruent with section 4.6.1's statements that "Climate change, including increased temperatures, reduced precipitation, and changes in airflow have the potential to drastically affect agriculture and the economy of Fremont County. Increased occurrence of severe fires over the past decade has led to reduced air quality and various health issues across Wyoming. Fremont County is committed to preserving the health of its citizens and its economy."	The steering committee disagrees that it is incongruent but made edits to objective to make it clearer.
Lander Climate Action Network	Section 4.6.4, Climate Change Priority Statements, are also at odds with section 4.6.1, and with the science in the IPCC AR6 report. Section 4.6.4.1 and 4.6.4.2 are unnecessary, as the science of climate change, including the impacts of each ton of additional greenhouse gas emissions, is very well understood and publicly documented.	The steering committee disagrees, our priorities are not questioning the science but the connection between a decision and climate change and we need the agencies to demonstrate the connection prior to making the decision.



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Lander	Additionally, because the IPCC has clearly	The steering committee disagrees,
Climate	shown that all emissions of greenhouse gas	our priorities are not questioning the
Action	will lead to increased global warming and to	science but the connection between
Network	additional extreme weather, which the	a decision and climate change and we
	management plan has already stated will	need the agencies to demonstrate
	affect the agriculture and economy of	the connection prior to making the
	Fremont County, it is contradictory	decision.
	for Section 4.6.4.4 to state that	
	"management decisions that are proposed	
	primarily to regulate greenhouse gases	
	through climate change analysis that could	
	harm the local economy are not supported."	
	Management decisions that prevent climate	
	change from harming the local economy	
	should be supported.	
Popo Agie	Strike "t", 3. Federal agencies should	Comment addressed in document.
Conservation	support policies to improve groundwater	
District	health for	
	consumptive use.	
Popo Agie	In Table 3. Wind-Bighorn Basin reservoirs	Comment addressed in document.
Conservation	within Fremont County with more than 500	
District	acre-feet permitted storage capacity (MWH	
	Americas et al., 2010), Enterprise Reservoir	
	should be renamed Frye Lake.	
Popo Agie	Correct spelling for Categorical.	Comment addressed in document.
Conservation		
District		
Popo Agie	We recommend mentioning harmful	Comment addressed in document.
Conservation	cyanobacterial blooms (HCBs) in the	
District	impaired waters section as lakes and	
	reservoirs in Fremont County have	
	experienced HCBs.	
Popo Agie	We recommend paragraph 13 include	Comment addressed in document.
Conservation	references to the state statute that address	
District	credible data (Wyoming State Statute§ 35-	
	11-103 (c)(xix) and prescribed in Chapter 1,	
	Section 35 of the Wyoming Water Quality	
	Rules).	
Popo Agie	Correct the description of the Popo Agie	Comment addressed in document.
Conservation	River, i.e., The Popo Agie River joins the	
District	Little Popo Agie River near Hudson before	
	the river's confluence with the Little Wind	
	River near Arapahoe.	
Popo Agie	Fig.13-We recommend labels on the map be	Comment addressed in document.
Conservation	changed to reflect the following: Middle	
District	Fork Little Wind River should be the South	
	Fork of the Little Wind River. North Popo	



Tory T.	Agie River should be the North Fork of the Popo Agie River. Middle Popo Agie River should be the Middle Fork of the Popo Agie River.  Section A. "Public Lands are managed to protect the health" Private lands should also be included in this FCLUP Objective to read "All public and private lands" unless private lands do not need law enforcement.	The scope of the plan is to the management on public lands.
Popo Agie Conservation District	We recommend better summaries of the Census of Agriculture categories because not all commodities listed in a category are grown in Fremont County, i.e., In comparison with Wyoming's other 22 counties in 2017, Fremont County ranks first in the production of fruits and nursery crops; second in hay and aquaculture production; fourth in poultry and vegetables products; and seventh in grains. Fremont County is ranked fifth in the total value of livestock and crops. (Census of Agriculture, 2017)	Comment addressed in document.
Popo Agie Conservation District	baby's breath Gypsopilia should be spelled Gypsophilia.	Comment addressed in document.
Popo Agie Conservation District	The Federal Agencies first paragraph ends with an incomplete sentence.	Comment addressed in document.
Tory T.	Refer to comment document received for general comments on document in entirety.	Comment addressed in document.
Popo Agie Conservation District	Fig. 31- Legend does not include BLM grazing allotments.	Comment addressed in document.



#### **APPENDIX D. FREMONT COUNTY SOCIOECONOMIC REPORT (2015)**



# A Fremont County Profile: Socioeconomics



### **Fremont County Board of County Commissioners**

Doug Thompson, Chair Travis Becker Larry Allen Ray Price Andrea Clifford The goal of this document is to provide an accurate picture of Fremont County's socioeconomic attributes. Accomplishing this requires verifiable and universally accepted substantive data that is objectively incorporated into a narrative format.

Those requirements provide the foundation for this document. The resulting document not only serves the county as it moves forward with its own educational and planning efforts, but also serves to inform state and federal educational and planning efforts as well.

This socioeconomic profile of Fremont County is made possible with the collobarative support of:







#### INTRODUCTION

In a rapidly changing world, timely and accurate information is essential to good decision making. Local officials, state governments, federal agencies, and the general public need information on the structure and trends within a region's economy in order to more effectively conduct and participate in public policy decision making processes. Information describing regional economic conditions can aid in the public policy decision making process by providing a perspective on economic structure and changes over time. In addition, the identification of long-term trends can help residents, local official, state government, and federal agencies plan for the future. This report has been developed to provide baseline information on the structure and trends of the Fremont County economy.

Four types of information are discussed in this report, including: 1) Demographics, 2) Land Characteristics, 3) County Government Finances, and 4) Natural Resource Based Industry Profiles. The Demographic section provides information on the characteristics of the residents of county. The Land Characteristic section provides a perspective on the physical setting of the county. The County Government Finances section considers county government's ability to meet the needs of residents in terms of public services and public infrastructure. The Industry profile section discusses the economic importance of natural resource based industries in the county.

Each type of information is discussed separately in the report. To put Fremont County's information in perspective, the county data is compared to corresponding data for Wyoming and the United States. A variety of data sources were used to development this socio-economic profile including the Wyoming Department of Administration & Information – Economic Analysis Division's Wyoming County Profiles. The most current data available from these data sources was used in the report. All time series data involving dollars were adjusted for inflation to 2009 dollars since these deflators are latest that are currently available. This report is part of an ongoing cooperative effort between the University of Wyoming and the Wyoming County Commissioners Association to develop a socio-economic database for Wyoming Counties.

## **COUNTY SUMMARY**

#### **Demographics**

Fremont County experienced modest population growth between 2000 and 2013 that was proportionately somewhat higher than the U.S. but lower than for Wyoming. The county's population increased from 35,840 residents in 2000 to 40,998 residents in 2013 representing a 14 percent increase over the time period. The county's population growth from 2000 to 2013 was 20 percent lower than the growth rate for Wyoming (18 percent) but 20 percent higher than the growth for the U.S. (12 percent) over the time period. Prior to 2007 the county's population growth had lagged behind the U.S.; however since 2007 it has exceeded the U.S. The county's population growth has lagged behind Wyoming throughout the time period. In 2013 the county's population leveled off at about 41,000 residents while Wyoming and the U.S. experienced continued population growth.

Population increases can occur in one of two ways: 1) Natural Increase (more births than deaths) or 2) Net In-Migration (more people moving in than moving out). Between 2000 and 2013 Fremont County experienced both types of population growth. While the county, state, and nation all experienced somewhat similar rates of natural increase from 2000 through 2013 (7.5 percent for Fremont County, 8.6 percent for Wyoming, and 7.8 percent for the U.S.), the major difference in the overall population growth rates between the regions was the higher rate of net migration for Wyoming and Fremont County (9.3 percent for Wyoming and 6.9 percent for Fremont County vs. 4.3 percent for the U.S.). As a result, while 52 percent of Fremont County's and 48 percent of the Wyoming's population increase between 2000 and 2013 was due to natural increase, 65 percent of the U.S. population increase was from natural increase.

People move to an area for a variety of reasons ranging from economic to esthetic. Data from the Wyoming Housing Database Partnership for 2000 through 2013 indicates that the most frequent primary reason given by new residents to Fremont County for moving to Wyoming were job related factors (42 percent). Job related factors included Job Transfers, New Jobs, Better Employment Opportunities, and Starting or Expanding a Business. The second most frequent reason was that friends or relatives already resided in the area (28 percent). Nearly 9 percent of new residents surveyed indicated that a better quality of life was the primary reason for moving to the county with 21 percent indicating some other reasons.

The population distribution for Fremont County was over represented at both ends of the age spectrum. In 2013 the largest age groups for Fremont County were adults 45 to 64 years old (27 percent) and adults 25 to 44 years old (23 percent). Combined, these two age groups represented 51 percent of the total county population (Figure 4). The next largest age group was youth 5 to 17 years old (18 percent), followed by retirement aged adults 65 and over (16 percent), adults 18 to 24 years old (8 percent), and youth under 5 years of age (7 percent). Compared to Wyoming and the U.S., Fremont County had a higher proportion of its overall population in the younger age groups of Under 5 and 5 to 17. The county also had a higher proportion of its overall population in the older age groups of 45 to 65 and 65 and over, especially the 65 and over age category. Conversely, the county had a smaller proportion of its overall population in the young and middle-aged adult age groups of 18 to 24 and 25 to 44. Overall,

the median age for Fremont County in 2012 was slightly older at 38.4 years compared to 36.8 years for Wyoming and 37.6 years for the U.S. Given the relatively high proportion of the county's residents in the 45 to 64 age group, the county's population is likely to continue to age over time.

White is the predominate category of race in Fremont County, accounting for 75 percent of the total population. Due to the presence of the Wind River Indian Reservation in the county, the second largest category of race is Native American (21 percent). The combination of these two categories represented 96 percent of the total population in the county. The other categories of race accounted for the remaining 4 percent of the population with Two or More races being the most common (3 percent). The percentage of the county's population that was Native American was 8 times the Wyoming percentage (3 percent) and 17 times the U.S. percentage (1 percent). Also, as a result of the large Native American population in the county, the percentage of the population that was White was comparable to the U.S. percentage (78 percent) but was substantially less than the Wyoming percentage (93 percent).

The federal government defines the term "Hispanic" as a cultural identification rather than a specific race. Thus Hispanics can be individuals of any race that self-identify themselves as "Hispanic" or "Latino" based on heritage, nationality group, lineage, or country of birth of the person or person's parents or ancestors before their arrival in the United States. In Fremont County the percentage of the population classifying themselves as Hispanic (6 percent) was only 38 percent of the U.S. percentage (17 percent) and 67 percent of the Wyoming percentage (10 percent).

Per capita income is a general measure of the economic well-being of a county's population. In 2000, per capita income in Fremont County was \$28,724 in 2009 dollars. The per capita income for the county in 2000 was 19 percent below Wyoming's (\$35,327) and 23 percent below the U.S. (\$37,351). From 2000 to 2013, after adjusting for inflation, per capita income for the county increased by 43 percent to \$41,081. Despite this increase, in 2013 the county's per capita income (\$41,081) was still 17 percent lower than Wyoming's (\$49,569) but has increased to only 2 percent lower than the U.S. (\$42,005).

In 2013 per capita income for Fremont County was \$43,780 in 2013 dollars. This level of income was 17 percent below per capita income for Wyoming (\$52,827) and 2 percent below per capita income for the U.S. (\$44,765). Most of the difference in per capita income between the county, Wyoming and the U.S. can be attributed to lower per capita labor earnings (\$22,658 vs. \$31,288 vs. \$28,679). This difference is slightly offset by higher per capita transfer payments for the county compared to Wyoming and the U.S. (\$8,164 vs. \$6,484 vs. \$7,638). The county's per capita investment income (\$12,958) was 14 below Wyoming's (\$15,055) but 1.5 times the U.S. (\$8,448). While the per capita income for the county was 17 percent below the state average, the Wyoming Economic Analysis Division estimates that the county's cost-of-living for the second quarter of 2013 was 2 percent below the state average. This suggests that, on average, the county's population was economically somewhat worse-off than the rest of the state in 2013.

Overall, the Fremont County population educational attainment in terms of a high school degree or higher (91 percent) was comparable to Wyoming (92 percent) and higher than the U.S. (86 percent). However, the county's population was somewhat less educated in terms of college or advanced degrees

(21 percent vs. 25 percent vs. 29 percent). The percentage of the county population without a high school degree (9 percent) was similar to Wyoming's (8 percent) and substantially lower than the U.S. (14 percent). The percentage of the county's population with a high school degree (30 percent) was similar to Wyoming's (30 percent) but slightly above the U.S. (28 percent). The percentage of the county's population with some college (29 percent) or an associate degree (11 percent) was above both Wyoming (28 percent and 10 percent) and the U.S. (21 percent and 8 percent). However, the percentage of the county's population with either a bachelors (14 percent) or graduate/professional degree (7 percent) was below both Wyoming (17 percent and 8 percent) and the U.S. (18 percent and 11 percent).

Fremont County experienced significant employment growth between 2000 and 2013. Employment in the county increased by 19 percent from 2000 through 2013 growing from 20,773 jobs in 2000 to 24,688 jobs in 2013. This employment growth primarily occurred between 2000 and 2008 with county's employment plateauing at around 25,000 jobs since 2008. During this time period Wyoming employment increased by 23 percent and the U.S. employment increased by 10 percent. Employment in all three regions was probably negatively affected by 2008-2009 recession, although the county's economy appears to have been less impacted than Wyoming or the U.S. While county employment increased by 19 percent between 2000 and 2013, county population increased by 14 percent suggesting that at least some the job growth in the county was filled by nonresidents during this time period.

From 2000 to 2013, employment in Fremont County increased by 19 percent. This increase was 17 percent less than the employment increase for Wyoming (23 percent) and 1.8 times the employment increase for the U.S. (10 percent) during the same time period. The main reason for the difference in overall employment growth was greater growth in wage and salary jobs for the county and Wyoming. While the increase in county wage and salary employment (11 percent) was 23 percent less than for Wyoming (15 percent), it was four times the anemic growth rate for the U.S (3 percent). In comparison, the increase in county self-employed employment (7 percent) was similar to that for Wyoming's (8 percent) or the U.S. (7 percent).

Due to its large size and the wide geographic distribution of its population, Local Government was the largest employer in Fremont County in 2013 accounting for 19 percent of total county employment. Local Government includes all the employment associated with the county, the numerous cities and towns in the county, and its eight school districts. Following Local Government was Retail Trade and Health Care & Social Assistance, both with about 10 percent of total county employment. Following Retail Trade and Health Care & Social Services was Accommodations & Food Services, Agriculture, Construction, and Mining, all of whom represented about 6 percent of total county employment and Other Services which represented 5 percent of total county employment. Combined, these eight sectors accounted for 68 percent of the total employment in the county. The three largest employment sectors in the county's economy, Local Government, Retail Trade, and Health Care & Social Assistance represent 38 percent of the total employment in the county. This compares to 30 percent for Wyoming's top three employment sectors and 29 percent for the U.S. top three employment sectors and indicates that the county's employment is somewhat more concentrated in a few sectors than Wyoming or the U.S.

County employment locational quotients indicate that the county's economy is specialized in the following sectors: Mining, Agriculture, Local Government, Forestry, Fishing, & Ag Support, State Government, and Civilian Federal Government.

Employment in Fremont County increased by 16 percent from 2001 through 2013. The largest increases were in Local Government which accounted for 37 percent of the growth in total county employment and Mining which accounted for 27 percent of the growth in total county employment. Combined these two sectors represented 65 percent of the total increase in county employment. In terms of other sectors, employment increases in Real Estate and Health Care & Social Services each accounted for more than 9 percent of the growth in total county employment. Also employment increases in Agriculture, Educational Services, and Finance & Insurance each accounted for more than 7 percent of the growth in total county employment. On the other hand, six sectors experienced losses in employment between 2001 and 2013 including: Construction (-491), Manufacturing (-182), Retail Trade (-124), Information (-89), Utilities (-32), and State Government (-5).

In terms of individual sector employment growth, the fastest growing sector was Mining which increased by nearly 3 times between 2001 and 2013. Following Mining, was Educational Services which almost doubled in employment during the time period. Real Estate and Finance and Insurance also experienced substantial growth in employment growing by more than 1.5 times. On the other hand, Utilities, Manufacturing, Information, and Construction all experienced employment declines of more than 25 percent.

In addition to the number of jobs, the labor earnings associated with these jobs is an important consideration. Overall average earnings per job are a general measure of the economic well-being of the local workforce. The Fremont County economy has a continuing problem with relatively low paying jobs. In 2000, the average earnings per job in Fremont County were \$30,559 in 2009 dollars. The average earnings per job for the county in 2000 were 17 percent below Wyoming's (\$37,046) and 37 percent less than the U.S. (\$48,819). From 2000 to 2013, after adjusting for inflation, average earnings per job increased by 28 percent to \$39,074. Despite this increase, in 2013 the average earnings per job for the county were still 21 percent below Wyoming's (\$49,188) and 25 percent below the U.S (\$52,330). While the average earnings per job for the county were 21 percent below the state average, the Wyoming Economic Analysis Division estimates that the county's cost-of-living for the second quarter of 2013 was 98 percent above the state average. This suggests that, on average, the county's workforce was economically worse-off than the rest of the state in 2013.

Average earnings per job (AEPJ) can vary substantially by sector. In 2013 AEPJ in Fremont County ranged from over \$100,000 for Utilities and to slightly more than \$7,500 for Arts, Entertainment, and Recreation. After Utilities, Federal – Civilian and Mining both had AEPJ of more than \$80,000. State Government, Transportation & Warehousing, Local Government and Wholesale Trade all had AEPJ above \$50,000. Six of the 23 sectors in the county's economy had an AEPJ that was greater than the average for Wyoming (\$52,420) and four of these sectors had an AEPJ that was greater than the U.S. average (\$55,768) in 2013. The six sectors with AEPJ above the Wyoming average represents only 33

percent of the total jobs in the county while the four sectors with AEPJ above the U.S. average represent only 12 percent of the total jobs in the county. This explains the lower overall AEPJ for the county relative to Wyoming and the U.S.

The combination of the number of jobs and average earnings per job (AEPJ) determines the relative importance of individual sectors in the Fremont County economy in terms of total labor earnings. Labor earnings are important because they represent the major source of personal income for county residents. Overall, employment in the county generated \$1.0 billion of labor earnings in 2013. Local Government, due to its large number of jobs and above average AEPJ, represents 24 percent of this total. Following Local Government were Mining (11 percent) and Health Care & Social Assistance (10 percent). Retail Trade represented 7 percent of total county employment, Construction 7 percent and State Government 5 percent. These six sectors account for 65 percent of the total labor earnings in the county. Total government labor earnings (Local Government, State Government, Federal – Civilian, and Military) represents 34 percent of total labor earnings in the county.

#### **Land Characteristics**

Fremont County is the second largest county in Wyoming containing 5.9 million acres. Most of this land area is under government or tribal ownership. More than 54 percent of the county's land area (3.2 million acres) is owned by the federal government. Of this amount, the BLM controls nearly two-thirds, with the Forest Service controlling more than 30 percent and the Bureau of Reclamation controlling nearly 4 percent. Tribal lands represent nearly 26 percent of the county's land area (1.6 million acres). State lands account for more than 5 percent of the county's land area (more than 317,000 acres). Nearly 85 percent of the state land area is state trust land with the other 15 percent held by the Game and Fish Department and the Recreation Commission. Finally, local government owns 0.1 percent of the land in the county (slightly more than 5,500 acres). As a result of the large government and tribal presence in the county, less than 14 percent of the county's land area is privately owned (slightly more than 820,000 acres). Information from the Wyoming Department of Revenue on acres taxed as agricultural land indicates that nearly 90 percent of the private land in the county is in agricultural use (more than 729,000 acres). Of this amount nearly 84 percent is range land (more than 610,000 acres).

Federal lands are managed for different purposes under differing statutory authority. Three categories of designation are presented for counties in the Economic Profile System – Human Dimension Toolkit: 1) Protected, 2) Restricted., and 3) General Use. In Fremont County nearly 22 percent of federal lands are designated as protected (nearly 672,000 acres). This amount includes more than 530,000 acres of Forest Service land that is designated as national wilderness (54 percent of total Forest Service land in the county). Also, more than eight percent of federal lands are designated as restricted (nearly 250,000 acres) with 70 percent designated for general use (more than 3 million acres).

#### **County Government Finances**

Wyoming Department of Audit information indicates that the total revenue for Fremont County Government was \$39.8 million in FY2014. Of this total, the largest source was Taxes which included property taxes and optional sales tax revenue (41 percent). Following Taxes was State Aid which included the county's share of the 4 percent sales and use tax revenue (31 percent) and Charges for Services (16 percent). Combined these three sources represented 88 percent of the total county government revenue in FY2014. Other sources of county government revenue included Direct Federal Aid (including PILT payments), Miscellaneous Revenue, and Other Local Government Revenue. Combined these smaller revenue sources represented 12 percent of the total county government revenue in FY2014. Compared to all counties in Wyoming, the County had a lower proportion of revenue from Taxes (41 percent vs. 50 percent). The county's proportion from State Aid was higher relative to all counties in the state (31 percent vs. 26 percent) and the proportion from Charges for Services was substantially higher relative to all counties in the state (16 percent vs. 7 percent). Other sources of revenue were comparable to all other counties in the state in terms of Direct Federal Aid (6 percent vs. 6 percent) and Miscellaneous Revenue (5 percent vs. 6 percent, except for Other Local Government (1 percent vs. 5 percent). Overall, the county's per capita revenue (\$972) was 25 percent below the average for all counties in Wyoming (\$1,288).

The total assessed valuation for Fremont County in FY2014 was \$917.6 million. More than 50 percent of the total valuation was from Mineral Production. Following minerals was Residential Property (25 percent) and Industrial Property (11 percent). Combined these three sources represented 89 percent of the county's total assessed valuation. Other sources of assessed valuation included Commercial Property (7 percent), Utilities (3 percent) and Agricultural Lands (2 percent). Combined these sources represented 11 percent of the county's assessed valuation.

Compared to Wyoming, the county had a lower proportion of assessed valuation from Mineral Production (53 percent vs. 60 percent). The county's proportion of assessed valuation from Residential Property was higher than Wyoming's (25 percent vs. 18 percent). The county's proportion of assessed valuation from Industrial Property was slightly higher than Wyoming's (11 percent vs. 9 percent). The county's assessed valuation for Commercial, Utilities, and Agricultural was comparable to Wyoming's (11 percent vs. 12 percent). In terms of Mineral Production, crude oil represented 61 percent of total county mineral assessed valuation, natural gas represented 39 percent of total county mineral assessed valuation, and sand & gravel represented less than 1 percent of total county mineral assessed valuation. In terms of Industrial Property, oil and gas facilities represented more than 93 percent of total county industrial property assessed valuation. Overall, oil and gas production and the associated facilities represent 63 percent of the county's total assessed valuation. This concentration makes county government finances vulnerable to fluctuations in oil and gas prices and activity in the county.

In FY2014 Fremont County's sales and use tax generated \$40.1 million in sales and use tax revenue. Of this total, 55 percent (\$22.1 million) was retained by state government and 45 percent (\$18.1 million) was returned to local governments in Fremont County. In FY2014 County government's share of the

returned sales and use tax revenue was approximately \$9.0 million (50 percent) with the remaining \$9.0 million (50 percent) going to municipal governments in the county.

About forty percent of the county's sales and use tax revenue came from Retail Trade. Following Retail Trade was Mining (17 percent), Public Administration (12 percent), and Leisure & Hospitality (9 percent). Combined these four sectors contributed 77 percent of the county's total sales and use tax revenue. Public Administration represents sales and use tax revenue on motor vehicle purchases which are collected at the time of registration in Wyoming. Wholesale, Utilities, Construction, Other Services, Financial and Other represented a combined 23 percent of county sales and use tax revenue with Utilities, Construction, Other Services, and Financial each accounting for more than 3 percent of total county sales and use tax revenue.

Compared to total sales and use tax revenue for Wyoming, the county had a substantially higher proportion of sales and use tax revenue from Retail Trade (40 percent vs. 29 percent). The county's proportion of sales and use tax revenue from Mining was somewhat lower than Wyoming's (17 percent vs. 21 percent). The proportion of county sales and use tax revenue from Public Administration was somewhat higher than Wyoming's (12 percent vs. 9 percent) and the proportion from Leisure & Hospitality was comparable to Wyoming's (9 percent vs. 9 percent).

The Economic Profile System-Human Dimensions Toolkit indicates that federal land payments to local governments in Fremont County totaled \$3.3 million in FY2013. The largest source of federal land payments to the county was Payment in Lieu of Taxes (PILT) representing 72 percent of the total amount (\$2.4 million). The second largest source of federal payments to the county was Forest Service payments representing 21 percent of the total amount (\$712,028). The third largest source of federal payments to the county was BLM Payments representing 6 percent of the total amount (\$218,130). Of the \$3.3 million in Federal land payments to the county in FY2013, 83 percent went to county government (\$2.8 million), 9 percent went to local school districts (\$302,612), 6 percent went to grazing districts (\$213,053), and 2 percent went to Resource Advisory Councils (\$56,962). In FY2013 Federal Land Payments to the county represented \$1.04 per acre of Federal land.

The total cost of maintaining county government for Fremont County in FY2014 was \$33.3 million. This represents a per capita cost of \$811.63 which was 25 percent below the average for all Wyoming counties. The largest cost categories were Jail (14 percent) and County Sheriff (14 percent). If the costs of all law enforcement (County Sheriff, Jail, County Attorney, County Courts and Juvenile Probation) are considered it represents 36 percent of the total county budget. The other major cost categories were Road and Bridge (11 percent) and Health (10 percent). The combination of combined law enforcement, Road and Bridge, and Health represent 57 percent of the total county budget.

#### **Natural Resourced Based Industry Profiles**

In 2013, the 1,274 producing oil and gas wells in Fremont County produced 4.1 million barrels of crude oil and 134.5 million mcf of natural gas. This represented about 7 percent of total crude oil and 7 percent of total natural gas production in the state. The other major type of mineral production in the

county was sand and gravel which produced 545,350 tons in 2013. This represented 4 percent of the total sand and gravel production in the state. There was also a small amount of bentonite production in the county during 2013.

The mining industry in the county, including the associated industrial property, had an assessed valuation of \$582.6 million dollars in 2014 (2014 assessed valuation for mineral production is based on 2013 production). This valuation represented 63 percent of the total assessed valuation for the county. Based on a county levy of 72.6 mills the mineral industry generated \$42.3 million in property tax revenue in 2014. Of this total, 62 percent went to K-12 schools (\$26.4 million), 16 percent went to local county government (\$7.0 million), 12 percent went to county special districts (\$5.2 million), and 9 percent went to the Community College (\$3.8 million). Special districts in the county included: Cemetery, Water and Sewer, Solid Waste Disposal, and Conservation.

In 2013 the mining industry in the county supported 1,430 jobs with labor earnings of \$115.0 million. This represented 6 percent of total employment and 11 percent of total labor earnings in the county. The percent of total employment in mining for the county was 6 times the national percentage (0.9%). The average earnings per job for mining in the county were \$80,395 which was 1.9 times the county average (\$41,641). The mining industry ranked 7th out of 23 sectors in the county's economy in terms of total employment and 2nd out of 23 sectors in terms of total labor earnings.

In 2012 there were 1,363 agricultural operations in Fremont County. These operations managed 1.7 million acres in the county. Included in this acreage is 89 percent of the private land in the county. Of the total land in agriculture, 88 percent is classified as grazing land, 10 percent as cropland, less than 1 percent as woodlands, and 2 percent as farmsteads and buildings. The average size of an agricultural operation in the county was 1,255 acres. The total cattle and sheep inventory in the county was 97,391 head including 81,288 head of cattle and calves and 16,103 head of sheep and lambs. In 2013, the county ranked 2<sup>nd</sup> out of 23 counties in Wyoming in terms of cattle and calves inventory and 8<sup>th</sup> out of 23 counties in terms of sheep and lambs inventory. It also ranked 5<sup>th</sup> in barley production, 5<sup>th</sup> in dry bean production, 6<sup>th</sup> in sugar beet production, 7<sup>th</sup> in corn for grain, 1<sup>st</sup> in alfalfa hay production, and 6<sup>th</sup> in other hay production. In terms of investment by agricultural operators, the estimated total market value of lands, buildings, and equipment for agriculture in the county was \$1.6 billion. This total included \$1.5 billion in land and buildings and \$141.1 million for equipment and machinery. The average investment per agricultural operation was \$1.2 million. In 2012 agricultural operations in the county paid \$4.8 million in property taxes.

The gross revenue for the agricultural industry in the county in 2013 was \$151.6 million. Of this total 55 percent was from cash receipts for livestock, 31 percent was from cash receipts for crops, 13 percent was from miscellaneous sources, and less than 1 percent was from government payments. Total employment for agriculture in 2013 was 1,485 jobs with labor earnings of \$28.8 million. This represented 6 percent of the jobs in the county and 3 percent of the labor earnings. The percent of total employment in agriculture for the county was 4.2 times the national percentage (1.4 percent). The average earnings per job for agriculture in the county were \$19,378 which was 47 percent the county

average (\$41,641). Average earnings per job in agriculture tend to be low because most employment in agriculture is self-employment and includes a large number of small part-time and lifestyle operations that generate limited labor earnings. The agriculture industry ranked 5<sup>th</sup> out of 23 sectors in the county's economy in terms of total employment and 12th out of 23 sectors in terms of total labor earnings.

In addition to jobs and income, agriculture also provides important natural resource amenities such as open space. Open space offers landscapes, lifestyles, and wildlife habitat that can have value to both residents and visitors. Open space is particularly important because it determines the character of the landscapes surrounding a community. Out of economic necessity, most agricultural operations in the county cover large areas of land; as a result, agriculture can contribute substantially to maintaining open spaces on private lands in a region. As noted above, 89 percent of the private land in county is in agricultural use.

Dean Runyan Associates estimates that visitors spent \$136.4 million while in Fremont County in 2013. In terms of accommodations, 34 percent of this spending was by visitors staying in hotels/motels, 24 percent by visitors staying in campgrounds, 20 percent was by visitors staying in private homes, 5 percent was by visitors staying in vacation homes, and 16 percent was by visitors not staying overnight. In terms of purchases, 30 percent was for local transportation & gas, 20 percent was for food services, 15 percent was for arts/entertainment/recreation, 14 percent was for retail sales, 13 percent for accommodations, 7 percent went to food stores and less than 1 percent for air transportation.

Dean Runyan estimated that the travel industry generated 1,530 jobs in the county in 2013. This represents 6 percent of total employment in the county. Nearly 60 percent of these jobs were in the accommodations and food service sector, 25 percent were in the arts/entertainment/recreation sector, and 13 percent were in the retail trade sector. The labor earnings associated with this employment was estimated to be \$43.5 million. This represents 4 percent of the total labor earnings for the county. Average earnings per job for the travel industry in the county for 2013 were \$28,431. Average earnings per job for the travel industry were 68 percent the county average (\$41,641).

The tax revenue associated with the county's travel industry is estimated to be \$1.5 million with \$0.5 million (33 percent) going to local government and \$1.0 million (67 percent) going to state government.

#### **American Indian Residents**

The Wind River Indian Reservation occupies 1.6 million acres in Fremont County representing 26 percent of the total land base in the county. Due to the presence of the reservation, Native Americans represent the second largest category of race in the county accounting for 21 percent of the total population (see page 7). In many respects the social and economic characteristics of the American Indian population in the county are somewhat different than the rest of the county's population. In terms of household type, American Indian residents were less likely to be in a married couple family (40 percent vs. 51 percent) or a nonfamily household (15 percent vs. 32 percent). Nonfamily households represent mostly

people living alone, but also a household where no one is related to the householder. Conversely, American Indian residents were more likely to live in a male householder family with no wife present (12 percent vs. 6 percent) and in a female householder family with no husband present (32 percent vs. 10 percent).

In terms of educational attainment, American Indian residents were more likely to not have a high school degree (14 percent vs. 11 percent), be only a high school graduate (34 percent vs. 28 percent), or have attended some college (36 percent vs. 28 percent). Conversely, they were slightly less likely to have an associate degree (9 percent vs. 10 percent), less likely to have a bachelor's degree (5 percent vs. 14 percent), and less likely to have a graduate or professional degree (2 percent vs. 8 percent). Overall, the percentage of the American Indian residents with a high school degree or higher was comparable to the county residents (86 percent vs. 89 percent); however the percentage of American Indian residents with a bachelor's degree or higher was significantly lower than for county residents (7 percent vs. 23 percent).

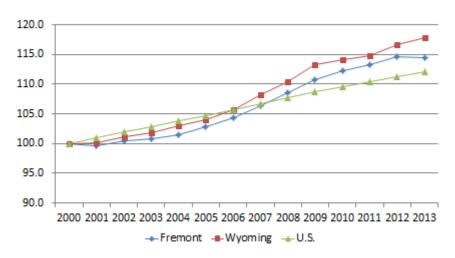
Unemployment is a continuing problem for American Indian residents in Fremont County. For the period 2006 through 2010, the Census Bureau estimates that the unemployment rate for American Indians in Fremont County was 16 percent. This was more than twice the unemployment rate for Fremont County as a whole (7%). Due to the difficulties of collecting census data on the reservation, the actual unemployment rate for American Indians in the county may be substantially higher than that reported by the Census Bureau.

For those American Indian residents that are employed, the type of employment is also different than that for Fremont County as whole. Only 46 percent of the American Indian workers in the county are employed in the private sector compared to 64 percent for all workers. Conversely, 51 percent of the American Indian workers are employed in the government sector versus 26 percent for all workers in the county. The percentage of workers that are self-employed is also less for American Indian workers (3 percent vs. 9 percent). The percent of workers that are unpaid family labor is higher for American Indian workers than for all workers in the county (.04 percent versus .02 percent).

Due to the high unemployment rate among American Indian residents in the county, these residents also have a high poverty level. For the 2006-2010 time period, the Census Bureau estimates that 24 percent of the American Indian residents in the county were living below the poverty level. This was nearly twice the poverty rate for the county as a whole. Due to the difficulties in collecting census data on the reservation, the actual poverty rate may be substantially higher than that reported by the Census Bureau. The poverty rate was particularly high for American Indian families with a female householder, no husband present, with related children under 5 years old at 66 percent. On a per capita income basis, American Indian residents were 40 percent below the average for the county (\$14,809 versus \$24,173). American Indian residents were also more likely to receive cash public assistance income (15 percent vs. 4 percent) and to have food stamp/SNAP benefits (26 percent vs. 9 percent).

## **DEMOGRAPHICS**

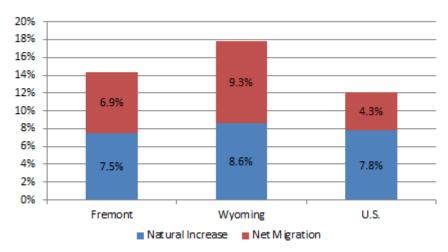
Figure 1.
Population Growth Index: 2000-2013



Fremont County experienced modest population growth between 2000 and 2013 that was proportionately somewhat higher than the U.S. but lower than for Wyoming (Figure 1). The county's population increased from 35,840 residents in 2000 to 40,998 residents in 2013 representing a 14 percent increase over the time period. The county's population growth from 2000 to 2013 was 20 percent lower than the growth rate for Wyoming (18 percent) but 20 percent higher than the growth for the U.S. (12 percent) over the time period. Prior to 2007 the county's population growth had lagged behind the U.S.; however since 2007 it has exceeded the U.S. The county's population growth has lagged behind Wyoming throughout the time period. In 2013 the county's population leveled off at about 41,000 residents while Wyoming and the U.S. experienced continued population growth.

**Data Sources:** Wyoming Department of Administration and Information. 2014. Economic Analysis Division, Table 1. Intercensal Estimates of the Resident Population for Counties of Wyoming: April 1, 2000 to July 1, 2010 and Table 1. Annual Estimates of the Resident Population for Counties of Wyoming: April 1, 2010 to July 1, 2014.

Figure 2.
Comparison of Source of Population Change: 2000-2013

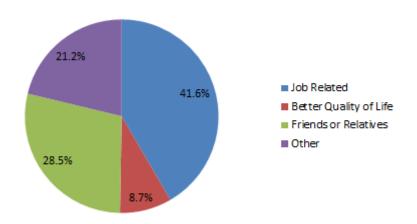


Population increases can occur in one of two ways: 1) Natural Increase (more births than deaths) or 2) Net In-Migration (more people moving in than moving out). Between 2000 and 2013 Fremont County experienced both types of population growth (Figure2). While the county, state, and nation all experienced somewhat similar rates of natural increase from 2000 through 2013 (7.5 percent for Fremont County, 8.6 percent for Wyoming, and 7.8 percent for the U.S.), the major difference in the overall population growth rates between the regions was the higher rate of net migration for Wyoming and Fremont County (9.3 percent for Wyoming and 6.9 percent for Fremont County vs. 4.3 percent for the U.S.). As a result, while 52 percent of Fremont County's and 48 percent of the Wyoming's population increase between 2000 and 2013 was due to natural increase 65 percent of the U.S. population increase was from natural increase. Conversely, while 48 percent of Fremont's and 52 percent of Wyoming's population increase was from net migration, only 35 percent of the U.S. population increase was from net migration. Of course immigration is much more restricted at the national level than at state level. However, the comparison is still important in explaining differences in population growth rates with the county and Wyoming experienced more balanced population growth than the U.S.

**Data Source:** Wyoming Department of Administration and Information. 2014. Economic Analysis Division, Annual Births, Deaths, and Net Migration by County of Residence: 1971-2013,

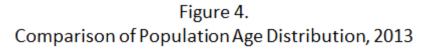
Figure 3.

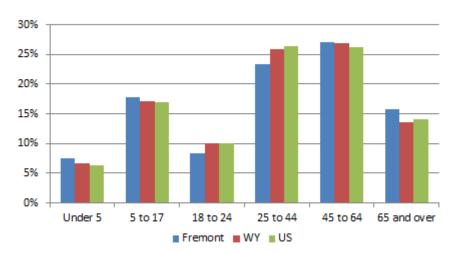
Primary Reason for Moving to Fremont County: 2000-2013



People move to an area for a variety of reasons ranging from economic to esthetic. Data from the Wyoming Housing Database Partnership for 2000 through 2013 (Figure 3) indicates that the most frequent primary reason given by new residents to Fremont County for moving to Wyoming were job related factors (42 percent). Job related factors included Job Transfers, New Jobs, Better Employment Opportunities, and Starting or Expanding a Business. The second most frequent reason was that friends or relatives already resided in the area (28 percent). Nearly 9 percent of new residents surveyed indicated that a better quality of life was the primary reason for moving to the county with 21 percent indicating some other reasons. This data is from the Housing Needs Assessment Survey conducted by the Wyoming Housing Database Partnership in cooperation with the Wyoming Department of Transportation. The survey results are based on a random sample of new residents who were exchanging their previous state's driver's licenses for Wyoming licenses.

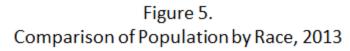
**Data Source:** Wyoming Community Development Authority. 2014. Wyoming Housing Database Partnership, Wyoming Profile of Demographics, Economics, and Housing; Volume II: Technical Appendix, Semiannual Report, Appendix G: Housing Needs Assessment Survey Data, 2000-2013.

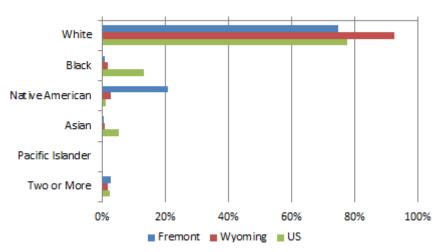




In 2013 the largest age groups for Fremont County were adults 45 to 64 years old (27 percent) and adults 25 to 44 years old (23 percent). Combined, these two age groups represented 51 percent of the total county population (Figure 4). The next largest age group was youth 5 to 17 years old (18 percent), followed by retirement aged adults 65 and over (16 percent), adults 18 to 24 years old (8 percent), and youth under 5 years of age (7 percent). The population distribution for Fremont County was over represented at both ends of the age spectrum. Compared to Wyoming and the U.S., Fremont County had a higher proportion of its overall population in the younger age groups of Under 5 and 5 to 17. The county also had a higher proportion of its overall population in the older age groups of 45 to 65 and 65 and over, especially the 65 and over age category. Conversely, the county had a smaller proportion of its overall population in the young and middle-aged adult age groups of 18 to 24 and 25 to 44. Overall, the median age for Fremont County in 2012 was slightly older at 38.4 years compared to 36.8 years for Wyoming and 37.6 years for the U.S. Given the relatively high proportion of the county's residents in the 45 to 64 age group, the county's population is likely to continue to age over time.

**Data Source:** Wyoming Department of Administration and Information. 2014. Economic Analysis Division, Annual Estimation of the Resident Population for Selected Age Groups by Sex for Wyoming: April 1, 2010 to July 1, 2014.

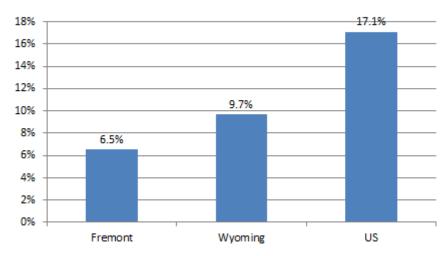




White is the predominate category of race in Fremont County, accounting for 75 percent of the total population (Figure 5). Due to the presence of the Wind River Indian Reservation in the county, the second largest category of race is Native American (21 percent). The combination of these two categories represented 96 percent of the total population in the county. The other categories of race accounted for the remaining 4 percent of the population with Two or More races being the most common (3 percent). The percentage of the county's population that was Native American was 8 times the Wyoming percentage (3 percent) and 17 times the U.S. percentage (1 percent). Also, as a result of the large Native American population in the county, the percentage of the population that was White was comparable to the U.S. percentage (78 percent) but was substantially less than the Wyoming percentage (93 percent). The percentage of the county population that was Black, Asian, or Pacific Islander was less than the percentage for either Wyoming or the U.S. The percentage of the population that was Two or More races was slightly higher than Wyoming or the U.S. (3 percent vs. 2 percent and 2 percent respectively).

**Data Source:** Wyoming Department of Administration and Information. 2014. Economic Analysis Division, Table 6. Annual Estimate of the Resident Population by Race for the United States, Wyoming, and Counties: July 1, 2013.

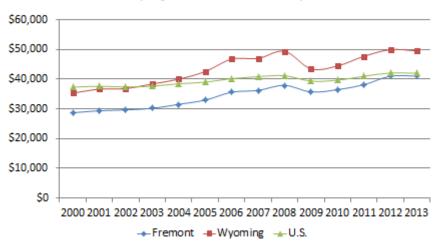
Figure 6.
Comparison Percent of Population Hispanic 2013



The federal government defines the term "Hispanic" as a cultural identification rather than a specific race. Thus Hispanics can be individuals of any race that self-identify themselves as "Hispanic" or "Latino" based on heritage, nationality group, lineage, or country of birth of the person or person's parents or ancestors before their arrival in the United States. In Fremont County, as shown in Figure 6, the percentage of the population classifying themselves as Hispanic (6 percent) was only 38 percent of the U.S. percentage (17 percent) and 67 percent of the Wyoming percentage (10 percent).

**Data Source:** Wyoming Department of Administration and Information. 2014. Economic Analysis Division, Table 6. Annual Estimates of the Resident Population by Race and Hispanic Origin for the United States, Wyoming, and Counties: July 1, 2013.

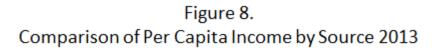
Figure 7.
Per Capita Income: 2000-2013
(Adjusted for Inflation)

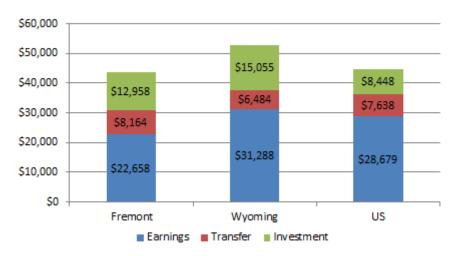


Per capita income is a general measure of the economic well-being of a county's population. In 2000, per capita income in Fremont County was \$28,724 in 2009 dollars (Figure 7). The per capita income for the county in 2000 was 19 percent below Wyoming's (\$35,327) and 23 percent below the U.S. (\$37,351). From 2000 to 2013, after adjusting for inflation, per capita income for the county increased by 43 percent to \$41,081. Despite this increase, in 2013 the county's per capita income (\$41,081) was still 17 percent lower than Wyoming's (\$49,569) but has increased to only 2 percent lower than the U.S. (\$42,005). There are three sources of per capita income: 1) net labor earnings including wages, salaries, and proprietor (self-employed) income, 2) government transfer payments such as Social Security, Medicare, Medicaid, and various income assistance program payments, and 3) investment income representing property income in the form of dividends, interest, and rents.

The majority of the growth in county per capita income between 2000 and 2013 was the result of growth of net labor earnings (42 percent) and higher investment income (42 percent) with 17 percent coming from higher transfer payments. Over one-half of the growth in county per capita investment income occurred between 2011 and 2013 as per capita investment income increased by 30 percent in the three-year period. In 2000, net labor earnings represented 56 percent of total per capita income, with investment income representing 25 percent, and transfer payments representing 19 percent. In 2013, net labor income represented 52 percent of total per capita income, with investment income representing 30 percent, and transfer payments representing 18 percent.

**Data Source:** U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Local Area Personal Income & Employment, Table CA30.

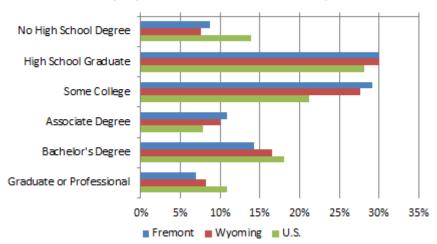




In 2013 per capita income for Fremont County was \$43,780 in 2013 dollars (Figure 8). This level of income was 17 percent below per capita income for Wyoming (\$52,827) and 2 percent below per capita income for the U.S. (\$44,765). Most of the difference in per capita income between the county, Wyoming and the U.S. can be attributed to lower per capita labor earnings (\$22,658 vs. \$31,288 vs. \$28,679). This difference is slightly offset by higher per capita transfer payments for the county compared to Wyoming and the U.S. (\$8,164 vs. \$6,484 vs. \$7,638). The county's per capita investment income (\$12,958) was 14 below Wyoming's (\$15,055) but 1.5 times the U.S. (\$8,448). In addition to lower per capita income, the county's 2013 poverty rate (15.3 percent) was substantially higher than Wyoming's (10.9 percent), and somewhat higher than the U.S. (14.5 percent). The county's 2013 unemployment rate (6.1 percent) was also above Wyoming's (4.7 percent) but below the U.S. (7.4 percent). While the per capita income for the county was 17 percent below the state average, the Wyoming Economic Analysis Division estimates that the county's cost-of-living for the second quarter of 2013 was 2 percent below the state average. This suggests that, on average, the county's population was economically somewhat worse-off than the rest of the state in 2013.

**Data Source:** U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Local Area Personal Income & Employment, Table CA30.

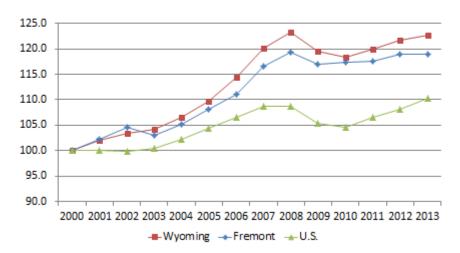
Figure 9.
Level of Educational Attainment, 2009-2013
(Population 25 Years or Older)



Overall, the Fremont County population educational attainment in terms of a high school degree or higher (91 percent) was comparable to Wyoming (92 percent) and higher than the U.S. (86 percent). However, the county's population was somewhat less educated in terms of college or advanced degrees (21 percent vs. 25 percent vs. 29 percent). The percentage of the county population without a high school degree (9 percent) was similar to Wyoming's (8 percent) and substantially lower than the U.S. (14 percent). The percentage of the county's population with a high school degree (30 percent) was similar to Wyoming's (30 percent) but slightly above the U.S. (28 percent). The percentage of the county's population with some college (29 percent) or an associate degree (11 percent) was above both Wyoming (28 percent and 10 percent) and the U.S. (21 percent and 8 percent). However, the percentage of the county's population with either a bachelors (14 percent) or graduate/professional degree (7 percent) was below both Wyoming (17 percent and 8 percent) and the U.S. (18 percent and 11 percent). In terms of access to educational resources, Fremont County has eight public school districts with a total of 31 schools and a 2012 fall enrollment of 6,656. The graduation rate for the public school system was 67 percent compared to a state average of 78 percent. The public school system had 582 certified teachers, 131 certified staff, 81 administrators, and 583 classified staff. Total general fund expenditures for the county's public school system was \$125.4 million in 2012 with an operating cost of \$21,163 per average daily membership. This compares with an average operating cost of \$17,156 per average daily membership for the state. Central Wyoming Community College is located in the county with its main campus in Riverton and off-campus facilities in Lander, Dubois, and the Wind River Indian Reservation.

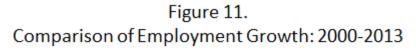
**Data Source:** Wyoming Department of Administration and Information. 2014. Economic Analysis Division, Social, Economic, and Housing Characteristics; American Community Survey Profiles, 5-Year Data Profiles for Wyoming and Counties: 2009-2013.

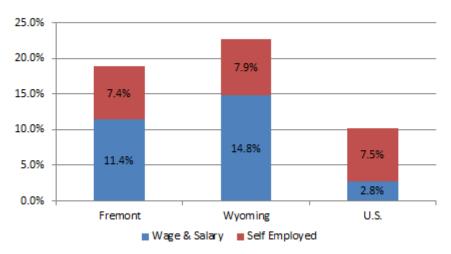
Figure 10. Employment Growth Index: 2000-2013



Fremont County experienced significant employment growth between 2000 and 2013. Employment in the county increased by 19 percent from 2000 through 2013 growing from 20,773 jobs in 2000 to 24,688 jobs in 2013 (Figure 10). This employment growth primarily occurred between 2000 and 2008 with county's employment plateauing at around 25,000 jobs since 2008. During this time period Wyoming employment increased by 23 percent and the U.S. employment increased by 10 percent. Employment in all three regions was probably negatively affected by 2008-2009 recession, although the county's economy appears to have been less impacted than Wyoming or the U.S. While county employment increased by 19 percent between 2000 and 2013, county population increased by 14 percent suggesting that at least some the job growth in the county was filled by nonresidents during this time period.

**Data Source:** U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Local Area Personal Income & Employment, Table CA25.





Source: Bureau of Economic Analysis

From 2000 to 2013, employment in Fremont County increased by 19 percent (Figure 11). This increase was 17 percent less than the employment increase for Wyoming (23 percent) and 1.8 times the employment increase for the U.S. (10 percent) during the same time period. The main reason for the difference in overall employment growth was greater growth in wage and salary jobs for the county and Wyoming. While the increase in county wage and salary employment (11 percent) was 23 percent less than for Wyoming (15 percent), it was four times the anemic growth rate for the U.S (3 percent). In comparison, the increase in county self-employed employment (7 percent) was similar to that for Wyoming's (8 percent) or the U.S. (7 percent).

**Data Source:** U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Local Area Personal Income & Employment, Table CA25.

Figure 12.
Fremont County Employment by Sector: 2013

Sector	Jobs	Percent	LQ
Local Government	4,584	18.6%	2.41
Retail Trade	2,479	10.0%	0.98
Health Care & Social Assistance	2,404	9.7%	0.88
Accommodations & Food Service	1,686	6.8%	0.95
Agriculture	1,485	6.0%	4.16
Construction	1,456	5.9%	1.30
Mining	1,430	5.8%	6.95
Other Services	1,307	5.3%	0.90
Real Estate	989	4.0%	0.89
State Government	904	3.7%	1.30
Professional Services	890	3.6%	0.57
Finance & Insurance	725	2.9%	0.53
Management Services	615	2.5%	0.37
Transportation & Warehousing	610	2.5%	0.70
Educational Services	520	2.1%	0.90
Federal - Civilian	479	1.9%	1.22
Arts, Entertainment, & Recreation	472	1.9%	0.78
Wholesale Trade	446	1.8%	0.55
Manufacturing	429	1.7%	0.24
Forestry, Fishing, & Ag Support	251	1.0%	1.65
Information	235	1.0%	0.55
Military	218	0.9%	0.79
Utilities	74	0.3%	0.92
Total	24,688	100.0%	

Due to its large size and the wide geographic distribution of its population, Local Government was the largest employer in Fremont County in 2013 accounting for 19 percent of total county employment (Figure 12). Local Government includes all the employment associated with the county, the numerous cities and towns in the county, and its eight school districts. Following Local Government was Retail Trade and Health Care & Social Assistance, both with about 10 percent of total county employment. Following Retail Trade and Health Care & Social Services was Accommodations & Food Services, Agriculture, Construction, and Mining, all of whom represented about 6 percent of total county employment and Other Services which represented 5 percent of total county employment. Combined, these eight sectors accounted for 68 percent of the total employment in the county. The three largest employment sectors in the county's economy, Local Government, Retail Trade, and Health Care & Social Assistance represent 38 percent of the total employment in the county. This compares to 30 percent for Wyoming's top three employment sectors and 29 percent for the U.S. top three employment sectors

and indicates that the county's employment is somewhat more concentrated in a few sectors than Wyoming or the U.S.

The location quotients (LQ) in the fourth column of Figure 12 were used to identify Defining Industries in the county. A location quotient is the ratio of an industry's share of total employment in the region relative to the industry's share of total employment at the national level. A large location quotient is an indication of specialization within the county's economy. Defining Industries are important because they play a significant role in a region's growth over time. The Federal Reserve Bank of Kansas City considers Defining Industries as those with a locational quotient of at least 1.25 that account for at least 0.2 percent of total employment in the region. On this basis Fremont County has six Defining Industries: Mining (6.57), Agriculture (4.17), Local Government (2.43), Forestry, Fishing, & Ag Support (2.05), State Government (1.27), and Civilian Federal Government (1.25).

**Data Source:** U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Local Area Personal Income & Employment, Table CA25.

Figure 13.

Change in Fremont County Employment by Sector: 2001-2013

			Change	Percent of	Percent
Sector	2001	2013	2001-2013	Change	Change
Local Government	3,302	4,584	1,282	37.2%	38.8%
Mining	482	1,430	948	27.5%	196.7%
Real Estate	632	989	357	10.4%	56.5%
Health Care & Social Assistance	2,089	2,404	315	9.1%	15.1%
Agriculture	1,228	1,485	257	7.5%	20.9%
Educational Services	268	520	252	7.3%	94.0%
Finance & Insurance	480	725	245	7.1%	51.0%
Other Services	1,123	1,307	184	5.3%	16.4%
Professional Services	757	890	133	3.9%	17.6%
Arts, Entertainment, & Recreation	341	472	131	3.8%	38.4%
Forestry, Fishing, & Ag Support	183	251	68	2.0%	37.2%
Management Services	557	615	58	1.7%	10.4%
Accommodations & Food Service	1,633	1,686	53	1.5%	3.2%
Federal - Civilian	452	479	27	0.8%	6.0%
Wholesale Trade	420	446	26	0.8%	6.2%
Transportation & Warehousing	593	610	17	0.5%	2.9%
Military	203	218	15	0.4%	7.4%
State Government	909	904	-5	-0.1%	-0.6%
Utilities	106	74	-32	-0.9%	-30.2%
Information	324	235	-89	-2.6%	-27.5%
Retail Trade	2,603	2,479	-124	-3.6%	-4.8%
Manufacturing	611	429	-182	-5.3%	-29.8%
Construction	1,947	1,456	-491	-14.3%	-25.2%
Total	21,243	24,688	3,445	100.0%	16.2%

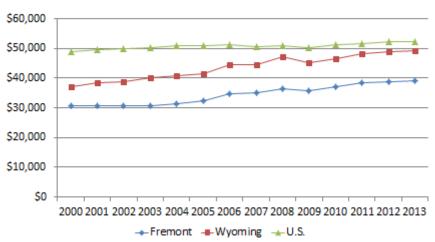
Employment in Fremont County increased by 16 percent from 2001 through 2013 (Figure 13). The largest increases were in Local Government which accounted for 37 percent of the growth in total county employment and Mining which accounted for 27 percent of the growth in total county employment. Combined these two sectors represented 65 percent of the total increase in county employment. In terms of other sectors, employment increases in Real Estate and Health Care & Social Services each accounted for more than 9 percent of the growth in total county employment. Also employment increases in Agriculture, Educational Services, and Finance & Insurance each accounted for more than 7 percent of the growth in total county employment. On the other hand, six sectors experienced losses in employment between 2001 and 2013 including: Construction (-491), Manufacturing (-182), Retail Trade (-124), Information (-89), Utilities (-32), and State Government (-5).

In terms of individual sector employment growth, the fastest growing sector was Mining which increased by nearly 3 times between 2001 and 2013. Following Mining, was Educational Services which

almost doubled in employment during the time period. Real Estate and Finance and Insurance also experienced substantial growth in employment growing by more than 1.5 times. On the other hand, Utilities, Manufacturing, Information, and Construction all experienced employment declines of more than 25 percent. The year 2001 was used to compare employment growth with 2013 rather than 2000 because the federal classifications for sectors changed in 2000 and as a result 2000 sector definitions are not consistent with 2013 sector definitions.

**Data Source:** U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Local Area Personal Income & Employment, Table CA25.

Figure 14.
Comparison of Average Earnings Per Job: 2000-2013
(Adjusted for Inflation)



In addition to the number of jobs, the labor earnings associated with these jobs is an important consideration. Overall average earnings per job are a general measure of the economic well-being of the local workforce. Figure 14 illustrates the continuing problem that the Fremont County economy has with relatively low paying jobs. In 2000, the average earnings per job in Fremont County were \$30,559 in 2009 dollars. The average earnings per job for the county in 2000 were 17 percent below Wyoming's (\$37,046) and 37 percent less than the U.S. (\$48,819). From 2000 to 2013, after adjusting for inflation, average earnings per job increased by 28 percent to \$39,074. Despite this increase, in 2013 the average earnings per job for the county were still 21 percent below Wyoming's (\$49,188) and 25 percent below the U.S (\$52,330). While the average earnings per job for the county were 21 percent below the state average, the Wyoming Economic Analysis Division estimates that the county's cost-of-living for the second quarter of 2013 was 98 percent above the state average. This suggests that, on average, the county's workforce was economically worse-off than the rest of the state in 2013.

**Data Source:** U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Local Area Personal Income & Employment, Table CA30.

Figure 15.

Average Earnings Per Job for Fremont County: 2013

		Earnings	
Sector	Jobs	(\$1,000)	AEPJ
Utilities	74	\$7,766	\$104,946
Federal - Civilian	479	\$41,456	\$86,547
Mining	1,430	\$114,965	\$80,395
State Government	904	\$56,466	\$62,462
Transportation & Warehousing	610	\$33,775	\$55,369
Local Government	4,584	\$243,225	\$53,060
Wholesale Trade	446	\$23,247	\$52,123
Construction	1,456	\$68,749	\$47,218
Professional Services	890	\$41,193	\$46,284
Information	235	\$10,599	\$45,102
Health Care & Social Assistance	2,404	\$107,364	\$44,660
Military	218	\$6,968	\$31,963
Retail Trade	2,479	\$74,775	\$30,163
Finance & Insurance	725	\$21,334	\$29,426
Manufacturing	429	\$12,398	\$28,900
Other Services	1,307	\$37,640	\$28,799
Real Estate	989	\$28,008	\$28,320
Management Services	615	\$16,772	\$27,272
Educational Services	520	\$11,402	\$21,928
Accommodations & Food Service	1,686	\$32,790	\$19,448
Agriculture	1,485	\$28,776	\$19,378
Forestry, Fishing, & Ag Support	251	\$4,813	\$19,175
Arts, Entertainment, & Recreation	472	\$3,543	\$7,506
Total	24,688	\$1,028,024	\$41,641

Average earnings per job (AEPJ) can vary substantially by sector (Figure 15). In 2013 AEPJ in Fremont County ranged from over \$100,000 for Utilities and to slightly more than \$7,500 for Arts, Entertainment, and Recreation. After Utilities, Federal – Civilian and Mining both had AEPJ of more than \$80,000. State Government, Transportation & Warehousing, Local Government and Wholesale Trade all had AEPJ above \$50,000. Six of the 23 sectors in the county's economy had an AEPJ that was greater than the average for Wyoming (\$52,420) and four of these sectors had an AEPJ that was greater than the U.S. average (\$55,768) in 2013. The six sectors with AEPJ above the Wyoming average represents only 33 percent of the total jobs in the county while the four sectors with AEPJ above the U.S. average represent only 12 percent of the total jobs in the county. This explains the lower overall AEPJ for the county relative to Wyoming and the U.S.

**Data Sources:** U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Local Area Personal Income & Employment, Tables CA25 & CA5.

Figure 16.

Total Labor Earnings for Fremont County: 2013

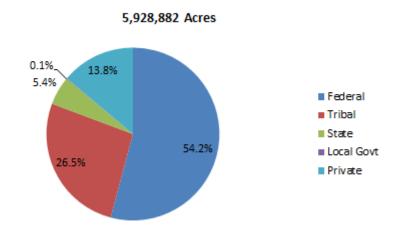
			Earnings	
Sector	Jobs	AEPJ	(\$1,000)	Percent
Local Government	4,584	\$53,060	\$243,225	23.7%
Mining	1,430	\$80,395	\$114,965	11.2%
Health Care & Social Assistance	2,404	\$44,660	\$107,364	10.4%
Retail Trade	2,479	\$30,163	\$74,775	7.3%
Construction	1,456	\$47,218	\$68,749	6.7%
State Government	904	\$62,462	\$56,466	5.5%
Federal - Civilian	479	\$86,547	\$41,456	4.0%
Professional Services	890	\$46,284	\$41,193	4.0%
Other Services	1,307	\$28,799	\$37,640	3.7%
Transportation & Warehousing	610	\$55,369	\$33,775	3.3%
Accommodations & Food Service	1,686	\$19,448	\$32,790	3.2%
Agriculture	1,485	\$19,378	\$28,776	2.8%
Real Estate	989	\$28,320	\$28,008	2.7%
Wholesale Trade	446	\$52,123	\$23,247	2.3%
Finance & Insurance	725	\$29,426	\$21,334	2.1%
Management Services	615	\$27,272	\$16,772	1.6%
Manufacturing	429	\$28,900	\$12,398	1.2%
Educational Services	520	\$21,928	\$11,402	1.1%
Information	235	\$45,102	\$10,599	1.0%
Utilities	74	\$104,946	\$7,766	0.8%
Military	218	\$31,963	\$6,968	0.7%
Forestry, Fishing, & Ag Support	251	\$19,175	\$4,813	0.5%
Arts, Entertainment, & Recreation	472	\$7,506	\$3,543	0.3%
Total	24,688	\$41,641	\$1,028,024	100.0%

The combination of the number of jobs and average earnings per job (AEPJ) determines the relative importance of individual sectors in the Fremont County economy in terms of total labor earnings (Figure 16). Labor earnings are important because they represent the major source of personal income for county residents. Overall, employment in the county generated \$1.0 billion of labor earnings in 2013. Local Government, due to its large number of jobs and above average AEPJ, represents 24 percent of this total. Following Local Government were Mining (11 percent) and Health Care & Social Assistance (10 percent). Retail Trade represented 7 percent of total county employment, Construction 7 percent and State Government 5 percent. These six sectors account for 65 percent of the total labor earnings in the county. Total government labor earnings (Local Government, State Government, Federal – Civilian, and Military) represents 34 percent of total labor earnings in the county.

**Data Sources:** U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Local Area Personal Income & Employment, Tables CA25 & CA5.

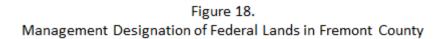
### **LAND CHARACTERISTICS**

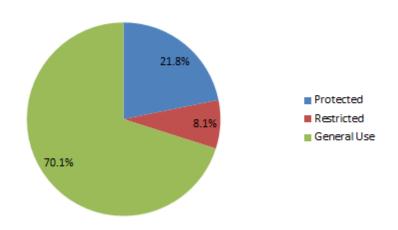
Figure 17.
Land Ownership in Fremont County



Fremont County is the second largest county in Wyoming containing 5.9 million acres (Figure 17). Most of this land area is under government or tribal ownership. More than 54 percent of the county's land area (3.2 million acres) is owned by the federal government. Of this amount, the BLM controls nearly two-thirds, with the Forest Service controlling more than 30 percent and the Bureau of Reclamation controlling nearly 4 percent. Tribal lands represent nearly 26 percent of the county's land area (1.6 million acres). State lands account for more than 5 percent of the county's land area (more than 317,000 acres). Nearly 85 percent of the state land area is state trust land with the other 15 percent held by the Game and Fish Department and the Recreation Commission. Finally, local government owns 0.1 percent of the land in the county (slightly more than 5,500 acres). As a result of the large government and tribal presence in the county, less than 14 percent of the county's land area is privately owned (slightly more than 820,000 acres). Information from the Wyoming Department of Revenue on acres taxed as agricultural land indicates that nearly 90 percent of the private land in the county is in agricultural use (more than 729,000 acres). Of this amount nearly 84 percent is range land (more than 610,000 acres).

**Data Source:** Wyoming Department of Administration and Information. 2010. Economic Analysis Division, Equality State Almanac, Sublette County Landowners (page 172).





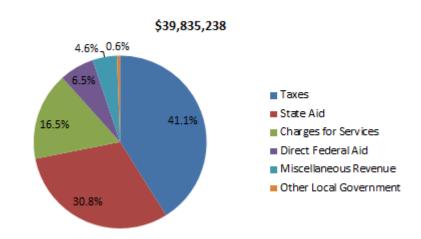
Federal lands are managed for different purposes under differing statutory authority. Three categories of designation are presented in Figure 18: 1) Protected, 2) Restricted., and 3) General Use. Protected areas include National Parks and Preserves (NPS), Wilderness (NPS, FWS, FS, BLM), National Conservation Areas (BLM), National Monuments (NPS, FS, BLM), National Recreation Areas (NPS, FS, BLM), National Wild and Scenic Rivers (NPS, FS, BLM), Water Fowl Protection Areas (FWS), Wildlife Management Areas (FWS), Research Natural Areas (FS, BLM), Areas of Critical Environmental Concern (BLM), and National Wildlife Refuges (FWS). Restricted areas include Wilderness Study Areas (NPS, FWS, FS, BLM) and Inventoried Roadless Areas (FS). General Use areas include Public Domain Lands (BLM) and National Forests and Grasslands (FS). This data was obtained from the Economic Profile System — Human Dimension Toolkit (NPS = National Park Service, FWS = Fish and Wildlife, FS = Forest Service, and BLM = Bureau of Land Management).

In Fremont County nearly 22 percent of federal lands are designated as protected (nearly 672,000 acres). This amount includes more than 530,000 acres of Forest Service land that is designated as national wilderness (54 percent of total Forest Service land in the county). Also, more than eight percent of federal lands are designated as restricted (nearly 250,000 acres) with 70 percent designated for general use (more than 3 million acres).

**Data Source:** Headwaters Economics. 2014. Economic Profile System-Human Dimension Toolkit, A Profile of Land Use (page 3).

## **County Government Finances**

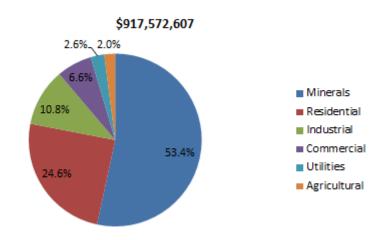
Figure 19.
Fremont County Government Revenue: FY2014



Wyoming Department of Audit information indicates that the total revenue for Fremont County Government was \$39.8 million in FY2014 (Figure 19). Of this total, the largest source was Taxes which included property taxes and optional sales tax revenue (41 percent). Following Taxes was State Aid which included the county's share of the 4 percent sales and use tax revenue (31 percent) and Charges for Services (16 percent). Combined these three sources represented 88 percent of the total county government revenue in FY2014. Other sources of county government revenue included Direct Federal Aid (including PILT payments), Miscellaneous Revenue, and Other Local Government Revenue. Combined these smaller revenue sources represented 12 percent of the total county government revenue in FY2014. Compared to all counties in Wyoming, the County had a lower proportion of revenue from Taxes (41 percent vs. 50 percent). The county's proportion from State Aid was higher relative to all counties in the state (31 percent vs. 26 percent) and the proportion from Charges for Services was substantially higher relative to all counties in the state (16 percent vs. 7 percent). Other sources of revenue were comparable to all other counties in the state in terms of Direct Federal Aid (6 percent vs.6 percent) and Miscellaneous Revenue (5 percent vs. 6 percent, except for Other Local Government (1 percent vs. 5 percent). Overall, the county's per capita revenue (\$972) was 25 percent below the average for all counties in Wyoming (\$1,288).

**Data Source:** Wyoming Department of Audit. 2014. Cost of Maintaining County Government in Wyoming: For Fiscal Year July 1, 2013-June 30, 2014, As prepared from Reports submitted to the Department of Audit Public Funds.

Figure 20.
Fremont County Assessed Valuation: FY2014

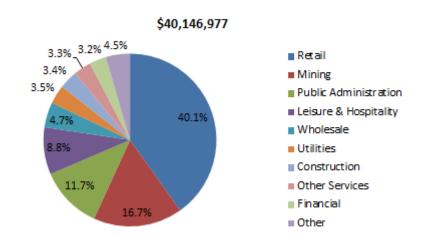


The total assessed valuation for Fremont County in FY2014 was \$917.6 million (Figure 20). More than 50 percent of the total valuation was from Mineral Production. Following minerals was Residential Property (25 percent) and Industrial Property (11 percent). Combined these three sources represented 89 percent of the county's total assessed valuation. Other sources of assessed valuation included Commercial Property (7 percent), Utilities (3 percent) and Agricultural Lands (2 percent). Combined these sources represented 11 percent of the county's assessed valuation.

Compared to Wyoming, the county had a lower proportion of assessed valuation from Mineral Production (53 percent vs. 60 percent). The county's proportion of assessed valuation from Residential Property was higher than Wyoming's (25 percent vs. 18 percent). The county's proportion of assessed valuation from Industrial Property was slightly higher than Wyoming's (11 percent vs. 9 percent). The county's assessed valuation for Commercial, Utilities, and Agricultural was comparable to Wyoming's (11 percent vs. 12 percent). In terms of Mineral Production, crude oil represented 61 percent of total county mineral assessed valuation, natural gas represented 39 percent of total county mineral assessed valuation, and sand & gravel represented less than 1 percent of total county mineral assessed valuation. In terms of Industrial Property, oil and gas facilities represented more than 93 percent of total county industrial property assessed valuation. Overall, oil and gas production and the associated facilities represent 63 percent of the county's total assessed valuation. This concentration makes county government finances vulnerable to fluctuations in oil and gas prices and activity in the county.

**Data Sources:** Wyoming Department of Revenue. 2014. 2014 Annual Report, Locally Assessed Valuations for the Year 2014 (page 10) and State Assessed Valuations for the Year 2014 (page 12).

Figure 21.
Fremont County Sales & Use Tax Revenue: FY2014

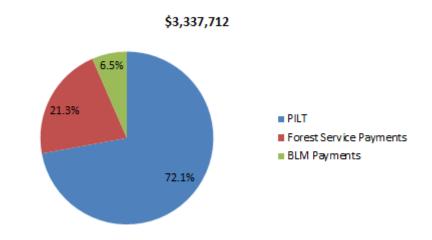


In FY2014 Fremont County's sales and use tax generated \$40.1 million in sales and use tax revenue (Figure 21). Of this total, 55 percent (\$22.1 million) was retained by state government and 45 percent (\$18.1 million) was returned to local governments in Fremont County. In FY2014 County government's share of the returned sales and use tax revenue was approximately \$9.0 million (50 percent) with the remaining \$9.0 million (50 percent) going to municipal governments in the county. About forty percent of the county's sales and use tax revenue came from Retail Trade. Following Retail Trade was Mining (17 percent), Public Administration (12 percent), and Leisure & Hospitality (9 percent). Combined these four sectors contributed 77 percent of the county's total sales and use tax revenue. Public Administration represents sales and use tax revenue on motor vehicle purchases which are collected at the time of registration in Wyoming. Wholesale, Utilities, Construction, Other Services, Financial and Other represented a combined 23 percent of county sales and use tax revenue with Utilities, Construction, Other Services, and Financial each accounting for more than 3 percent of total county sales and use tax revenue.

Compared to total sales and use tax revenue for Wyoming, the county had a substantially higher proportion of sales and use tax revenue from Retail Trade (40 percent vs. 29 percent). The county's proportion of sales and use tax revenue from Mining was somewhat lower than Wyoming's (17 percent vs. 21 percent). The proportion of county sales and use tax revenue from Public Administration was somewhat higher than Wyoming's (12 percent vs. 9 percent) and the proportion from Leisure & Hospitality was comparable to Wyoming's (9 percent vs. 9 percent).

**Data Sources:** Wyoming Department of Administration and Information, Economic Analysis Division. 2014. Wyoming Sales, Use, and Lodging Tax Revenue Report, 39<sup>th</sup> Edition.

Figure 22.
Fremont County Federal Land Payment: FY2013



The Economic Profile System-Human Dimensions Toolkit indicates that federal land payments to local governments in Fremont County totaled \$3.3 million in FY2013 (Figure 22). The largest source of federal land payments to the county was Payment in Lieu of Taxes (PILT) representing 72 percent of the total amount (\$2.4 million). PILT payments are intended to compensate county governments for non-taxable federal lands within their borders. It is based on a maximum per-acre payment reduced by other federal revenue sharing payments and subject to a per capita population cap. The second largest source of federal payments to the county was Forest Service payments representing 21 percent of the total amount (\$712,028). Forest Service payments can include 25% Revenue Sharing funds, Secure Rural School & Community Self Determination Act funds, and Bankhead-Jones Forest Grasslands funds. The third largest source of federal payments to the county was BLM Payments representing 6 percent of the total amount (\$218,130). BLM payments represent revenue sharing funds including grazing fees through the Taylor Grazing Act. Of the \$3.3 million in Federal land payments to the county in FY2013, 83 percent went to county government (\$2.8 million), 9 percent went to local school districts (\$302,612), 6 percent went to grazing districts (\$213,053), and 2 percent went to Resource Advisory Councils (\$56,962). In FY2013 Federal Land Payments to the county represented \$1.04 per acre of Federal land.

**Data Source:** Headwaters Economics. 2014. Economic Profile System-Human Dimension Toolkit, A Profile of Federal Land Payments (page 1).

Figure 23.
Fremont County Government Costs, FY2014

Costs	Amount	Percent	Per Capita
Jail	\$4,688,253	14.1%	\$114.35
County Sheriff	\$4,657,711	14.0%	\$113.61
Road and Bridge	\$3,535,887	10.6%	\$86.25
Health (Not Hospital)	\$3,437,663	10.3%	\$83.85
Boards	\$3,119,064	9.4%	\$76.08
Construction	\$1,784,014	5.4%	\$43.51
County Attorney	\$1,450,403	4.4%	\$35.38
Capital	\$1,447,550	4.4%	\$35.31
Social Services	\$1,002,696	3.0%	\$24.46
County Assessor	\$875,600	2.6%	\$21.36
County Clerk	\$862,952	2.6%	\$21.05
Justice or Circuit Court	\$783,131	2.4%	\$19.10
Administration	\$717,850	2.2%	\$17.51
Courthouse	\$709,752	2.1%	\$17.31
County Treasurer	\$681,816	2.0%	\$16.63
Parks & Recreation	\$669,626	2.0%	\$16.33
Distict Court	\$608,369	1.8%	\$14.84
County Commissioners	\$520,880	1.6%	\$12.71
Juvenile Probation	\$394,227	1.2%	\$9.62
County Coroner	\$350,800	1.1%	\$8.56
County Planner	\$289,396	0.9%	\$7.06
Other	\$271,284	0.8%	\$6.62
Agriculture Department	\$247,813	0.7%	\$6.04
Civil Defense	\$139,858	0.4%	\$3.41
Fire Protection	\$28,791	0.1%	\$0.70
Total	\$33,275,386	100.0%	\$811.63

The total cost of maintaining county government for Fremont County in FY2014 was \$33.3 million (Figure 23). This represents a per capita cost of \$811.63 which was 25 percent below the average for all Wyoming counties. The largest cost categories were Jail (14 percent) and County Sheriff (14 percent). If the costs of all law enforcement (County Sheriff, Jail, County Attorney, County Courts and Juvenile Probation) are considered it represents 36 percent of the total county budget. The other major cost categories were Road and Bridge (11 percent) and Health (10 percent). The combination of combined law enforcement, Road and Bridge, and Health represent 57 percent of the total county budget.

**Data Source:** Wyoming Department of Audit. 2014. Cost of Maintaining County Government in Wyoming: For Fiscal Year July 1, 2013-June 30, 2014, As prepared from Reports submitted to the Department of Audit Public Funds

# NATURAL RESOURCE BASED INDUSTRY PROFILES

Figure 24.
Fremont County Mining Industry

	Amount
Mineral Production (2013)	
Crude Oil (Barrels)	4,155,914
Natural Gas (MCF)	134,467,744
Sand & Gravel (Tons)	545,350
Bentonite (Tons)	6,247
Tax Revenue (2014)	
Assessed Valuation	\$582,649,593
Property Tax Revenue	\$42,329,493
Employment (2013)	
Full & Part-time Jobs	1,430
Labor Earnings	\$114,965,000
Average Earnings Per Job	\$80,395

In 2013, the 1,274 producing oil and gas wells in Fremont County produced 4.1 million barrels of crude oil and 134.5 million mcf of natural gas (Figure 24). This represented about 7 percent of total crude oil and 7 percent of total natural gas production in the state. The other major type of mineral production in the county was sand and gravel which produced 545,350 tons in 2013. This represented 4 percent of the total sand and gravel production in the state. There was also a small amount of bentonite production in the county during 2013. The mining industry in the county, including the associated industrial property, had an assessed valuation of \$582.6 million dollars in 2014 (2014 assessed valuation for mineral production is based on 2013 production). This valuation represented 63 percent of the total assessed valuation for the county. Based on a county levy of 72.6 mills the mineral industry generated \$42.3 million in property tax revenue in 2014. Of this total, 62 percent went to K-12 schools (\$26.4 million), 16 percent went to local county government (\$7.0 million), 12 percent went to county special districts (\$5.2 million), and 9 percent went to the Community College (\$3.8 million). Special districts in the county included: Cemetery, Water and Sewer, Solid Waste Disposal, and Conservation. In 2013 the mining industry in the county supported 1,430 jobs with labor earnings of \$115.0 million. This represented 6 percent of total employment and 11 percent of total labor earnings in the county. The percent of total employment in mining for the county was 6 times the national percentage (0.9%). The average earnings per job for mining in the county were \$80,395 which was 1.9 times the county average (\$41,641). The mining industry ranked 7th out of 23 sectors in the county's economy in terms of total employment and 2nd out of 23 sectors in terms of total labor earnings.

**Data Sources:** Wyoming Oil and Gas Conservation Commission. 2014. OnLine Stats Book, 2013 County Report. Wyoming Department of Revenue. 2014. 2014 Annual Report, State Assessed Valuation: Production Year 2013 (pages 44 & 45). U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Local Area Personal Income & Employment, Table CA25 & CA5.

Figure 25.
Fremont County Agricultural Industry

	Amount
Assets (2012)	
Total Land in Agriculture (Acres)	1,710,015
Cattle Inventory (Head)	81,288
Sheep Inventory (Head)	16,103
Investment – Land, Buildings, Equipment	\$1,629,139,000
Property Taxes Paid	\$4,800,000
Gross Revenue (2013)	\$151,614,000
Employment (2013)	
Jobs	1,485
Labor Earnings	\$28,776,000
Average Earnings Per Job	\$19,378

In 2012 there were 1,363 agricultural operations in Fremont County. These operations managed 1.7 million acres in the county (Figure 25). Included in this acreage is 89 percent of the private land in the county. Of the total land in agriculture, 88 percent is classified as grazing land, 10 percent as cropland, less than 1 percent as woodlands, and 2 percent as farmsteads and buildings. The average size of an agricultural operation in the county was 1,255 acres. The total cattle and sheep inventory in the county was 97,391 head including 81,288 head of cattle and calves and 16,103 head of sheep and lambs. In 2013, the county ranked 2nd out of 23 counties in Wyoming in terms of cattle and calves inventory and 8<sup>th</sup> out of 23 counties in terms of sheep and lambs inventory. It also ranked 5<sup>th</sup> in barley production, 5<sup>th</sup> in dry bean production, 6<sup>th</sup> in sugar beet production, 7<sup>th</sup> in corn for grain, 1<sup>st</sup> in alfalfa hay production, and 6<sup>th</sup> in other hay production. In terms of investment by agricultural operators, the estimated total market value of lands, buildings, and equipment for agriculture in the county was \$1.6 billion. This total included \$1.5 billion in land and buildings and \$141.1 million for equipment and machinery. The average investment per agricultural operation was \$1.2 million. In 2012 agricultural operations in the county paid \$4.8 million in property taxes.

The gross revenue for the agricultural industry in the county in 2013 was \$151.6 million. Of this total 55 percent was from cash receipts for livestock, 31 percent was from cash receipts for crops, 13 percent was from miscellaneous sources, and less than 1 percent was from government payments. Total employment for agriculture in 2013 was 1,485 jobs with labor earnings of \$28.8 million. This represented 6 percent of the jobs in the county and 3 percent of the labor earnings. The percent of total employment in agriculture for the county was 4.2 times the national percentage (1.4 percent). The average earnings per job for agriculture in the county were \$19,378 which was 47 percent the county

average (\$41,641). Average earnings per job in agriculture tend to be low because most employment in agriculture is self-employment and includes a large number of small part-time and lifestyle operations that generate limited labor earnings. The agriculture industry ranked 5<sup>th</sup> out of 23 sectors in the county's economy in terms of total employment and 12th out of 23 sectors in terms of total labor earnings.

In addition to jobs and income, agriculture also provides important natural resource amenities such as open space. Open space offers landscapes, lifestyles, and wildlife habitat that can have value to both residents and visitors. Open space is particularly important because it determines the character of the landscapes surrounding a community. Out of economic necessity, most agricultural operations in the county cover large areas of land; as a result, agriculture can contribute substantially to maintaining open spaces on private lands in a region. As noted above, 89 percent of the private land in county is in agricultural use. Due to the natural resource amenities associated with agricultural land there is public support for the retention of lands in agriculture. For example, a recent survey sponsored by the Wyoming Stock Growers Association, the Wyoming Stock Growers Land Trust, the Nature Conservancy, and the University of Wyoming found that nearly 80 percent of Wyoming residents felt that they personally benefit from the presence of farms and ranches in Wyoming. In addition, 76 percent of respondents were concerned with the loss of family farms and ranches in the State. Other issues of serious concerns to respondents included the availability of water for farming and ranching (71 percent), and natural areas and ranchland being split up by new development (66 percent).

There have been only a few efforts to quantify the values of agricultural land amenities to residents and visitors in the West. Studies in Colorado have found that ranchland provides important economic benefits to both residents and visitors. Magnan et al. (2005) found that the natural environment, ranchlands, and western historical preservation were the three most important contributors to local quality of life in Routt County. The analysis indicated that the value of ranchlands to current Routt County residents in terms of quality of life is likely to be \$20-\$30 million. Ellingson et al. (2006) found that the natural environment, ranch open space, western historical preservation, and recreational amenities are local assets that strongly add to the summer visitors' experience in Routt County. The analysis indicated that 50 percent of Routt County's summer tourists would reduce their expenditures and time spent in the area if existing ranchlands were converted to urban uses. This reduction would cost the county about \$8 million per year in lost direct revenue. Oren and Seidl (2004) found that Gunnison's public open space and private working landscapes contribute to the quality of winter tourism in the area. Their analysis indicates that wholesale conversion of local ranchland to tourism infrastructure and second homes may reduce winter tourism by as much as 40 percent. The impact of such a change could reach \$14 million dollars and 350 jobs per year. While these economic estimates are not necessarily directly transferable to Fremont County, they do suggest that there may be significant amenity values associated with ranchlands in the county. Also since these estimates represent indirect measures of value there is a potential for them to substantially overestimate the actual value.

As a result of development pressures from an expanding population base in the West, there are concerns about the retention of agricultural lands as working landscapes. The American Farmland Trust (2002) identified 464,000 acres of "prime" ranchland in Fremont County and estimated that 296,960 acres (64 percent) could be converted to residential development by 2020. They defined prime ranchland as private agricultural lands with desirable wildlife characteristics including 1) low rural development densities, 2) proximity to publicly owned lands, 3) year-round water availability, 4) mixed grass and tree cover, and 5) a high variety of vegetation classes. The county ranked 21st among all counties in the Western U.S. in terms of prime ranchland at risk of development.

There is evidence that there has actually been some change in ownership of agricultural lands in Fremont County. Travis et al. (2003) estimated that 218,551 acres of ranchland in the county change ownership in just eleven years (1990-2001). Traditional ranchers bought less than one-half (46 percent) of these acres of ranchland (101,507 acres) with Amenity Buyers purchasing 14 percent (30,059 acres), Investors - 6 percent (12,387 acres), Developers- less than 1 percent (440 acres), Part-Time Ranchers - 8 percent (17,175 acres), Corporations - 6 percent (14,003 acres), Conservation Organizations - 6 percent (12,471 acres), Other Buyers - 13 percent (28,865 acres), and Unknown Buyers - 1 percent (1,644 acres). Although only 440 acres of ranchland was directly purchased by developers, the long-term resiliency of the other non-tradition rancher buyers is unknown. Also, since the analysis only considered ranch sales of 400 acres or more, the amount of ranchland going to development may be understated since such conversions often involve smaller parcels. The authors note that this change in ownership may lead to instability in land tenure for ranchlands in the region and raise concerns with the retention of land in agriculture in the county.

Data Sources: USDA. 2014. National Agricultural Statistics Service, 2012 Census of Agriculture: Wyoming State and County Data, Volume 1, Geographic Series Part 50, AC-12-A-50, Table 1. County Summary Highlights: 2012 and Table 8. Farms, Land in Farms, Value of Land and Buildings, and Land Use: 2012 and 2007. U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Local Area Personal Income & Employment, Tables CA45, CA25, & CA5. Freedman, K.S. and N.M. Koranta. 2014. Public Opinion on Natural Resource Conservation in Wyoming: Wyoming Open Space Initiative, Ruckelshaus Institute, A Division of the Haub School of Environment and Natural Resources, UW Extension B-1258, October 2014. Magnan, N. A. Seidl, C.J. Mucklow, and D. Alpe. 2005. The Value of Ranchland to Routt County Residents, 1998-2005. Economic Development Report, Department of Agricultural and Resource Economics, Fort Collins, CO, EDR 05-02, October 2005. Ellingson, L., A. Seidl, and C.J. Mucklow. 2006. Tourists' Value of Routt County's Working Landscape, 2005. Economic Development Report, Department of Agricultural and Resource Economics, Fort Collins, CO, EDR 06-05, May 2006. Oren, A., A. Seidl. 2004. Winter Tourism and Land Development in Gunnison, Colorado. Economic Development Report, Department of Agricultural and Resource Economics, Fort Collins, CO, EDR 04-10, August 2004. American Farmland Trust. 2002. Strategic Ranchland in the Rocky Mountain West: Mapping the Threats to Prime Ranchland in Seven Western States, American Farmland Trust, Washington D.C. Travis, W.R., H. Gosnell, and J. H. Haggerty. 2003. Summary Report: Ranchland Dynamics in the Greater Yellowstone Ecosytem, A Report to Yellowstone Heritage, Center of the American West, University of Colorado at Boulder.

Figure 26.
Fremont County Travel Industry, 2013

	Amount
VisitorSpending	\$136.4 Million
Employment	1,530 Jobs
Labor Income	\$43.5 Million
Average Earnings Per Job	\$28,431
Local Tax Revenue	\$1.4 million

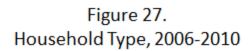
Dean Runyan Associates estimates that visitors spent \$136.4 million while in Fremont County in 2013 (Figure 26). In terms of accommodations, 34 percent of this spending was by visitors staying in hotels/motels, 24 percent by visitors staying in campgrounds, 20 percent was by visitors staying in private homes, 5 percent was by visitors staying in vacation homes, and 16 percent was by visitors not staying overnight. In terms of purchases, 30 percent was for local transportation & gas, 20 percent was for food services, 15 percent was for arts/entertainment/recreation, 14 percent was for retail sales, 13 percent for accommodations, 7 percent went to food stores and less than 1 percent for air transportation.

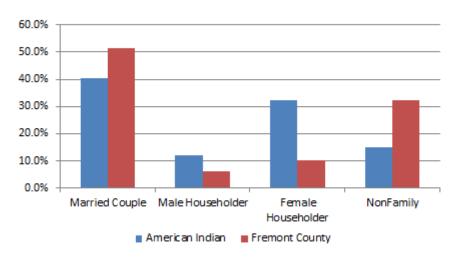
Dean Runyan estimated that the travel industry generated 1,530 jobs in the county in 2013. This represents 6 percent of total employment in the county. Nearly 60 percent of these jobs were in the accommodations and food service sector, 25 percent were in the arts/entertainment/recreation sector, and 13 percent were in the retail trade sector. The labor earnings associated with this employment was estimated to be \$43.5 million. This represents 4 percent of the total labor earnings for the county. Average earnings per job for the travel industry in the county for 2013 were \$28,431. Average earnings per job for the travel industry were 68 percent the county average (\$41,641).

The tax revenue associated with the county's travel industry is estimated to be \$1.5 million with \$0.5 million (33 percent) going to local government and \$1.0 million (67 percent) going to state government.

**Data Source:** Dean Runyan Associates. 2014. Wyoming Travel Impacts: 2000-2013, Prepared for Wyoming Office of Tourism, Cheyenne, Wyoming.

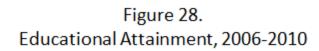
#### **AMERICAN INDIAN RESIDENTS**

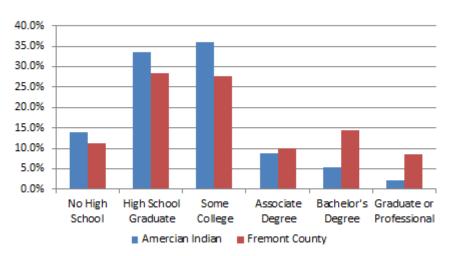




The Wind River Indian Reservation occupies 1.6 million acres in Fremont County representing 26 percent of the total land base in the county (see page 22). Due to the presence of the reservation, Native Americans represent the second largest category of race in the county accounting for 21 percent of the total population (see page 7). In many respects the social and economic characteristics of the American Indian population in the county are somewhat different than the rest of the county's population. In terms of household type, American Indian residents were less likely to be in a married couple family (40 percent vs. 51 percent) or a nonfamily household (15 percent vs. 32 percent). Nonfamily households represent mostly people living alone, but also a household where no one is related to the householder. Conversely, American Indian residents were more likely to live in a male householder family with no wife present (12 percent vs. 6 percent) and in a female householder family with no husband present (32 percent vs. 10 percent).

**Data Source:** U.S. Census Bureau. 2014. American Fact Finder, Selected Social Characteristics in the United States, 2006-2010 American Community Survey Selected Population Tables, DP02.

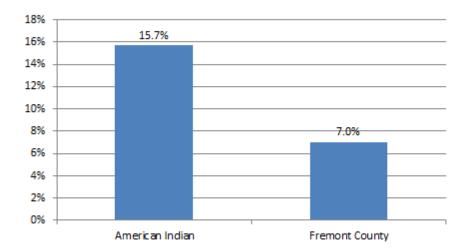




In terms of educational attainment, American Indian residents were more likely to not have a high school degree (14 percent vs. 11 percent), be only a high school graduate (34 percent vs. 28 percent), or have attended some college (36 percent vs. 28 percent). Conversely, they were slightly less likely to have an associate degree (9 percent vs. 10 percent), less likely to have a bachelor's degree (5 percent vs. 14 percent), and less likely to have a graduate or professional degree (2 percent vs. 8 percent). Overall, the percentage of the American Indian residents with a high school degree or higher was comparable to the county residents (86 percent vs. 89 percent); however the percentage of American Indian residents with a bachelor's degree or higher was significantly lower than for county residents (7 percent vs. 23 percent).

**Data Source:** U.S. Census Bureau. 2014. American Fact Finder, Selected Social Characteristics in the United States, 2006-2010 American Community Survey Selected Population Tables, DP02.

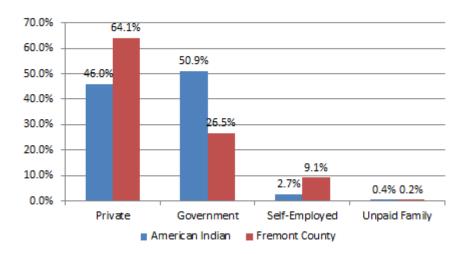
Table 29.
Percent Unemployed: 2006-2010



Unemployment is a continuing problem for American Indian residents in Fremont County. For the period 2006 through 2010, the Census Bureau estimates that the unemployment rate for American Indians in Fremont County was 16 percent. This was more than twice the unemployment rate for Fremont County as a whole (7%). Due to the difficulties of collecting census data on the reservation, the actual unemployment rate for American Indians in the county may be substantially higher than that reported by the Census Bureau.

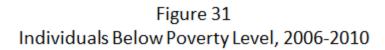
**Data Source:** U.S. Census Bureau. 2014. American Fact Finder, Selected Social Characteristics in the United States, 2006-2010 American Community Survey Selected Population Tables, DP03.

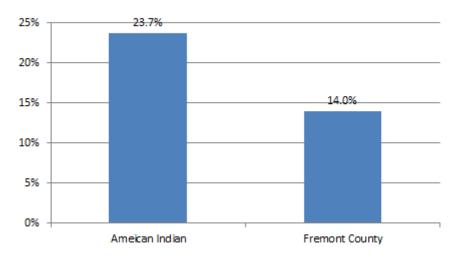
Figure 30. Class of Worker, 2006-2010



For those American Indian residents that are employed, the type of employment is also different than that for Fremont County as whole. Only 46 percent of the American Indian workers in the county are employed in the private sector compared to 64 percent for all workers. Conversely, 51 percent of the American Indian workers are employed in the government sector versus 26 percent for all workers in the county. The percentage of workers that are self-employed is also less for American Indian workers (3 percent vs. 9 percent). The percent of workers that are unpaid family labor is higher for American Indian workers than for all workers in the county (.04 percent versus .02 percent).

**Data Source:** U.S. Census Bureau. 2014. American Fact Finder, Selected Social Characteristics in the United States, 2006-2010 American Community Survey Selected Population Tables, DP03.





Due to the high unemployment rate among American Indian residents in the county, these residents also have a high poverty level. For the 2006-2010 time period, the Census Bureau estimates that 24 percent of the American Indian residents in the county were living below the poverty level. This was nearly twice the poverty rate for the county as a whole. Due to the difficulties in collecting census data on the reservation, the actual poverty rate may be substantially higher than that reported by the Census Bureau. The poverty rate was particularly high for American Indian families with a female householder, no husband present, with related children under 5 years old at 66 percent. On a per capita income basis, American Indian residents were 40 percent below the average for the county (\$14,809 versus \$24,173). American Indian residents were also more likely to receive cash public assistance income (15 percent vs. 4 percent) and to have food stamp/SNAP benefits (26 percent vs. 9 percent).

**Data Source:** U.S. Census Bureau. 2014. American Fact Finder, Selected Social Characteristics in the United States, 2006-2010 American Community Survey Selected Population Tables, DP03.

### **TABLES**

Table 1. Population, 2000-2013							
Year	Fremont	Wyoming	U.S.				
2000	35,840	494,300	282,162,411				
2001	35,718	494,657	284,968,955				
2002	36,015	500,017	287,625,193				
2003	36,130	503,453	290,107,933				
2004	36,383	509,106	292,805,298				
2005	36,838	514,157	295,516,599				
2006	37,408	522,667	298,379,912				
2007	38,132	534,876	301,231,207				
2008	38,907	546,043	304,093,966				
2009	39,685	559,851	306,771,529				
2010	40,229	564,222	309,326,295				
2011	40,585	567,329	311,582,564				
2012	41,090	576,626	313,873,685				
2013	40,998	582,658	316,128,839				
Change	5,158	88,358	33,966,428				
Percent	14.4%	17.9%	12.0%				
Source	Fremont	Wyoming	U.S.				
Natural Increase	2,697	42,359	21,964,712				
Net Migration	2,461	45,999	12,001,716				
Total Change	5,158	88,358	33,966,428				
Source: WY Departme	nt of A & I	- Economic	Analysis Divi	sion			
Table 2. Primary Reaso	on for Mov	ing to Fren	nont County,	2000-2013			
,			.,,				
Reason	Number	Percent					
Job Related	1,670	41.6%					
Better Quality of Life	348	8.7%					
Friends or Relatives	1,143	28.5%					
Other	852	21.2%					
Total	4,013	100.0%					
Source: Wyoming Community Development Authority							

Table 3. Age of Pop	ulation 20	13				
Table 3. Age of Fop	, didition, 20	,13				
				Fremont	Wyoming	U.S.
Age	Fremont	Wyoming	U.S.	Percent	Percent	Percent
Under 5	3,076	38,347		7.5%	6.6%	6.3%
5 to 17	7,308	,		17.8%	17.0%	17.0%
18 to 24	3,441	,		8.4%	10.1%	10.0%
25 to 44	9,585	151,055		23.4%	25.9%	26.3%
45 to 64	11,133	156,669		27.2%	26.9%	26.3%
65 and over	6,455	78,689		15.7%	13.5%	14.1%
Total	40,998		316,128,839	100.0%	100.0%	100.0%
Median Age	38.4	36.8	37.6			
Source: WY Departi	ment of A 8	ያ I - Econor	nic Analysis D	Division		
Table 4. Race of Po	pulation, 2	013				
				Fremont	Wyoming	U.S.
Race	Fremont	Wyoming	U.S.	Percent	Percent	Percent
White	30,731	539,936	245,499,216	75.0%	92.7%	77.7%
Black	388	10,186	41,623,897	0.9%	1.7%	13.2%
Native American	8,529	15,258	3,910,028	20.8%	2.6%	1.2%
Asian	220	5,506	16,632,553	0.5%	0.9%	5.3%
Pacific Islander	19	630	722,417	0.0%	0.1%	0.2%
Two or More	1,111	11,142	7,740,728	2.7%	1.9%	2.4%
Total	40,998	582,658	316,128,839	100.0%	100.0%	100.0%
				Fremont	Wyoming	U.S.
Identity	Fremont	Wyoming	U.S.	Percent	Percent	Percent
Hispanic	2,680	56,363	54,071,370	6.5%	9.7%	17.1%
Non-Hispanic	38,318	526,295	262,057,469	93.5%	90.3%	82.9%
Total	40,998	582,658	316,128,839	100.0%	100.0%	100.0%
Source: WY Departi	ment of A 8	ያ I - Econor	nic Analysis D	Division		

Table 5. Per Capita Ir	ncome, 201	3				
-				Fremont	Wyoming	U.S.
Туре	Fremont	Wyoming	U.S.	Percent	Percent	Percent
Net Earnings	\$22,658	\$31,288	\$28,679	51.8%	59.2%	64.1%
Transfer Payments	\$8,164	\$6,484	\$7,638	18.6%	12.3%	17.1%
Investment	\$12,958	\$15,055	\$8,448	29.6%	28.5%	18.9%
Total	\$43,780	\$52,827	\$44,765	100.0%	100.0%	100.0%
	Deflated	Deflated	Deflated	Deflated	Deflated	Deflated
	Fremont	Fremont	Fremont	Fremont	Wyoming	U.S.
Year	Earnings	Tranfer	Investment	Total	Total	Total
2000	\$16,118	\$5,582	\$7,024	\$28,724	\$35,327	\$37,351
2001	\$16,713	\$5,764	\$6,893	\$29,370	\$36,653	\$37,633
2002	\$16,966	\$6,004	\$6,705	\$29,675	\$36,871	\$37,388
2003	\$16,619	\$6,283	\$7,299	\$30,201	\$38,418	\$37,666
2004	\$17,214	\$6,343	\$7,984	\$31,541	\$40,004	\$38,482
2005	\$18,152	\$6,325	\$8,504	\$32,980	\$42,594	\$39,013
2006	\$19,394	\$6,493	\$9,729	\$35,617	\$46,767	\$40,211
2007	\$20,120	\$6,678	\$9,453	\$36,251	\$47,023	\$40,894
2008	\$21,103	\$7,039	\$9,808	\$37,950	\$49,418	\$41,188
2009	\$19,744	\$7,618	\$8,356	\$35,718	\$43,488	\$39,379
2010	\$20,290	\$7,754	\$8,441	\$36,485	\$44,486	\$39,664
2011	\$21,125	\$7,619	\$9,425	\$38,169	\$47,733	\$41,020
2012	\$21,287	\$7,522	\$12,230	\$41,039	\$49,970	\$42,094
2013	\$21,261	\$7,661	\$12,159	\$41,081	\$49,569	\$42,005
Change	\$5,143	\$2,079	\$5,135	\$12,357	\$14,242	\$4,654
Percent of Total	41.6%	16.8%	41.6%	100.0%	N.A.	N.A.
Percent Change	31.9%	37.2%	73.1%	43.0%	40.3%	12.5%
C B		-1				
Source: Bureau of Ec	onomic An	aiysis				

				Fremont	Wyoming	U.S
Degree	Fremont	Wyoming	U.S.	Percent	Percent	Percen
No High School Degree	2,325	28,616	28,773,258		7.6%	13.9%
High School Graduate	8,070			30.1%	30.0%	28.2%
Some College	7,808				27.6%	21.2%
Associate Degree	2,928			10.9%	10.1%	7.8%
Bachelor's Degree	3,829	62,127	37,260,334	14.3%	16.5%	18.0%
Graduate or Professional	1,865	30,875	22,356,200	7.0%	8.2%	10.8%
Total Population 25 Yrs or Old	26,825	376,529	206,587,852	100.0%	100.0%	100.0%
High School Degree or Higher	24,500	347,913	177,814,594	91.3%	92.4%	86.1%
Bachelor's Degree or Higher	5,694	93,003	59,616,534	21.2%	24.7%	28.9%
Source: WY Department of A &	ı I - Econon	nic Analysis	Division			
Table 7. Employment, 2000-20	13					
	Fremont	Fremont	Fremont	Wyoming	U.S.	
Year	W&S	SelfEmpl	Total	Total	Total	
2000	15,651	5,122	20,773	322,283	165,370,800	
2001	15,831	5,412	21,243	328,624	165,519,200	
2002	16,172	5,559	21,731	333,038	165,159,100	
2003	15,839	5,562	21,401	335,584	166,026,500	
2004	16,096	5,732	21,828	343,080	169,036,700	
2005	16,546	5,905	22,451	353,738	172,557,400	
2006	16,953	6,109	23,062	368,896	176,123,600	
2007	17,497	6,703	24,200	386,981	179,885,700	
2008	18,015	6,776	24,791	397,281	179,645,900	
2009	17,673	6,650	24,323	385,464	174,243,700	
2010	17,767	6,631	24,398	381,611	173,044,700	
2011	17,958	6,518	24,476	386,385	176,286,700	
2012	18,144	6,552	24,696	392,201	178,846,000	
2013	18,025	6,663	24,688	395,312	182,278,200	

Table 8. Fremont County Employment by Sector, 2013				
Sector	Jobs	Percent	LQ	
Local Government	4,584	18.6%	2.41	
Retail Trade	2,479	10.0%	0.98	
Health Care & Social Assistance	2,404	9.7%	0.88	
Accommodations & Food Service	1,686	6.8%	0.95	
Agriculture	1,485	6.0%	4.16	
Construction	1,456	5.9%	1.30	
Mining	1,430	5.8%	6.95	
Other Services	1,307	5.3%	0.90	
Real Estate	989	4.0%	0.89	
State Government	904	3.7%	1.30	
Professional Services	890	3.6%	0.57	
Finance & Insurance	725	2.9%	0.53	
Management Services	615	2.5%	0.37	
Transportation & Warehousing	610	2.5%	0.70	
Educational Services	520	2.1%	0.90	
Federal - Civilian	479	1.9%	1.22	
Arts, Entertainment, & Recreation	472	1.9%	0.78	
Wholesale Trade	446	1.8%	0.55	
Manufacturing	429	1.7%	0.24	
Forestry, Fishing, & Ag Support	251	1.0%	1.65	
Information	235	1.0%	0.55	
Military	218	0.9%	0.79	
Utilities	74	0.3%	0.92	
Total	24,688	100.0%	N.A.	
Source: Bureau of Economic Analysis	S			

Table 9. Change in Fremont County I	Employmer	nt by Sect	or, 2001-20	11	
			Change	Percent of	Percen
Sector	2001	2012	2001-2012	Change	Change
Local Government	3,302	4,584		37.2%	38.8%
Mining	482	1,430	948	27.5%	196.7%
Real Estate	632	989	357	10.4%	56.5%
Health Care & Social Assistance	2,089	2,404	315	9.1%	15.1%
Agriculture	1,228	1,485	257	7.5%	20.9%
Educational Services	268	520	252	7.3%	94.0%
Finance & Insurance	480	725	245	7.1%	51.0%
Other Services	1,123	1,307	184	5.3%	16.4%
Professional Services	757	890	133	3.9%	17.6%
Arts, Entertainment, & Recreation	341	472	131	3.8%	38.4%
Forestry, Fishing, & Ag Support	183	251	68	2.0%	37.2%
Management Services	557	615	58	1.7%	10.4%
Accommodations & Food Service	1,633	1,686	53	1.5%	3.2%
Federal - Civilian	452	479	27	0.8%	6.0%
Wholesale Trade	420	446	26	0.8%	6.2%
Transportation & Warehousing	593	610	17	0.5%	2.9%
Military	203	218	15	0.4%	7.4%
State Government	909	904	-5	-0.1%	-0.6%
Utilities	106	74	-32	-0.9%	-30.2%
Information	324	235	-89	-2.6%	-27.5%
Retail Trade	2,603	2,479	-124	-3.6%	-4.8%
Manufacturing	611	429	-182	-5.3%	-29.8%
Construction	1,947	1,456	-491	-14.3%	-25.2%
Total	21,243	24,688	3,445	100.0%	16.2%
Source: Bureau of Economic Analysis	;				

Table 10. Average	e Earnings	Per Job, 20	00-2013
	Deflated	Deflated	Deflated
Year	Fremont	Wyoming	U.S.
2000	\$30,559	\$37,046	\$48,819
2001	\$30,725	\$38,461	\$49,611
2002	\$30,822	\$38,938	\$49,895
2003	\$30,671	\$40,030	\$50,384
2004	\$31,395	\$40,669	\$51,079
2005	\$32,514	\$41,586	\$50,784
2006	\$34,612	\$44,465	\$51,156
2007	\$34,959	\$44,385	\$50,671
2008	\$36,374	\$47,257	\$51,065
2009	\$35,827	\$45,118	\$50,228
2010	\$37,135	\$46,691	\$51,283
2011	\$38,330	\$48,220	\$51,671
2012	\$38,765	\$48,897	\$52,461
2013	\$39,074	\$49,188	\$52,330
Percent Change	27.9%	32.8%	7.2%
Source: Bureau of	Economic	Analysis	

Table 10a. Average Earnings Per Job for Fremont County, 2013				
		Earnings		
Sector	Jobs	(\$1,000)	AEPJ	
Utilities	74	\$7,766	\$104,946	
Federal - Civilian	479	\$41,456	\$86,547	
Mining	1,430	\$114,965	\$80,395	
State Government	904	\$56,466	\$62,462	
Transportation & Warehousing	610	\$33,775	\$55,369	
Local Government	4,584	\$243,225	\$53,060	
Wholesale Trade	446	\$23,247	\$52,123	
Construction	1,456	\$68,749	\$47,218	
Professional Services	890	\$41,193	\$46,284	
Information	235	\$10,599	\$45,102	
Health Care & Social Assistance	2,404	\$107,364	\$44,660	
Military	218	\$6,968	\$31,963	
Retail Trade	2,479	\$74,775	\$30,163	
Finance & Insurance	725	\$21,334	\$29,426	
Manufacturing	429	\$12,398	\$28,900	
Other Services	1,307	\$37,640	\$28,799	
Real Estate	989	\$28,008	\$28,320	
Management Services	615	\$16,772	\$27,272	
Educational Services	520	\$11,402	\$21,928	
Accommodations & Food Service	1,686	\$32,790	\$19,448	
Agriculture	1,485	\$28,776	\$19,378	
Forestry, Fishing, & Ag Support	251	\$4,813	\$19,175	
Arts, Entertainment, & Recreation	472	\$3,543	\$7,506	
Total	24,688	\$1,028,024	\$41,641	
Source: Bureau of Economic Analysis	<u> </u> S			

Table 11. Total Labor Earnings for Fre	nty, 2013			
		•		
			Earnings	
Sector	Jobs	AEPJ	(\$1,000)	Percent
Local Government	4,584	\$53,060	\$243,225	23.7%
Mining	1,430	\$80,395	\$114,965	11.2%
Health Care & Social Assistance	2,404	\$44,660	\$107,364	10.4%
Retail Trade	2,479	\$30,163	\$74,775	7.3%
Construction	1,456	\$47,218	\$68,749	6.7%
State Government	904	\$62,462	\$56,466	5.5%
Federal - Civilian	479	\$86,547	\$41,456	4.0%
Professional Services	890	\$46,284	\$41,193	4.0%
Other Services	1,307	\$28,799	\$37,640	3.7%
Transportation & Warehousing	610	\$55,369	\$33,775	3.3%
Accommodations & Food Service	1,686	\$19,448	\$32,790	3.2%
Agriculture	1,485	\$19,378	\$28,776	2.8%
Real Estate	989	\$28,320	\$28,008	2.7%
Wholesale Trade	446	\$52,123	\$23,247	2.3%
Finance & Insurance	725	\$29,426	\$21,334	2.1%
Management Services	615	\$27,272	\$16,772	1.6%
Manufacturing	429	\$28,900	\$12,398	1.2%
Educational Services	520	\$21,928	\$11,402	1.1%
Information	235	\$45,102	\$10,599	1.0%
Utilities	74	\$104,946	\$7,766	0.8%
Military	218	\$31,963	\$6,968	0.7%
Forestry, Fishing, & Ag Support	251	\$19,175	\$4,813	0.5%
Arts, Entertainment, & Recreation	472	\$7,506	\$3,543	0.3%
Total	24,688	\$41,641	\$1,028,024	100.0%
Source: Bureau of Economic Analysis				

	Fremont Co	ounty	
		Percent	Percent
Owner	Acres	of Total	of Type
BLM	2,104,640	35.5%	65.5%
Forest Service	980,928	16.5%	30.5%
Bureau of Reclamation	125,632	2.1%	3.9%
Total Federal	3,211,200	54.2%	100.0%
Total Tribal Lands	1,573,940	26.5%	100.0%
	1,575,510	20.070	200.070
State Trust Lands	268,552	4.5%	84.6%
Recreation Commission	639	0.0%	0.2%
Fish & Game	48,181	0.8%	15.2%
Total State	317,372	5.4%	100.0%
	527,572	3,0	
County	814	0.0%	14.7%
Cities	3,730	0.1%	67.2%
School Dist. & Colleges	1,007	0.0%	18.1%
Total Local Government	5,551	0.1%	100.0%
Total Private	820,819	13.8%	100.0%
Total Land Area	5,928,882	100.0%	
otal Lana Arca	3,320,002	100.070	
Source: Equality State Almana	ac		
· · · · · ·			
Table 13. Acres of Taxable Ag	ricultural La	nd in Frem	ont Count
	ricultural La Acres	nd in Frem Percent	ont Count
Classification			ont Count
Classification rrigated Lands	Acres	Percent	nont Count
Classification rrigated Lands Dry Farm Land	Acres 118,361	Percent 16.2%	nont Count
Classification rrigated Lands Dry Farm Land Range Land	Acres 118,361 0	Percent 16.2% 0.0%	nont Count
Classification Trigated Lands Dry Farm Land Range Land Total Taxable Ag Land	Acres 118,361 0 610,826 729,187	Percent 16.2% 0.0% 83.8% 100.0%	
Table 13. Acres of Taxable Ag Classification Irrigated Lands Dry Farm Land Range Land Total Taxable Ag Land Source: Wyoming Departmen	Acres 118,361 0 610,826 729,187	Percent 16.2% 0.0% 83.8% 100.0%	
Classification  Irrigated Lands  Dry Farm Land  Range Land  Total Taxable Ag Land  Source: Wyoming Departmen	Acres 118,361 0 610,826 729,187 t of Revenu	Percent 16.2% 0.0% 83.8% 100.0% e 2013 Ann	nual Repor
Classification Irrigated Lands Dry Farm Land Range Land Total Taxable Ag Land Source: Wyoming Departmen	Acres 118,361 0 610,826 729,187 t of Revenu	Percent 16.2% 0.0% 83.8% 100.0% e 2013 Ann	nual Repor
Classification Irrigated Lands Dry Farm Land Range Land Total Taxable Ag Land Source: Wyoming Departmen Table 14. Management Design	Acres 118,361 0 610,826 729,187 t of Revenu	Percent 16.2% 0.0% 83.8% 100.0% e 2013 Ann	nual Repor
Classification Irrigated Lands Dry Farm Land Range Land Total Taxable Ag Land	Acres 118,361 0 610,826 729,187 t of Revenu nations of Formations of For	Percent  16.2%  0.0%  83.8%  100.0%  e 2013 Ann  ederal Lane  Percent	nual Repor
Classification Irrigated Lands Dry Farm Land Range Land Total Taxable Ag Land Source: Wyoming Departmen Table 14. Management Design Type Protected	Acres 118,361 0 610,826 729,187 t of Revenu nations of Foundations	Percent 16.2% 0.0% 83.8% 100.0% e 2013 Ann ederal Land Percent 21.8%	nual Repor
Classification Irrigated Lands Dry Farm Land Range Land Total Taxable Ag Land Source: Wyoming Departmen Table 14. Management Design Type Protected Restricted	Acres 118,361 0 610,826 729,187 t of Revenue hations of Formations of Fo	Percent  16.2%  0.0%  83.8%  100.0%  e 2013 Ann  ederal Land  Percent  21.8%  8.1%	nual Repor

Table 15. Fremont County C	Government Rev	enue, FY2014
Course	A a	Downont
Source	Amount	Percent
Taxes	\$16,359,140	41.1%
State Aid	\$12,276,206	30.8%
Charges for Services	\$6,556,981	16.5%
Direct Federal Aid	\$2,589,159	6.5%
Miscellaneous Revenue	\$1,819,603	4.6%
Other Local Government	\$234,149	0.6%
Total	\$39,835,238	100.0%
Source: Wyoming Departm	ent of Audit	
Table 16. Fremont County A	Assessed Valuation	on, FY2014
Property Type	Amount	Percent
Minerals	\$489,938,015	53.4%
Residential Property	\$226,026,926	24.6%
Industrial Property	\$98,953,047	10.8%
Commercial Property	\$60,591,394	6.6%
Utilities	\$23,454,831	2.6%
Agricultural Lands	\$18,608,394	2.0%
Total Valuation	\$917,572,607	100.0%
Crude Oil	\$298,492,308	60.9%
Natural Gas	\$190,281,800	38.8%
Sand & Gravel	\$1,109,442	0.2%
Total Minerals	\$489,883,550	100.0%
Source: Wyoming Departm	ent of Revenue	

Table 17. Fremont County Sales & Use Tax Revenue, FY2014							
Industry	Sales Tax	Llse Tay	Sales & Use	Percent			
Retail	\$15,789,765		\$16,112,472	40.1%			
Mining		\$3,933,915		16.7%			
Public Administration		\$1,205,354		11.7%			
	\$3,501,202			8.8%			
Leisure & Hospitality Wholesale							
	\$1,854,428 \$1,395,070			4.7% 3.5%			
Utilities							
Construction	\$438,776			3.4%			
Other Services	\$1,312,397			3.3%			
Financial	\$1,208,656			3.2%			
Information	\$1,006,993			2.6%			
Manufacturing	\$446,675		. ,	1.1%			
Business Services	\$162,214			0.5%			
Transportation	\$38,046			0.2%			
Eduction & Health	\$42,529			0.1%			
Agr & Other Total	\$14,813		\$14,813 \$40,146,977	0.0%			
Source: Wyoming Economic A	Analysis Divisi	on					
	,						
Table 18. Fremont County Fed	deral Land Pa	yments, FY2	2013				
Source	Amount	Percent					
PILT	\$2,407,554	72.1%					
Forest Service Payments	\$712,028	21.3%					
BLM Payments	\$218,130	6.5%					
Total	\$3,337,712	100.0%					
Distributions	Amount	Percent					
County Government	\$2,765,085	82.8%					
Local School Districts	\$302,612	9.1%					
Grazing Districts	\$213,053	6.4%					
Resource Advisory Councils	\$56,962	1.7%					
Total	\$3,337,712	100.0%					
	ψ3,337,71 <b>Z</b>	100.070					
Source: Economic Profile System - Human Dimension Toolkit							

Table 19. Fremont County G	overnment Co	sts, FY201	4
County Costs	Amount	Percent	Per Capita
Jail	\$4,688,253	14.1%	\$114.35
County Sheriff	\$4,657,711	14.0%	\$113.61
Road and Bridge	\$3,535,887	10.6%	\$86.25
Health (Not Hospital)	\$3,437,663	10.3%	\$83.85
Boards	\$3,119,064	9.4%	\$76.08
Construction	\$1,784,014	5.4%	\$43.51
County Attorney	\$1,450,403	4.4%	\$35.38
Capital	\$1,447,550	4.4%	\$35.31
Social Services	\$1,002,696	3.0%	\$24.46
County Assessor	\$875,600	2.6%	\$21.36
County Clerk	\$862,952	2.6%	\$21.05
Justice or Circuit Court	\$783,131	2.4%	\$19.10
Administration	\$717,850	2.2%	\$17.51
Courthouse	\$709,752	2.1%	\$17.31
County Treasurer	\$681,816	2.0%	\$16.63
Parks & Recreation	\$669,626	2.0%	\$16.33
Distict Court	\$608,369	1.8%	\$14.84
County Commissioners	\$520,880	1.6%	\$12.71
Juvenile Probation	\$394,227	1.2%	\$9.62
County Coroner	\$350,800	1.1%	\$8.56
County Planner	\$289,396	0.9%	\$7.06
Other	\$271,284	0.8%	\$6.62
Agriculture Department	\$247,813	0.7%	\$6.04
Civil Defense	\$139,858	0.4%	\$3.41
Fire Protection	\$28,791	0.1%	\$0.70
Total	\$33,275,386	100.0%	\$811.63
Source: Wyoming Departme	nt of Audit		

Table 20. Fremont Coun	ty Mining Indust	ry					
Mineral Production (20)	13)						
Milicial Froduction (20.	<u> </u>						
		State					
Туре	Production	Production					
Oil (Barrels)	4,155,914	6.6%					
Gas (MCF)	134,467,744	6.6%					
Sand & Gravel (Tons)	545,350	4.2%					
Bentonite (Tons)	6,247	0.2%					
Source: Wyoming Oil &	Gas Conservatio	n Commission &	State Inspec	tor of Mines o	of Wyoming		
Tax Revenue (2014)							
			County	K-12	Special	Community	Tota
	Assessed		Revenue	Revenue	Districts	College	Revenue
	Valuation	Percent	(12.0 Mills)	(45.2 Mills)	(8.9 Mills)	(6.5 Mills)	(72.6 Mills)
Crude Oil	\$298,492,308	51.2%	\$3,581,908	\$13,506,777	\$2,653,597	\$1,943,185	\$21,685,466
Natural Gas	\$190,281,800	32.7%	\$2,283,382	\$8,610,251	\$1,691,605	\$1,238,735	\$13,823,973
Sand & Gravel	\$1,109,442	0.2%	\$13,313	\$50,202	\$9,863	\$7,222	\$80,601
Mining Facilities	\$92,711,578	15.9%	\$1,112,539	\$4,195,199	\$824,206	\$603,552	\$6,735,496
Bentonite	\$54,465	0.0%	\$654	\$2,465	\$484	\$355	\$3,957
Total Minerals	\$582,649,593	100.0%	\$6,991,795	\$26,364,894	\$5,179,755	\$3,793,049	\$42,329,493
Percent			16.5%	62.3%	12.2%	9.0%	100.0%
Source: Wyoming Depar	rtment of Reven	ue					
Employment (2012)							
			Percent				
	Mining	Total	Mining				
Jobs	1,430	24,688	5.8%				
Labor Income	\$114,965,000	\$1,028,024,000	11.2%				
Average Earnings/Job	\$80,395	\$41,641	193.1%				
Source: Bureau of Econo	omic Analysis						

Physical Characteristics  Land Use  Total Cropland  Total Woodland  Grazing Land  Farmstead  Total Land	Acres 167,985 10,922 1,505,946 25,162 1,710,015  Cattle & Calves	Percent 9.8% 0.6% 88.1% 1.5% 100.0% Sheep &	1,363	Average Size (Acres) 1,255
Total Cropland Total Woodland Grazing Land Farmstead Total Land	167,985 10,922 1,505,946 25,162 1,710,015 Cattle &	9.8% 0.6% 88.1% 1.5% 100.0% Sheep &	of Farms 1,363	Size (Acres)
Total Woodland Grazing Land Farmstead Total Land	10,922 1,505,946 25,162 1,710,015 Cattle &	0.6% 88.1% 1.5% 100.0% Sheep &		1,255
Grazing Land Farmstead Total Land	1,505,946 25,162 1,710,015 Cattle &	88.1% 1.5% 100.0% Sheep &		1,255
Farmstead Total Land	25,162 1,710,015 Cattle &	1.5% 100.0% Sheep &		1,255
Total Land	1,710,015 Cattle &	100.0% Sheep &		1,255
	Cattle &	Sheep &		1,255
		•		
In contain		•		
In. contains	Caives	Laure Laur	Total	
	04.000	Lambs	Head	
Inventory	81,288	16,103	97,391	
	Land &	Machinery &	Combined	
	Buildings	Equipment	Investment	
Market Value	\$1,488,080,000		\$1,629,139,000	
Average Per Farm	\$1,091,768	\$103,492	\$1,195,260	
Source: 2012 Census of Agri Gross Revenue				
_	_	_		
Туре	Amount	Percent		
Cash Receipts - Livestock	\$83,847,000	55.3%		
Cash Receipts - Crops	\$46,595,000	30.7%		
Government Payments Miscellaneous Income	\$1,259,000	0.8% 13.1%		
Total Gross Revenue	\$19,913,000 \$151,614,000	100.0%		
Total Gloss Nevellue	\$151,014,000	100.0%		
Source: Bureau of Economi	c Analysis			
<u>Employment</u>				
			Percent	
	Agriculture	County Total	Agriculture	
Jobs	1,485	24,688	6.0%	
Labor Income		\$1,028,024,000	2.8%	
Average Earnings/Job	\$19,378	\$41,641	46.5%	

Visitor Spending					
<u></u>	Amount				
Accommodation	(Million\$)	Percent			
Hotel, Motel	\$46.6	34.2%			
Campground	\$33.2	24.3%			
Private Home	\$28.0	20.5%			
Vacation Home	\$7.2	5.3%			
Day Travel	\$21.4	15.7%			
Total	\$136.4	100.0%			
	Amount				
Purchases	(Million\$)	Percent			
Accommodations	\$18.1	13.3%			
Food Service	\$27.1	19.9%			
Food Stores	\$9.3	6.8%			
Local Tran. & Gas	\$41.6	30.5%			
Art, Ent. & Rec	\$20.7	15.2%			
Retail Sales	\$18.6	13.6%			
Air Transportation	\$0.9	0.7%			
Total	\$136.3	100.0%			
Employment					
			Earnings		Ave. Earn
Sector	Jobs	Percent	(Million\$)	Percent	Per Job
Accom & Food Service	920	60.1%	\$20.3	46.7%	\$22,065
Arts, Ent. & Rec.	380	24.8%	\$17.2	39.5%	\$45,263
Retail	200	13.1%	\$5.0	11.5%	\$25,000
Ground Tran	10	0.7%	\$0.3	0.7%	\$30,000
Visitor Air Tran	10	0.7%	\$0.2	0.5%	\$20,000
Other Travel	10	0.7%	\$0.5	1.1%	\$50,000
Total	1,530	100.0%	\$43.5	100.0%	\$28,431
Tax Revenue					
	Amount				
	(Million\$)	Percent			
Local Tax Revenue	\$1.4	27.5%			
State Tax Revenue	\$3.7	72.5%			
Total Revenue	\$5.1	100.0%			

Table 23 Household Type, 2006-2010				
,, ,	American	Fremont	American	Fremont
	Indian	County	Indian	County
Household Type	Number	Number	Percent	Percent
Married Couple Family	915	8,000	40.5%	51.5%
Male Householder, No Wife Present, Family	274	936		6.0%
Female Householder. No Husband Present, Family	732	1,606		10.3%
NonFamily Household	337	4,999		32.2%
Total	2,258	15,541		100.0%
Source: U.S. Census Bureau, American Community Su	rvey			
Table 24. Educational Attainment, 2006-2010				
	American	Fremont	American	Fremont
	Indian	County	Indian	County
Level	Number	Number	Percent	Percent
No High School Degree	541	2,882	13.9%	11.2%
High School Graduate	1,305	7,305	33.6%	28.4%
Some College	1,401	7,094	36.1%	27.6%
Associate Degree	345	2,560	8.9%	10.0%
Bachelor's Degree	209	3,701	5.4%	14.4%
Graduate or Professional	82	2,173	2.1%	8.5%
Total Population 25 Yrs or Older	3,883	25,715	100.0%	100.0%
High School Degree or Higher	3,342	22,833	86.1%	88.8%
Bachelor's Degree or Higher	291	5,874	7.5%	22.8%
Source: U.S. Census Bureau, American Community Su	rvey			
Table 25. Class of Wayley, 2000 2010				
Table 25. Class of Worker, 2006-2010	Amorican	Framant	American	Framant
	American Indian		American	Fremont
Class	Number	County Number	Indian Percent	County
				Percent
Private Sector Worker	1,361	12,121		64.1%
Government Worker	1,508	5,018		26.5%
Self-Employed	80	1,725		9.1%
Unpaid Family Worker	11	43		0.2%
Total Employed Population 16 and Over	2,960	18,907	100.0%	100.0%
Source: U.S. Census Bureau, American Community Su	rvey			