

Natrona County, Wyoming

Chapter 7 Update for the Natrona County Development Plan



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Prepared for:
The Natrona County
Board of County
Commissioners

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Acronyms

Acronym or Abbreviation	Expanded Text
ACEC	Area of Critical Environmental Concern
ARPA	Archaeological Resources Protection Act
AUM	Animal Unit Month
BLM	Bureau of Land Management
BOR	Bureau of Reclamation
CCPO	Climate Change Program Office
CCUS	Carbon Capture, Utilization, and Storage
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CH ₄	Methane
CO ₂	Carbon Dioxide
DEQ	Department of Environmental Quality
DOI	Department of Interior
DOE	Department of Energy
DOR	Department of Revenue
EA	Environmental Assessment
EIS	Environmental Impact Statement
EOR	Enhanced Oil Recovery
EPA	Environmental Protection Agency
ERMA	Extensive Recreation Management Area
FLPMA	Federal Land Policy and Management Act
FO	Field Office
FSH	Forest Service Handbook
FSM	Forest Service Manual
GHG	Greenhouse Gases
GLO	General Lands Office
HMA	Herd Management Area
IDT	Interdisciplinary Team
IPCC	International Panel on Climate Change

LUP	Land Use Plan
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NCDP	Natrona County Development Plan
NEPA	National Environmental Policy Act
NFMA	National Forest Management Act
NRCS	Natural Resources Conservation Service
NRMP	Natural Resource Management Plan
OHV	Off-highway Vehicle
OMB	Office of Management and Budget
OSLI	Office of State Lands and Investments
PILT	Payments in Lieu of Taxes
PFC	Proper Functioning Condition Assessment
PRPA	Paleontological Resources Protection Act
RMP	Resource Management Plan
ROD	Record of Decision
ROW	Right-of-way
SAR	Search and Rescue
SRMA	Special Recreation Management Area
SSP	Socioeconomics Strategic Plan
TMDL	Total Maximum Daily Load
TSP	Total Suspended Particulates
U.S.	United States
USDA	United States Department of Agriculture
USDI	United States Department of Interior
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service

USGS	United States Geological Survey
VRM	Visual Resource Management
WGFD	Wyoming Game and Fish Department
WPLI	Wyoming Public Lands Initiative
WPCI	Wyoming Pipeline Corridor Initiative
WSA	Wilderness Study Area
WY	Wyoming
WYNDD	Wyoming Natural Diversity Database

Introduction

A Natural Resource Management Plan (NRMP), a form of land use planning, is a document that serves as the basis for communicating and coordinating with federal and state government and its agencies on land and natural resource management issues on federal and state lands that influence the local area and economy. Understanding that rural counties can be strongly impacted by land management decisions on federal and state lands located within, or adjacent to, the county, local governments can ensure that local policies and concerns are meaningfully considered by federal and state land management agencies through formally adopting a NRMP.

The existing Natrona County Development Plan (NCDP), adopted by the Board of County Commissioners in 2016, consists of seven chapters that guide decisions concerning the physical development of Natrona County. The Natrona County Board of Commissioners is tasked with ensuring that lands under the jurisdiction of Natrona County are sustained and provide a viable economic base for the county and its residents. The seven chapters constituting the 2016 NCDP include:

- Chapter 1: Background and Introduction
- Chapter 2: Goals, Policies, Actions
- Chapter 3: Employment and Demographic Profile
- Chapter 4: Report of Inventory
- Chapter 5: Growth Management Area
- Chapter 6: Rural Area Plan
- Chapter 7: Federal and State Land Use Policy

As directed by the Natrona County Board of Commissioners, Chapter 7: Federal and State Land Use Policy will be amended to include discussion of the resources within this document. In addition, custom and culture, specifically as it relates county resources, values, and economics, is discussed within this revised Chapter 7. This revised Chapter 7 of the NCDP is known as a NRMP and will be referred to as such, or simply “the plan”. Any references made to the NCDP will be done explicitly. Note that select policy statements throughout this draft plan have been taken directly from the 2016 NCDP.

While local governments do not have jurisdiction over the federal government or federal lands, various federal and state statutes dictate the requirements and parameters for how federal land management agencies engage with local entities during decision-making processes. This can include local governments serving as a “cooperating agency” during project planning as an Interdisciplinary Team (IDT) Team member or providing local expertise and information for areas of statutory responsibility. Additionally, both the National Environmental Policy Act (NEPA) and the Federal Land Policy and Management Act (FLPMA) require a federal “consistency review” of the planning effort or project with the local policies, plans, or laws adopted by the local government (Budd-Falen Law Office 2018).

Counties are particularly well-suited to understand the impacts that federal land management decisions may have on the local economy, custom, and culture. Under Wyoming Statute § 18-5-208(a), 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.”

Purpose and Intent of this Plan

The purpose of this plan is to establish the custom and culture of the local area, identify resources or land uses that economically or culturally impact the stability and character of the County, and recognize the importance of local involvement in federal decision-making.

Wyoming counties have a fundamental interest in federal and state lands within and adjacent to their county. Many aspects of the environmental and socioeconomic health and well-being of the local government and citizens are related to goods and services provided by federal and state lands. To this end, local governments request the same degree of participation as that afforded the State of Wyoming as described in IM WY 2015-013¹. It is the policy of Natrona County to productively participate in NEPA projects.

The NEPA, FLPMA, National Forest Management Act (NFMA), and the United States Department of Interior Bureau of Land Management (USDI BLM)² Cooperating Agency policy all encourage and provide for public processes, with special attention given to local governments. County governments are given special consideration with regard to planning on federal lands under this framework. As duly elected representatives, locally elected county commissions represent a range of interests. The approval of a NRMP represents public input in regards to natural resource planning. Participation in a federal planning process does not negate the right for objection under NEPA.

In adopting this NRMP, the Board of County Commissioners intends to:

- Maintain or expand upon the culture, customs, heritage, and economic diversity of resource-based industries within the local economy, while balancing the integrity of local natural resources, wildlife, and environmental quality;
- Promote the understanding of the history, dynamics, and benefits from uses of federal and state lands within the county from activities such as agriculture, recreation, and other multiple-uses;
- Recognize and protect privacy rights and interests in federal and State land resources including, but not limited to, right-of-ways, grazing permits, water rights, special use permits, leases, contracts, and recreation permits and licenses;
- Use this plan to identify and justify areas of need facing Natrona County, specifically regarding the current conditions of natural resources within the county;
- Minimize conflicts between land uses; and
- Promote a robust, diverse, and stable local economy.

The Board of County Commissioners (hereinafter the Board) also acknowledges that comprehensive and responsible management of local natural resources requires equal effort and participation of all parties involved, including local, state, and federal agencies. In order to encourage this relationship, the Board will:

¹ IM WY 2015-013, describes the BLM commitment to the NEPA process with specifics regarding types of NEPA and communication protocols.

² Bureau of Land Management, A Desk Guide to Cooperating Agency Relationships and Coordination with Intergovernmental Partners, 2012

- Inform federal land management 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 issues to discuss. Meetings will be scheduled on a biannual basis.
- Transmit a copy of this plan to the state, regional, and local federal agency offices doing business within the county for their consideration as part of any consistency review that is required pursuant to federal statute.
- Contact the Bureau of Land Management (BLM), the U.S. Forest Service (USFS) offices, U.S. Fish and Wildlife Service (USFWS), and the Bureau of Reclamation (BOR) offices to determine a protocol for informal communication that shall occur so that each is apprised of issues and concerns as early as possible.
- Contact the Wyoming Game and Fish Department (WGFD), the Wyoming Department of Agriculture, and Wyoming Environmental Protection Agency offices to determine a protocol for informal communication that shall occur so that each is apprised of issues and concerns as early as possible.
- Review NEPA documents to determine if they will request “cooperating agency status” and will consider entering into Memorandum of Understanding (MOU) or Memorandum of Agreement (MOA) as appropriate. The District and the County reserve 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.

The Natrona County Board of County Commissioners may appoint a Federal Land Committee to serve as an advisory committee to the Board on federal land issues. Under the direction of the Board, the committee will make recommendations to the Board as to management decisions and policies affecting federal and state lands; and participate in the development, coordination, and implementation of the provisions of Natrona County Federal and State Land Use Policy and NRMP. The federal lands committee may:

- Develop an implementation plan for Natrona County Federal and State Land Use Policy;
- Ensure that all relevant provisions of this policy are followed by federal and state agencies in management of federal and state lands;
- Receive input from residents who are interested in, and directly impacted by, federal and state land use decisions;
- Act as a federal and state land issues clearinghouse;
- Ensure that guidelines, protocols, and other policies used to direct any activity on federal and state lands do not contain restrictions or protections not provided for by law or regulation; and
- Keep the County fully informed of management actions proposed or to be implemented on federal and state land and allow the Board time to develop Natrona County’s position of such action shall it not be clearly defined in this policy or subsequent implementation plans.

Legal Framework

Federal statutes provide opportunities for counties to share their own special expertise with federal land

management agencies during decision-making processes in order to protect the local custom and culture, tax base, and private property. NRMPs establish the current economic and cultural conditions and the desired future conditions of an area, and illustrate how those conditions are linked with activities that occur on adjoining federal and state lands. Specifically, federal laws require federal land management agencies, including the BLM and USFS, to consider State and local land use plans and to explain deviations from these plans in decision documents per the following statutes:

The National Environmental Policy Act (NEPA)

NEPA and its implementing regulations under the Council on Environmental Quality (CEQ) require all federal land management agencies to address inconsistencies between a proposed action and State and local plans, and address the extent to which the agency would harmonize its proposed action with the local law or plan (40 C.F.R. § 1506.2). Consistency review and cooperating agency status are each provision that allow local voice within federal planning.

In order to participate in the federal agency's consistency review process, an adopted local plan is required. On March 16, 1981, CEQ published the *Memorandum for Federal NEPA Liaisons, Federal, State, and Local Official and Other Persons Involved in the NEPA Process*. Questions 23b and 23c of this document address how an agency should handle potential conflicts between a proposal and the objectives of federal, state or local land use plans, policies and controls for the area concerned under 40 CFR § 1502.16(c). As defined in this document, local land use plans or policies includes all types of formally adopted documents for land use planning, zoning, and related regulatory requirements. Provided that the local government submits the local plan to the agency in the course of writing an Environmental Impact Statement (EIS) or Environmental Assessment (EA), the federal agency is required 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))."

Local governments can also participate in the NEPA process as a cooperating agency, which is defined as: "any Federal agency other than a lead 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." (40 C.F.R. § 1508.5). As a cooperating agency, the local government would be involved in the federal process at its inception and participate in the NEPA process, such as scoping and drafting portions of the NEPA document (40 C.F.R. § 1501.6(b)).

CEQ regulations (40 C.F.R. § 1501.6(b)(3)) also permit a cooperating agency to, "assume on request of the lead agency responsibility for developing information and preparing environmental analyses including portions of the environmental impact statement concerning which the cooperating agency has special expertise" (40 CFR § 1501.6(b)(3)). As a cooperating agency in future planning efforts, the County could take part in arranging for resource, environmental, social, economic, and institutional data and information to be collected or compiled, if already available (43 CFR §1610.4-3). This NRMP can be used by a federal agency in an environmental analysis or specialist report under these regulations.

In short, federal land management agencies are required to cooperate with State and local agencies to reduce duplication between NEPA and comparable local requirements (40 C.F.R. § 1506.2(b)). By adopting a local NRMP, a county (1) ensures that local policies are considered during a federal agency's consistency review process, and (2) demonstrates the special expertise required for participation in the NEPA process as a cooperating agency (if desired by the County).

The Federal Land Policy Management Act (FLPMA)

FLPMA, BLM's guiding statute, requires BLM to coordinate their land use plans with local and state government land use plans, providing that BLM's plans "shall be consistent with State and local plans to the maximum extent [the Agency] finds consistent with Federal law and the purposes of this Act." (43 U.S.C. § 1712(c)(9)).

Specifically, FLPMA requires that the BLM:

- Stays apprised of local land use plans;
- Assures that consideration is given to those local land use plans that are germane in the development of land use plans for federal lands;
- Assists in resolving, to the extent practical, inconsistencies between federal and local land use plans;
- Provides for meaningful public involvement of local government officials in the development of land use programs, land use regulations, and land use decisions for public lands, including early public notice of proposed decisions which may have a significant impact on non-federal lands. (43 U.S.C. § 1712(c)(9)).

The National Forest Management Act (NFMA)

NFMA requires the USFS to coordinate National Forest land and resource plans with "the land and resource management planning processes of State and local governments and other Federal agencies[.]" (16 U.S.C. § 1604(a)). While the USFS is not required to comply with State and local plans, a final decision document must contain results of a review of local plans, including consideration of objectives, the compatibility and interrelated impacts of USFS plans and local government policies, opportunities to contribute to common objectives, and ways to reduce conflicts between a USFS plan and local policies (36 C.F.R. § 219.4(b)(2)).

Agency Specific Guiding Documents and Regulation

There are additional orders, policies, regulations, and handbooks that outline or support cooperating agency status and the use of a NRMP. The Wyoming Public Lands Handbook provides "guidance for county commissioners on Wyoming's public lands and the laws and policies that govern their management." (DOI 2012). This handbook provides best management practices and explanations for those working with public land managers.

Executive Order 13352, *Facilitation of Cooperative Conservation* required that the Secretaries of the Interior and Agriculture shall:

1. "...carry out the programs, projects, and activities of the agency that they respectively head that implement laws relating to the environment and natural resources in a manner that:
 - a) facilitates cooperative conservation;

- b) *takes appropriate account of and respects the interests of persons with ownership or other legally recognized interests in land and other natural resources;*
- c) *properly accommodates local participation in Federal decision making; and d) provides that the programs, projects, and activities are consistent with protecting public health and safety” (US 2004).”*

In 2008, the Department of the Interior (DOI) broadened its regulations to require every DOI agency to offer cooperating agency status to all eligible intergovernmental partners for all environmental impact statements (DOI 2008). The DOI also indicated that cooperating agency procedures could be used to support efforts under environmental assessments, as well. Under this regulation, agencies under DOI will “collaborate, to the fullest extent possible, with all cooperating agencies concerning those issues relating to their jurisdiction and special expertise (43 CFR 46.230).

Bureau of Land Management

The BLM³ published *A Desk Guide to Cooperating Agency Relationships* in 2005 as a “how to” publication that all BLM managers and staff were required to put into practice in order to guide the BLM through the legal, regulatory, and planning roles when involved in a cooperating agency relationship. Requirements for working with cooperating agencies were added to the BLM’s planning regulations at that same timeframe (43 CFR § 1601.0-5, 43 CFR § 1610.3-1, 43 CFR § 1610.4). The desk guide was revised in 2012 when the BLM adopted *A Desk Guide to Cooperating Agency Relationships and Coordination with Intergovernmental Partners* (2012b) based on DOI’s broadened regulations passed in 2008 (see discussion above). Specifically, this desk guide highlights the role of cooperating agencies in the planning process. The BLM’s Land Use Planning Handbook (H-1601-1) and National Environmental Policy Handbook (H-1790-1) also provides additional guidance for collaborative planning and preparation of an EIS or EA for approval, amendment, or revision of a Land Use Plan (LUP).

Prior to the approval of a proposed resource management plan, or amendment to a management framework plan or resource management plan, the BLM is also required to provide for the State Governor’s consistency review as part of their land use planning process (43 CFR § 1610.3-2(e)). During this period, additional inconsistencies and recommendations to remedy inconsistencies may be identified. “This step, in addition to the ongoing coordination with State and local governments, supports implementation of the FLPMA requirement that the BLM keep apprised of State, local, and tribal land use plans and assist in resolving, to the extent practical and consistent with Federal law, inconsistencies between Federal and non-Federal government plans (see 43 USC 1712(c)(9)).”

Bureau of Reclamation (BOR)

The BOR, also under DOI, developed a NEPA handbook (2012) based on these implementing regulations as a guidance tool for all BOR staff. Under 40 CFR § 1501.6, BOR will consider requests for cooperating agency status based on jurisdictional responsibilities, project effects, and any special expertise (DOI 2012).

U.S. Forest Service (USFS)

In July 2008, The USFS, under the Department of Agriculture, moved its NEPA procedures from directives to regulations, codifying Forest Service Manual (FSM) 1950 and Forest Service Handbook (FSH)

³ Bureau of DOI

1909.15, and expanding them to incorporate CEQ guidance (36 CFR Part 220). As outlined under FHS 1909.15, and explained in *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations* (40 CFR Parts 1500 – 1508), the USFS has the responsibility to solicit cooperation from other Federal, Tribal, State or local agencies with jurisdiction by law or special expertise on environmental issues that should be addressed in the environmental analysis (40 CFR § 1508.5).

The USFS is currently revising its NEPA regulations (36 CFR Part 220) to address challenges, such as droughts, insect infestations, and disease, which have strained available staff and resources. These proposed rules are intended to help the USFS make timelier decisions based on high quality, science-based analysis. The proposed rule was released to the public on June 13, 2019 (36 CFR Part 220). The USFS is reviewing public comment and is planning to publish the rule revising the USFS NEPA regulations and associated directives in summer 2020⁴. The USFS refers to CEQ regulations and guidance, along with their NEPA handbook for working with cooperating agencies. Additional information regarding NEPA procedures, policy and guidance is found at <https://www.fs.fed.us/nepa/>.

While the objectives and priorities of the County may not be consistent with existing management plans or practices of the federal or State of Wyoming government, this plan is consistent with federal and State law.

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 each federal resource in the county, this plan addresses the following:

- **Resource Assessment:** This assessment 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. Maps are included in [Appendix A](#). 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?”
- **Resource Management Objectives:** Resource Management Objectives describe general goals in the form of broad policy statements regarding the use, development, and protection for each resource. Where applicable, objectives should be stated in measurable terms and include tangible metrics for which resource objectives can be met. Resource Management Objectives address the question, “What does the County want for and from this resource?”
- **Priorities:** This section describes specific priorities on how to achieve the County’s Resource Management Objective for each resource. Priorities tier to Resource Management Objectives for each resource and address the question, “How would the County like to see its objectives achieved?”

Public Process

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

⁴ <https://www.fs.fed.us/emc/nepa/revisions/index.shtml>

developed this plan in public meetings in accordance with Wyo. Stat. §§ 16-4-401 through 16-4-408⁵, allowing for participation and contribution from the public. Two public meetings and one collaborative meeting with federal and State Agencies were held to guide the development of this plan. In addition, a public survey was administered to identify important social, economic, and environmental issues associated with federal and state lands within the county. Survey results are included in [Appendix B](#).

Credible Data

There are many factors that make a data source credible, but the underlying basis is an assurance that the source is unbiased and supported by evidence. The Information Quality Act (Pub. Law. 106-554, § 515) directed the Office of Management and Budget (OMB) to require federal agencies to issue formal information quality guidelines that would ensure the quality, objectivity, utility, and integrity of information disseminated by federal agencies. To satisfy OMB's government-wide guidelines (67 Fed. Reg. 8452), the BLM and USFS have each adopted information quality guidelines. The Board has used credible data in the creation of this plan by the utilization of federal, State, and local publicly available data sources, as well as data that meets, at a minimum, the Information Quality Act guidelines. Conversely, the Board expects that all federal land management agencies will also follow, as required, their respective information quality guidelines to "ensure and maximize the quality, utility, objectivity and integrity of the information that they disseminate [...]." (67 Fed. Reg. 8452). Consideration was taken to account for the standard type of data sources used by each agency; all sources used can be found in the Resources Cited section.

Consideration of Other Plans

The 2016 NCDP was considered during the development of this plan. Other local plans considered or reviewed are mentioned or cited in the relevant resource areas.

Updating the Plan

As conditions change new issues arise, the Natrona County Board of County Commissioner's policies will continue to evolve and change, requiring periodic amendments to this document. The Board will conduct formal reviews of this document on a two-year basis to determine the need for updates, but amendments can be made at any time by approval of the Board.

Should a court declare any part of this policy void, unenforceable or invalid, the remaining provisions shall remain in full force and effect.

Planning Objectives

1. Natrona County supports federal and state land management that is based on actions of cooperative conservation that relate to use, enhancement, and enjoyment of natural resources and protection of the environment. These actions shall involve collaborative activity among federal, state, local, and tribal governments, private for-profit and nonprofit institutions, other governmental entities and individuals.
2. Natrona County supports federal and state land management that involves efficient, collaborative and coordinated planning among federal, state, and local governments, private individuals and entities, and other non-governmental organizations and individuals in order to manage the use, protection, enhancement, and enjoyment of natural resources and associated

⁵ Consistent with Wyo. Stat. § 9-4-218(a)(viii)(D)

lands.

3. Natrona County supports relevant guidance from cooperating agencies and state handbooks on best management practices for federal and state land management planning.

Planning Priorities

1. Federal and state land use planning shall involve a high level of cooperation and coordination. Natrona County invites federal and state land management agencies to establish effective government-to-government relationships with the County. In order to provide meaningful dialogue between the County and its citizens, Natrona County expects notification at the earliest opportunity of proposed policy, plans, projects, or actions on federal lands that may affect the public's rights, interests, safety, and/or economic stability. Natrona County will work with federal and state land management agencies to shape the policies, guidelines or projects in attempt to minimize negative impacts to the County and its citizens.
2. Natrona County invites federal and state agencies to facilitate cooperative conservation by fully involving local governmental entities, including the Natrona County Board of County Commissioners and Natrona County Conservation District; to take appropriate account of and respect the interests of persons with ownership or other legally recognized interests in land and other natural resources; to properly accommodate local participation in federal decision-making; and to provide that the programs, projects, and activities are consistent with protecting public health, safety, and welfare. Natrona County will not support federal projects where the federal agency has excluded local government agencies and landowners.
3. Federal and state land use planning shall be multi-jurisdictional to the largest extent possible;
4. Federal and state land use planning shall incorporate the principles of performance-based and adaptive management, while respecting the legal interests and rights granted on federal lands;
5. Federal and state land use planning shall involve a high level of cooperation and coordination with county agencies to identify, disclose and monitor socio-economic effects. Natrona County requests federal and state land management agencies to consider proposed actions and future impacts on:
 - a. Community resources and stability;
 - b. Maintenance of custom, culture and economic diversity and stability;
 - c. Conservation and use of the environment and natural resources in the county;
 - d. Active management options, efficiencies, and flexibility; and
 - e. Existing multiple use.
6. Federal and state land use planning shall include a large-scale cumulative analysis of effects, temporally and geographically.
7. The County supports analysis and decisions on actions and projects that are based on holistic considerations of the ecosystem and local community, rather than a species-by-species or resource-by-resource approach.
8. The Board recommends that federal and state planning efforts utilize the best available unbiased science in planning efforts and that all planning documents will:

- a. Describe how high-quality data (data which is evaluated by rigorous scientific methodology and principles) was considered, appropriately interpreted, and applied in the planning process within the context of the issued being considered;
 - b. Evaluate and disclose substantial uncertainties in that science;
 - c. Require federal and state land management agencies to follow data that meets the minimum criteria described in their respective handbooks, unless other criteria are agreed upon between federal and cooperating agencies involved in a project;
 - d. Evaluate and disclose substantial risks associated with plan components based on that science; and
 - e. Seek out and take into full account data and information available from local sources⁶ when developing plans and/or making recommendations.
9. Natrona County expects to participate in actions impacting federal and state land in a way best calculated to achieve optimum affect; including but not limited to, requests for cooperating agency status. If possible, the County will recommend how federal and state land management agency action might enhance and benefit local custom and the community's culture; thus, providing sustainable continuity of local interests.
10. Federal and state land management agencies shall identify a liaison to serve as the first point of contact with the Board of County Commissioners and as the person who will generally initiate agency contact with the County.
11. Federal land management agencies shall implement federal land management programs and activities consistent with and respecting the County's rights and fulfilling the federal governments legally mandated coordination responsibility with the County.
12. Federal and state land management agencies shall develop, in consultation and collaboration with Natrona County, agreements and statements of relationships with the County that help clarify the County's rights and interests and set forth procedures and protocols for consultations, including the points of contact.
13. Federal and state land management agencies shall involve designated county representatives, including staff, consultants and technical representatives, in the consultation process, including development of proposed policies, plans, projects, or actions, where appropriate.
14. Federal and state land management agencies shall involve the County early in the planning process in the preparation of in-depth socioeconomic information.
15. Federal and state land management agencies shall fully consider recommendations by Natrona County to address any concerns on proposed decisions.
16. Federal and state agencies shall use this approved NRMP in future federal planning efforts as a source of social, economic and/or institutional data for land management or resource planning efforts. Federal and state land management agencies shall inform Natrona County how its information and recommendations were considered in federal and state land management

⁶ including county, towns, school districts, public health care providers, and other local agencies

decisions, including explanations particularly in the event that county input was not adopted or incorporated.

17. Federal and state land management agencies shall consider documenting the process and actions taken to consult with Natrona County, the results of those actions, and how the federal and state land manager's final decision was communicated to the County. This consultation review and monitoring process shall involve Natrona County officials and representatives.
18. Natrona County expects to enter into a memorandum of understanding (with a two-year term, automatically renewable) for all NEPA-related projects or planning document amendments affecting federal and state lands in Natrona County.
19. Once a decision on a major action affecting federal or state lands is made, federal and state land management agencies shall document and track follow-up actions to ensure implementation and compliance with this federal and state land use policy.
20. Federal and state land management planners shall review all future planning documents for consistency with Natrona County, Federal, and State Land Use Policy (including this Natrona County NRMP); identify any inconsistencies or conflicts that may exist; and take practical measures to resolve the conflicts; and describe these findings in the planning or other decision documents.
21. Waivers, modifications, and exceptions of existing federal standards or guidelines should be considered where feasible when they result in less impact, reduce overall footprint of development, or substantially reduce the costs of the project. They may also be granted when the conditions have changed or when the restriction is unnecessary to achieve the objectives.
22. Federal and state land management agencies shall consider conducting bi-annual planning meetings for specific projects that include the participation of livestock permittees, affected adjacent landowners, and other multiple use interests in the affected area, as well as Natrona County representatives to review status of past projects in which the County was a cooperating agency, review current and upcoming NEPA and planning efforts, and determine the opportunities for cooperation and efficiency in the planning process.
23. Natrona County, when involved as a cooperating agency, shall be allowed, if interested, to arrange for resource, environmental, social, economic, and institutional data and information to be collected or assembled (if already available) as defined in 43 CFR §1610.4-3.
24. Natrona County will refer to the Wyoming Lands Handbook for guidance on all best management practices for participation in federal and state land management.

Mitigation Objectives

1. Natrona County supports the balanced use of natural resources and the implementation of mitigation to provide enhanced benefits for all natural, public, and industrial uses within the County such that it supports the local custom and culture and inherent values.

Mitigation Priorities

1. Mitigation and other conditions established in an environmental impact statement or during its review and committed as part of a decision, shall be implemented by the lead agency or other appropriate consenting agency.

2. The lead agency shall condition funding of actions on mitigation, and upon request, inform cooperating agencies on the progress in carrying out mitigation measure which they have proposed and which were adopted by the agency making the decision.
3. Mitigation includes avoiding the impact altogether by not taking a certain action; minimizing impacts by limiting the degree or magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the affected environment; reducing or eliminating the impact over time using preservation and maintenance operations during the life of the action; and compensating for the impact by replacing or providing substitute resources or environments.
4. When considering mitigation measures, land managers must consider the full range of impacts caused by the proposed actions, and must include design alternatives that would decrease pollution emissions, construction impacts, and esthetic intrusion. Design alternatives could also include relocation assistance, land use controls and other related efforts. Once the proposal itself is considered to have significant impact as a whole, all impacts on the environment (whether or not “significant”) must be considered, and mitigation measures must be developed where it is feasible to do so.
5. All mitigation measures which could reduce adverse impacts or enhance beneficial impacts must be identified and analyzed. The analysis shall address the anticipated effectiveness of these mitigation measures in reducing adverse impacts or enhancing beneficial impacts.
6. Analyze any residual impacts or unavoidable adverse impacts which remain after mitigation measures have been applied as well as any further impacts by the mitigation measures themselves.
7. Federal and state land managers shall identify and adopt measures that may reduce or avoid potential adverse economic or social effects of the new alternatives considered, and maximize their positive effects.
8. For the development of all new land management plans (or revisions or amendments to existing plans), it is Natrona County’s request that federal land managers host at least one economic strategies workshop to discuss regional economic conditions, trends, and strategies. This workshop would analyze local and regional economic and social conditions by collaborating with agency staff to identify opportunities to advance local economic and social goals through planning and policy decisions.
9. Any initiative, mitigation or compensatory mitigation programs or studies must be coordinated with, and provide for full participation of the County and other local government agencies, including the Natrona County Conservation District.
10. All disturbances of surface resources, including fish and wildlife habitats, must be reclaimed as soon as feasible after impacts have been created.
11. All mitigation of surface disturbances must be accomplished on or adjoin the site of disturbance. No off-site mitigation may be considered until onsite opportunities have been exhausted or until proper analysis shows that habitat losses cannot be mitigated on site.
12. Off-site mitigation shall be required, if on-site mitigation is not sufficient.

13. Off-site mitigation must provide for the full involvement of the County.
14. Off-site mitigation shall be of duration appropriate to the anticipated impacts being mitigated.
15. The most cost-effective method of mitigation or habitat improvement is to pool committed mitigation funds to address mitigation on a county-wide landscape scale, so long as the County and other local agencies are directly involved in the approval and management of a compensatory mitigation fund.
16. Natrona County supports the use of a mitigation banking system that provides for the banking of dollars or mitigation credits.
17. Natrona County favors habitat improvement projects that are jointly sponsored by various resource interests and involve treatments such as disking and seeding, removal of decadent vegetation, logging, other methods of seeding, burning, and other direct soil and vegetation prescriptions that are demonstrative to restore forest and rangeland health, increase forage, and improve watershed function for the mutual benefit of domestic livestock, wildlife, and all other resources.

Chapter 1: Custom and Culture

Resource Assessment

County Commissions in the State of Wyoming are particularly well-suited to understand the impacts that federal land management decisions may have on the local economy, custom, and culture, and are recognized as having responsibilities to preserve the custom and culture of their individual counties in matters relating to the NEPA and federal land planning process. Under Wyoming Statute § 18-5-208(a), 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.”

Culture is defined as the customary beliefs, social forms, and material traits of a racial, religious, or social group (Merriam-Webster 2020a). Custom is the whole body of usages, practices, or conventions that regulate social life (Merriam-Webster 2020b). Both the customs and culture of Natrona County have been shaped by the community’s combined values and activities unique to the area. Over time, the County’s customs and culture will continue to change and grow, creating a rich cultural landscape which reflects the County’s past, present, and future.

Natrona County is predominantly rural, with a higher concentration of residents in and around its county seat in Casper, Wyoming. This rural character denotes an intrinsic connection to the land that underlies most of the County’s customs and culture. The open space that characterizes the majority of this county provides space to work, play, and live, and many customs within the area depend on the continued presence and access to these open spaces. Important influences on customs and culture within the county include: resource



Photo 1 Natrona County, view from Casper Mountain

extraction and associated industries, ranching, grazing, agriculture, forest products, outdoor recreation, water use, and other intrinsic uses such as aesthetic values and areas of historical or cultural significance. The continued support of these multiple uses by the County is important to avoid potential negative social and economic impacts upon the community that relies upon them.

Modern-day Natrona County overlaps traditional lands of ancient tribes as well as more recent nomadic tribes such as the Lakota, Northern Cheyenne, Arapaho, Crow, Shoshone, and Sioux, some descendants of whom now reside within the Wind River Indian Reservation, located northwest of Natrona County (Hunt 2014). A Euro-American presence was established by 1812, with subsequent independent trappers and scouts continuing to explore Natrona County and develop a more permanent presence within the area. As time went on, Euro-American presence increased, spurred by early opportunities for successful cattle and sheep operations (Hunt 2014). Natrona County was officially established in 1890 and named for natron deposits found within the area. Cattle ranching and sheep operations grew in scope throughout the County, and competition for open range grew fierce, culminating in violent

altercations that, at times, left livestock and men dead. These tensions eventually lessened by the early 1900s. Soon, towns were born and grew, stimulated by economic growth stemming from cattle and sheep ranching, wool, and oil discoveries within the area. Similar to other areas of Wyoming, much of Natrona County contains rich resources of oil, natural gas, and coal deposits, a vestige of the diverse array of prehistoric life once present across the area. Additional infrastructure followed to support the primary industries with the addition of oil refineries, railroads, and other necessary transportation to move commerce throughout Natrona County. The boom and bust cycle associated with oil discoveries became a common phenomenon in Natrona County as new oil fields were continually found and exhausted; these same cycles similarly influence Wyoming as a whole, which still benefits from revenue produced by oil and other resource extraction. Today, while ranching and oil remain a large component of the area's economy, natural gas and coal-bed methane production are also profitable. Since the 1960s, oil production has decreased, and as of 2008, natural gas and coal prices have also begun to lessen, highlighting a driving force behind the recent emergence of alternative energy developments in Wyoming; an example of Natrona County's ability to adapt and diversify in response to a changing world. Other industries such as mining, tourism, entertainment, and service industries have also provided revenue to the local economy, which continues to diversify, particularly in more densely populated areas such as Casper. Altogether, the resources held within the land primarily support the economic and recreational interests of Natrona County, though these interests must often be balanced against each other. The land provides raw extractive resources as well as intrinsic aesthetic and ecological-based values that bolster industries such as tourism, hunting, and commercial recreation.

Survey Results—Custom and Culture

The history of Natrona County, coupled with its inherent economic and recreational ties to the land, contribute greatly to the custom and culture of the area. The western way of life is alive and well here in Natrona County, influenced by a long history of making a living from the land and the variety of resources it provides. Balancing opportunities for multiple uses on federal and state lands such as ranching, recreation, agriculture, and extraction remains an important value for many residents. A public survey, administered in 2020, found that 100 percent of those surveyed utilized federal and state lands for recreation or non-economic purposes, further highlighting the importance of open space to residents of the area. Other comments noted that many federal and state land parcels are difficult access due to lack of infrastructure or checkerboard patterns of ownership across the landscape, which is frustrating to those who would like to access and utilize federal and state lands. Most Natrona County residents spend their free time camping, hunting, boating, fishing, hiking, and generally enjoying the outdoors. Survey responses regarding custom and culture reflect the multiple uses that typify the federal and state lands resource. Balancing economic and recreational uses on federal and state lands is a central issue within Natrona County. Maintaining open spaces and clean air and water is important to residents that value the recreational opportunities that the area offers, but ecological health is often balanced against the economic health within the area, which is mainly supported by resource extraction and ranching ventures, often on both public and private lands. Some residents state concerns that ecological degradation stemming from ranching and resource extraction limits opportunities for recreation and associated industries.

Looking forward, most future development hinges on resource extraction, with respondents stating that negative perceptions surrounding resource extraction and competing uses limit potential development of those resources. Others point to a lack of access to federal and state lands as a pressing issue that

impacts both residential recreation as well as future development of economic opportunities such as guided hunting and fishing on federal and state lands.

Multiple respondents express concern regarding the County's general reliance upon resource extraction. Respondents state that resource extraction is often given precedence over other uses. Some residents stated that a diversification of the economy may foster economic resilience across the county, serving to avoid the negative effects of the boom and bust cycle associated with reliance on resource extraction. With a variety of economic and recreational uses taking place on federal and state lands, residents of Natrona County are inextricably linked to the decisions made regarding these lands. Overall, residents want to ensure that their voice is heard during the planning process and that local perspective is given priority over outside influences that may focus on short-term gains rather than long-term benefits to the community. Natrona County is built upon traditional industries such as ranching and resource extraction, and in modern times, it has taken steps to explore new industries and diversify its economic base to better prepare for the future. Federal and state lands comprise an invaluable resource for residents of Natrona County, providing a place for both economic and recreation activities that define the custom and culture of this unique place.

Input from state and federal land managers was also acquired through interviews and surveys during this public process to understand how federal, state, and local agencies can collectively improve planning coordination. Comments from this cooperative planning survey emphasized the importance of local planning and the desire of federal and state agencies to include counties in decision-making processes. Specifically, federal and state land managers cited the importance of using local natural resource management plans as a tool to understanding the County's resource planning objectives and priorities. Areas of opportunity identified for current and future coordination with county planners included the protection of wildlife habitat, recreational access to federal and state lands, and wildfire management/mitigation. Multiple commenters also referenced co-locating industrial development in an effort to minimize landscape disturbance. Overall, survey responses conveyed the importance of county participation in state and federal planning and the utility of a local natural resource management plan. A complete summary of the surveys can be found in [Appendix B](#) and should be considered as part of the custom and culture of Natrona County.

Resource Management Objectives

1. Natrona County will support traditional land uses that maintain continuity and stability in the local economy, and look for other future land uses that provide additional opportunities, diversity, and economic stability or growth to the area, while assuring the sustainability of existing agricultural, recreational, and industrial interests. By supporting traditional multiple uses, the County intends that local custom and culture will be maintained, while mitigating potential social impacts on the community.

Priorities

1. Natrona County supports the maintenance and enhancement of traditional land uses and the custom and culture of the County and opposes any change in land use that does not evaluate, mitigate and minimize impacts to the County's custom, culture and economic stability. The County intends to avoid undue social distress, dislocation, and hardship to the community by such changes.
2. Federal and state land managers shall incorporate the social, cultural, and economic needs of the County when developing plans or projects and making recommendations that affect the

custom and culture of the County. Furthermore, the consideration process used to assess impacts to county custom and culture shall be cited in federal and state land management plans and the steps taken to incorporate protection of the County's custom, culture and heritage into each plan and project.

3. Natrona County will review federal and state land use planning issues impacting the County's custom and culture and make recommendations pertinent to the issue in question. Responsible use of federal and state lands is use that benefits the custom, culture, heritage and economic base of the County.
4. Federal and state land management agencies shall notify Natrona County of any actions, proposals, policies, or regulations which may impact the custom and culture of Natrona County will review and comment on federal or state actions which impact the custom and culture of the County.
5. Local governmental agencies (including county, towns, school districts, public health care providers, and other local agencies) have important and useful data and other information regarding economic and cultural trends that may not be available from state or federal data sources. It is Natrona County's policy that federal and state land managers seek out and take into full account data and information available from local sources when developing plans and/or making recommendations.
6. Management of federal and state lands will recognize existing rights and interests in such lands: Livestock grazing permits, mineral leases, mining claims, recreation permits, concessionaire contracts, and right-of-ways form the backbone of the County's communities.
7. Livestock grazing, the resulting lifestyles and imprint on the landscapes of the West are some of the oldest enduring and economically important cultural and heritage resources in the West, and must be preserved and perpetuated.
8. Natrona County supports and encourages federal and state land use planning and management activities that considers local community infrastructure, current community planning and economic efforts, along with anticipated land use trends to help provide for long-term community and economic stability and diversity, instead of planning or management that only reacts to a current situations or concerns occurring on federal lands.
9. Due to the nature of Natrona County's landscapes and ecology, agriculture goes hand-in-hand with maintaining the custom and culture of open space and its attendant values. Agriculture provides a basis for community and economic stability, while maintaining the values of custom and culture.

Chapter 2: Land Management

Land Use

Resource Assessment

Countywide, over 53 percent of surface lands are administered by either federal or state government, while 46 percent are privately owned (Table 1). The BLM manages 41 percent of lands Natrona County, which are shared between the Casper and Lander Field Offices. Given that federal and state lands, by area, make up the majority of Natrona County, the County's overall quality of life is closely tied to federal and state land management decisions. As discussed in later chapters, agriculture, recreation, industry, and water resources are all influenced by state and federal agency decisions. Refer to Map 1 in [Appendix A](#) for surface land ownership in Natrona County.

Table 1 Natrona County Surface Land Ownership (Wyoming Geospatial Hub 2019)

Owner	Acres	Percent (%)
Bureau of Land Management	1,421,765	41.3
Bureau of Reclamation	4,681	0.1
Federal Aviation Administration	198	< 0.1
U.S. Fish & Wildlife Service	7,727	0.2
U.S. Forest Service	5,552	0.2
General Services Administration	3	< 0.1
Local Government	18,592	0.5
Private	1,572,604	45.7
State	388,916	11.3
Water	18,803	0.5
Grand Total	3,438,842	100.0

Bureau of Land Management (BLM)

The BLM, under DOI, is the largest federal land managing agency in Natrona County (41 percent), with the county split between the High Plains District Office and Wind River/Big Horn Basin District Office overseeing the Lander and Casper Field Office's management of more than 1.4 million acres of public lands. The Casper Resource Management Plan was approved in December 2007, while the Lander Field Office Resource Management Plan was approved in a record of decision signed June 2014. The BLM originated from the reorganization of the General Lands Office (GLO) and the U.S. Grazing Service into a single agency in 1946. The GLO was originally responsible for all public land sales, patents, and entries established within the Treasury Department to oversee disposition of ceded and acquired lands. The U.S. Grazing Service⁷ was created to manage the Taylor Grazing Act (1934) authorization of grazing districts, regulation of grazing, and public rangeland improvements on public lands leased to farmers and ranchers for grazing.

FLPMA (Public Law 94–579, 1976), as amended (2001), the BLM's guiding statute, outlines the management mandate of the BLM to balance public access and multiple uses, and to "provide for the management, protection, development, and enhancement of the public lands" to serve present and future generations. Specific discussion regarding FLPMA and cooperating agencies can be found in the

⁷ Originally the Division of Grazing until 1939

section on legal framework.

Bureau of Reclamation (BOR)

The BOR under DOI “manages, develops, and protects water and related resources in an environmentally and economically sound manner in the interest of the American public (BOR 2020). Established in 1902, the BOR is known for the dams, power plants and canals it constructed and manages. The BOR manages two large reservoirs in Natrona County—Pathfinder and Alcova—for storage of water to be used for irrigation, flood control, power generation, and recreation. Alcova Reservoir provides irrigation water for the Casper-Alcova Irrigation project between Casper and the Alcova Dam. The full supply of water is delivered to about 25,000 acres of agricultural land in Natrona County. Pathfinder Reservoir supplies irrigation water to the North Platte Irrigation project located approximately 170 miles downstream from the Dam. The BOR Wyoming Area Office has several managing partners on BOR surface in Natrona County. The Casper Alcova Irrigation District manages the operation and maintenance of irrigation features that belong to the BOR. Natrona County Roads, Bridges and Parks operate recreational areas at Gray Reef, Alcova and Pathfinder Reservoirs. Some of the land around Pathfinder Reservoir has been designated as Pathfinder National Wildlife Refuge and is managed by the USFWS.

U.S. Fish and Wildlife Service (USFWS)

The Bureau of Fisheries and the Bureau of Biological Survey consolidated into one agency under a 1940 reorganization plan (54 Stat. 1232) in the Department of the Interior to be known as the Fish and Wildlife Service. The Fish and Wildlife Act of 1956 (70 Stat. 1119) was amended on July 1, 1974, by Public Law 93-271 (88 Stat. 92) to, among other purposes, designate the Bureau as the U.S. Fish and Wildlife Service.

The USFWS is responsible for the enforcement of several wildlife-related statutes and international agreements, such as the Endangered Species Act (16 U.S.C. § 1531 et seq.), the Lacey Act (16 U.S.C. § 3371-3378 and 18 U.S.C. § 42-43), and the Migratory Bird Treaty Act (16 U.S.C. § 703-712). The service administers the National Wildlife Refuge System pursuant to the National Wildlife Refuge System Administration Act (16 U.S.C. § 668dd-668ee), as amended, which includes more than 800 million acres of lands and waters that USFWS administers through either primary or secondary jurisdiction. USFWS also manages national fish hatcheries, fish health centers, and fish technology centers and oversees the Aquatic Animal Drug Approval Partnership Program. In addition, USFWS coordinates both domestic and international conservation activities, including administering multiple international conservation statutes. FWS also is responsible for disbursing financial assistance pursuant to the Federal Aid in Wildlife Restoration Act (known as the Pittman-Robertson Act; 16 U.S.C. § 669 et seq.) and the Federal Aid in Sport Fish Restoration Act (commonly known as the Dingell-Johnson Act; 16 U.S.C. § 777 et seq.), as well as State and Tribal Wildlife grants.⁸

U.S. Forest Service (USFS)

USFS manages a smaller portion of Natrona County (0.2 percent) on the Medicine Bow-Routt National Forest, but these lands are a major contributor to the county both in tourism funds and recreational opportunities and access (see section on Recreation and Tourism). The Routt National Forest Land and Resource Management Plan was approved in 1998.

⁸ https://www.fws.gov/help/about_us.html

The USFS originated in 1876 when Congress formed the office of Special Agent in the Department of Agriculture, which later became the Division of Forestry in 1881. The Forest Reserve Act of 1891 authorized withdrawing land from the public domain. These reserves were originally managed by DOI, but later, management was transferred from the GLO to the Bureau of Forestry, or the USFS through the Transfer Act of 1905. USFS was mandated in the Organic Act of 1897 to “improve and protect the forest within the boundaries or for the purpose of securing favorable conditions of water flow, and to furnish a continuous supply of timber for the use and necessities of citizens of the United States” (USFS 2020). The Multiple-Use Sustained Yield Act (Public Law 86-517) of 1960 required the USFS to develop and administer the renewable resources of timber, range, water, recreation and wildlife on the national forests for multiple use and sustained yield of the products and services. This law was amended by the Omnibus Parks and Public Lands Management Act of 1996. Management of the USFS is through NFMA (Public Law 94-588, 1976), the primary statute governing the administration of national forests.

State Lands

When Wyoming became a state in 1890, the federal government granted approximately 4.2 million acres of land to the State of Wyoming. This land, authorized by the Wyoming Constitution and state law, is managed by the Board of Land Commissioners for long-term growth in value and optimum and sustainable revenue production. State lands are not managed under a multiple use mandate. In 1988, the Board of Land Commissioners adopted its Chapter 13 rules to officially allow the public the privilege of hunting, fishing, and general recreational use on state trust lands. However, the Office of State Lands and Investments (OSLI) is required by law to manage state trust lands to produce income to support public schools and other public institutions. Income is generated through the leasing of lands for a wide variety of surface and sub-surface purposes to return revenues to the designated state beneficiaries in the form of rentals, royalties, and fees (WOSLI 2020).

Change in Land Use

The National Land Cover Database was used to assess the change in land cover across Natrona County between 2001 and 2016 (Map 2 in [Appendix A](#)). The most notable change occurred south of Casper, where large areas of evergreen forest have shifted to herbaceous lands. The Sheepherder Hill fire (2012), Jackson Canyon fire (2006), and Dead Horse fire (2000) have all taken place since 2000 and contributed to the shift from forested to herbaceous land cover types. The Station fire (2015) occurred on the northeastern side of Casper in previously shrub/scrub, also resulting in herbaceous land cover. Increasing development around Casper is observed over this time period. While the data shows a drastic decrease in herbaceous lands and increase in shrub/scrub lands across much of the county, this vast and sudden change suggests that this is likely due to a change in classification technique, as opposed to actual changes in land cover. Similarly, changes from hay/pasture to cultivated crops northwest of Casper are also likely due to changes in classification technique.

Resource Management Objectives

1. Natrona County supports multiple-use management of federal and state lands and defined as the management of federal and state land use and their resource values (renewable and non-renewable) so that they are utilized in a balanced combination that will best meet the current and future needs of the people for current and future generations.

Priorities

1. Federal land management agencies shall make suitable lands available for disposal under the Recreation and Public Purpose Act in resource management plans and upon request by an appropriate entity in accordance with the acts.
2. Federal lands shall be available for disposal when such disposals meet the important public objective of community expansion or economic development, or when the disposal would serve the public interest.
3. The design and development of all federal land disposals, including land adjustments and exchanges, shall be carried out to the benefit of the citizens of Natrona County in an expeditious manner.
4. There shall be no net loss of private lands in Natrona County. Federal land management agencies shall not acquire any private lands or rights in private lands in Natrona County without first ensuring: that at a minimum, parity in land ownership is maintained; and that private property interests are protected and enhanced. Net loss shall be measured in acreage and fair market value.
5. Federally managed lands that are difficult to manage or which lie in isolated tracts shall be targeted for disposal.
6. Natrona County shall be notified of, consulted with, and otherwise involved in all federal and state land adjustments in Natrona County. Natrona County's concurrence shall be required prior to such adjustment.
7. Federal lands in Natrona County shall be managed for multiple use. Multiple use is the management of the 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 county citizens.
8. The prioritizing of any one multiple use shall only occur after the impacts to other multiple uses are fully quantified and mitigated. Any proposal to close the federal lands to a multiple use must be coordinated with Natrona County and include a public hearing.
9. Natrona County will review the federal and state land use and planning issues pertaining to natural resources, such as plan amendments, and make recommendations to applicable agencies and parties.
10. Natrona County recommends federal and state agencies promote public respect for authorized private structures (corrals, fences, water development, etc.) on federal and state land in an effort to reduce vandalism, educate land users, and promote the multiple use concepts.
11. Natrona County recommends federal and state agencies evaluate opportunities for commercial use of federal and state lands for purposed of benefiting the custom and culture of Natrona County as well as the economic base of the county.
12. Natrona County supports year-round, multiple use management on federal and state lands that enhances the local economic stability and diversity, and provides for the quality life and traditional uses outlined in custom and culture and other portions of this NRMP.
13. Natrona County will be notified of, consulted with, and otherwise involved in all federal and state land adjustments in Natrona County. The design and development of all federal land

disposals, including land adjustments and exchanges, shall be carried out to the benefit of the citizens of Natrona County.

14. Federal and state land management agencies will consider local government transportation and maintenance needs for local resources such as rock, gravel, road base, etc., and will provide options for siting new or expanding existing year-round sources on federally managed lands that are reasonably distributed around the county and that provide sufficient material for those needs. All planning or permitting for actions on federal and state lands that requires the use of a road or travel route that is maintained by the county, shall provide consideration within that project's environmental analyses for the potential maintenance needs and locations of material sources that are available. If no sources are available for a project that meet the above requirements, then new locations shall be permitted.

Land Access

Resource Assessment

Natrona County's main corridors are centered around the town of Casper and consist of Interstate 25, U.S. Highway 20, and State Highway 220 (Map 3 in [Appendix A](#)).

Off-highway vehicle (OHV) use on federal lands (primarily administered by the BLM) supports many operations within Natrona County, including livestock grazing, mineral exploration and development, law enforcement, fire protection, and recreation. Overall, federal lands have seen rapidly increasing OHV use over the past 20 years in comparison to other types of recreation. OHV use can lead to environmental concerns, including disturbance of wildlife in crucial habitats, siltation of streams due to increased erosion, and degradation of scenic qualities and cultural sites. Effective transportation management seeks to balance these environmental concerns with uses of federal lands that are important to Natrona County's economy and culture.

Off-Highway Vehicle Management Areas

All federal lands have a motorized vehicle use designation. Lands designated as open are open to all OHV use, on or off established roads and vehicle routes, as long as this activity does not cause unacceptable levels of natural resource damage. Limited means that OHV use is subject to some type of restriction such as the number or type of vehicles, time of season, permitted or licensed use only, use on existing roads and trails, or use on designated roads and trails. Closed areas are closed to all motor vehicle access, with exceptions for emergencies, firefighting, public safety, or related incidents. A closed designation usually does not exclude foot, horseback, or mechanized travel (BLM 2015). OHV management areas are displayed in Map 3, [Appendix A](#)⁹.

The Poison Spider OHV Park, a 285-acre area west of Casper, is the only area in Natrona County that is designated as open to OHV use. OHV use is limited to existing roads and trails across the vast majority of Natrona County. OHV use is limited to designated roads and trails in several locations around the county, totaling approximately 13 percent of Natrona County. Approximately 950 acres are closed to OHV use, the majority of which are found in the Muddy Mountain Environmental Education Area, located 12 miles south of Casper.

⁹ OHV data for the Lander Field Office includes only the "Limited to Existing Roads and Trails" designation.

BOR Off-Highway Vehicle Use

BOR lands are closed to off-road vehicle use, except for an area or trail specifically opened to use of off-road vehicles in accordance with 43 CFR § 420.21. Across BOR-administered lands within Natrona County, there are no areas designated as open to OHV use. Generally, the public is allowed to drive on existing roads or two-tracks crossing BOR land. Notable exceptions are BOR irrigation system operations and maintenance roads and roads or two tracks that have been closed for resource protection. Roads used for operations and maintenance of BOR irrigation features, whether they are on BOR surface or not, are solely for the operation and maintenance of those features and are not for public use.

Resource Management Objectives

1. Natrona County relies on the access to federal and state land to enhance quality of life, but also to fulfill its statutory mandate of protecting the health, safety, and general welfare of people within its jurisdiction. Access to federal and state lands allows for fire protection, search and rescue, flood control, law enforcement, infrastructure maintenance, quality of life, economic benefits, and general human safety.

Priorities

1. Access to or across federal and state lands shall not entail encumbrances or restrictions on private property rights or privileges.
2. There shall be no closure of existing roads or R.S. 2477 right-of-ways without scientific justification, support of the Natrona County Board of County Commissioners, and support of the citizens of the affected area.
3. Prior to any road closures on federal and state land within the County, the deciding officer shall conduct full consultation with the county and local citizens.
4. The development of multiple use trail systems on federal and state lands in the county shall provide a wide range of recreational opportunities and experiences for all users and shall be permitted, with emphasis on looped trails.
5. Federal and state land managers shall provide for the development of access on federal and state lands for the elderly and physically impaired.
6. No roads, trails, right-of-ways, corridors, easements or other traditional access for the transportation of people, products, recreation, energy or livestock may be closed, abandoned, withdrawn, or have a change of use without full public disclosure and analysis. Natrona County supports retaining existing access to federal and state land and will oppose management initiatives that restrict or limit access that might affect the livelihoods and/or quality of life for Natrona County residents.
7. County roads on federal and state lands shall remain open unless it has been determined by the County that the subject road is no longer needed as part of the county's transportation system.
8. Roads accessing Pathfinder Lake shall be maintained during the winter to allow for public and private access.
9. Natrona County asserts federal and state officials need to respect access to federal and state land as contributing to the sustainability of local custom and culture and vital to the local community. Toward this end, the County supports efforts to identify and perfect stock trails,

roads, and right-of-ways protected by law. The County supports and promotes efficient and effective regulatory schemes that allow continued access and encourages the education of federal and state land users regarding access issues and rights.

10. Access to federal and state lands is part of the custom and culture in Natrona County, and changes in land management uses or activities shall consider impacts to that value. The County requires federal and state agencies to provide access for activities linked to the local custom and culture of Natrona County such as agriculture, recreation and related tourist activities, industrial and energy production, water resources, and other intangible values such as historical and cultural sites, open space values and access to open space, aesthetic values, conservation and entrepreneurial values, in order to support the custom and culture and economies of the local communities.
11. Access to and across federal and state lands has been identified through public comment ([Appendix B](#)) as one of the largest concern within the County, and shall be prioritized and considered by federal and state land managers on all land use actions.

Wilderness and Other Special Land Use Designations

Resource Assessment

Special designations discussed here include Wilderness Study Areas (WSA), Areas of Critical Environmental Concern, Recreation Management Areas, National Historic Trails, and Lands with Wilderness Characteristics. There are no congressionally designated Wilderness Areas or National Historic Landmarks within Natrona County. Refer to Chapter 4 for a discussion of Wild and Scenic Rivers and Chapter 5 for a discussion of Wild Horse and Burro Ranges. Refer to Map 4 in [Appendix A](#) for a map of Natrona County's Special Land Use Designations.

Wilderness Study Areas (WSA)



Photo 2 Split Rock WSA, Natrona County

The goal of the Wyoming Public Lands Initiative is to develop a locally-led legislative lands package to address designation, release, and other management for WSA in Wyoming. Natrona County's participation in this initiative is through the established Fremont County committee. While only Congress has the authority to designate

lands as Wilderness, it is the BLM's policy to manage

WSAs in a manner that maintains the area's suitability for preservation as Wilderness (BLM 2012a).

The Sweetwater Rocks Complex, consisting of four contiguous WSAs lying in Natrona and/or Fremont Counties will be addressed as a single unit. These WSAs include: Savage Peak WSA, Miller Springs WSA, Split Rock WSA, and Lankin Dome WSA (Map 4 in [Appendix A](#)). Lankin Dome WSA is located entirely in Fremont County.

Lands with Wilderness Characteristics

Section 201 of FLPMA requires the BLM to maintain on a continuing basis an inventory of all federal 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. Regardless of past inventory, the BLM must maintain and update its inventory of wilderness resources on public lands. Lands with wilderness characteristics are distinct from wilderness study areas. In order for an area to qualify as having wilderness characteristics, it must possess sufficient size, naturalness, and outstanding opportunities for either solitude or primitive and unconfined recreation (BLM 2012d). The BLM manages lands with wilderness characteristics in accordance with the current Resource Management Plans, which contain no specific management for retention of wilderness characteristics.

The Lander Field Office originally conducted inventories of the planning area for lands with wilderness characteristics in 1980s. As part of the recent Lander Resource Management Plan Revision, 20 areas were selected for additional inventory review, four of which are located in Natrona County. Inventories revealed that these areas do not contain wilderness characteristics (BLM 2013a). Of all inventoried areas within the Casper Field Office, three were identified to potentially have wilderness characteristics: Stove Gulch, Henderson Draw, and Little Pine Ridge. Refer to Map 4 in [Appendix A](#) for lands which were inventoried for wilderness characteristics.

Areas of Critical Environmental Concern

An Area of Critical Environmental Concern (ACEC) is defined as, “an area within public lands where special management attention is required [...] to protect and prevent irreparable damage to important historical, cultural, or scenic values; fish and wildlife; or other natural systems or processes, or to protect life and safety from natural hazards.” (43 CFR § 1601.0-5(a)). Permissible activities on ACECs generally depend on the resources and values that the designation was meant to protect. Natrona County contains two ACECs: Jackson Canyon ACEC and Alcova Fossil Area ACEC (Map 4 in [Appendix A](#)).

Recreation Management Areas

Instruction Memorandum No. 2011-004 (BLM 2010) includes revised guidance for Recreation and Visitor Services planning in conjunction with the BLM land use planning process. Recreation and Visitor Services objectives are a primary resource management consideration within Recreation Management Areas. Recreation Management Areas are classified as either special recreation management areas (SRMAs) or extensive recreation management areas (ERMAs). SRMAs are administrative units where the existing or proposed recreation opportunities and recreation setting characteristics are recognized for their unique value, importance and/or distinctiveness, especially as compared to other areas used for recreation. ERMAs are administrative units that require specific management consideration to address recreation use, demand, or Recreation and Visitor Services program investments.

Natrona County contains the following Recreation Management Areas: North Platte River SRMA, Middle Fork/Powder River SRMA, National Historic Trails SRMA, National Historic Trails ERMA, Sweetwater Rocks Undeveloped SRMA, Goldeneye Wildlife Recreation Area SRMA, and Muddy Mountain Environmental Education Area (Map 5 in [Appendix A](#)).

National Historic Trails

A National Historic Trail is a congressionally designated trail that is an extended, long-distance trail, not necessarily managed as continuous, that follows as closely as possible and practicable the original trails or routes of travel of national historic significance. The purpose of a National Historic Trail is the identification and protection of the historic route and the historic remnants and artifacts for public use and enjoyment. A National Historic Trail is managed in a manner to protect the nationally significant

resources, qualities, values, and associated settings of the areas through which such trails may pass, including the primary use or uses of the trail (BLM 2012c).

The Oregon/California/Mormon Pioneer, Pony Express National Historic Trail is found within Natrona County and passes southwest through Casper, north of Pathfinder Reservoir, and into Fremont County (Map 5 in [Appendix A](#)).

Resource Management Objectives

1. Natrona County supports a decision on WSAs and the management of special use areas that balance continued and multiple use of federal and state lands while conserving unique and special areas and resources.

Priorities

1. The legal requirements and qualifications of the Wilderness Act of 1964 and the Wyoming Wilderness Act of 1984 shall be upheld, including those providing for the continuation of existing uses and the regulation of existing uses only so as to prevent necessary or undue degradation of the environment.
2. No additional federal lands in Natrona County are suitable for wilderness designation other than the existing wilderness study areas in the county. Natrona County opposes any such further designations.
3. Natrona County supports the expeditious resolution of pending congressional wilderness designation proposals for BLM WSAs in the county and supports the release of WSAs not recommended for wilderness designation from non-impairment management.
4. There shall be no protective perimeters or buffer zones around wilderness areas. The fact that non-wilderness activities or uses can be seen or heard from within any wilderness area shall not, of itself, preclude such activities or uses up to the boundary of the wilderness area.
5. With the exception of a proposed pipeline adjacent to existing pipelines, federal and state land management agencies shall provide for a quarter-mile protective buffer for sections of designated historic trails on federal and state lands in the county in which no new disturbance would be allowed except where existing improved roads and pipelines currently cross the trail, and no construction activities would be allowed unless screened from the trail topography.
6. Natrona County will only support special designations of federal or state lands where there is substantial local input and support, and the designation is documented by sound, scientifically based research to support their need.
7. Natrona County supports special land designations that coincide (rather than conflict) with multiple use concepts, and the custom and culture of Natrona County. If special land use designations are proposed, they must be fully coordinated with Natrona County and consistent with surrounding conservation management, and do not preclude future options for the conservation, implementation, or utilization of water resources, rangeland, soils, or vegetation (including noxious or invasive weeds) and fuels management.
8. It is Natrona County's policy that ACECs must meet relevance and importance criteria and must require special management to protect the area and prevent irreparable damage to resources or natural systems.

9. The County's support for designation of an ACEC within federal land management plans will be held until:
 - a. It is clearly demonstrated that the proposed area satisfies all the definitional requirements of the FLPMA of 1976;
 - b. It is clearly demonstrated that the area proposed for designation as an ACEC is limited in geographic size and that the proposed management prescriptions are limited in scope to the minimum necessary to specifically protect and prevent irreparable damage to the relevant and important values identified, or limited in geographic size and management prescriptions to the minimum required to specifically protect human life or safety from natural hazards;
 - c. It is clearly demonstrated that the proposed area is limited only to areas that are already developed or used or to areas where no development is required;
 - d. It is clearly demonstrated that the proposed area contains relevant and important historic, cultural or scenic values, fish or wildlife resources, or natural processes which are unique or substantially significant on a regional basis, or contain natural hazards which significantly threaten human life or safety;
 - e. The federal agency has fully analyzed regional values, resources, processes, or hazards for irreparable damage and its potential causes resulting from potential actions which are consistent with the multiple-use, sustained yield principles, and the analysis describes the rationale for any special management attention required to protect, or prevent irreparable damage to the values, resources, processes or hazards;
 - f. It is clearly demonstrated that the proposed designation is consistent with the plans and policies of the county where the proposed designation is located.
10. It is clearly demonstrated that the proposed ACEC designation will not be applied redundantly over existing protections provided by other state and federal laws for federal lands or resources on federal lands, and that the federal statutory requirements for special management addition to those specified by the other state and federal laws.
11. The difference between special management attentions required for an ACEC and nominal multiple-use management has been identified and justified, and that any determination of irreparable damage has been analyzed and justified for short and long-term horizons.
12. Natrona County opposes any impairment or diminution by any wilderness or other special use designations to those interests associated with livestock and grazing, fire and fuels management, or water management and access, such as ditches, reservoirs, water conveyance facilities, and easements or right-of-ways.

Fire Management

Resource Assessment

Wildland fire describes any non-structural fire that occurs in vegetation and/or natural fuels. Wildfire and prescribed fires are two categories of wildland fire. Wildfires are unplanned ignitions caused by natural sources such as lightening, unauthorized and accidental human-caused fires, and escaped prescribed fires. Prescribed fire refers to the introduction of fire to an area under regulated conditions

for specific management purposes (BLM 2015).

Natrona County fire history from 1980 to 2016 is displayed below in Figure 1 and Figure 2. While annual fire occurrence (ignition) totals vary from year to year, they generally stayed at or below 30 occurrences between 1980 and 2009. From 2010 to 2016, however, four of seven years saw greater than 30 occurrences. In 2011, 50 fires occurred within Natrona County, which was the high over this time period. Acres burned from wildfire ignitions within Natrona County saw even greater annual variability. Between 1980 and 2016, five years saw greater than 10,000 acres burned by wildfire: 1996, 2000, 2006, 2012, and 2015. As shown in Table 2, natural-caused fires made up the majority of occurrences and acres burned between 1980 and 2016.

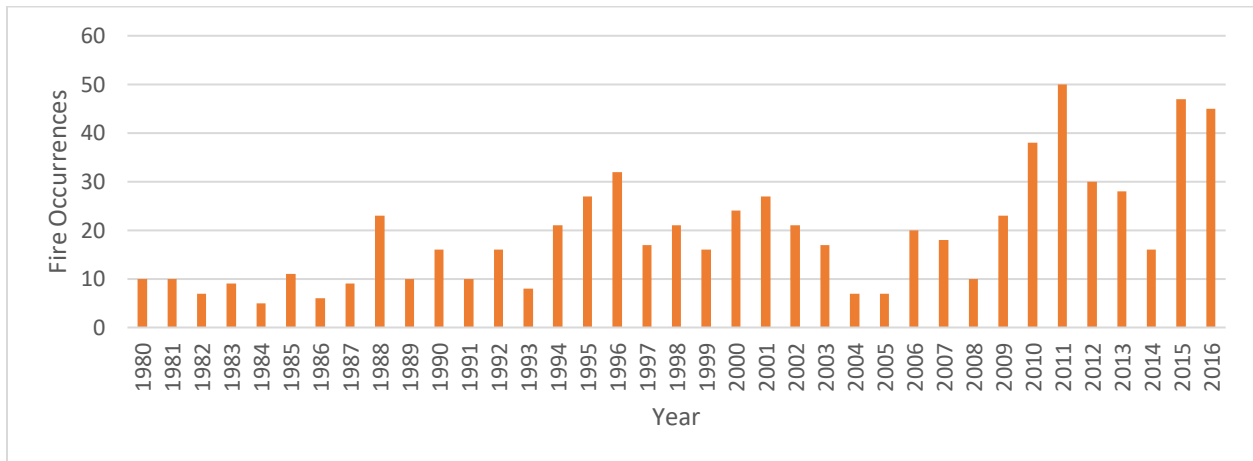


Figure 1 Fire Occurrences in Natrona County (1980–2016) (USGS 2016)

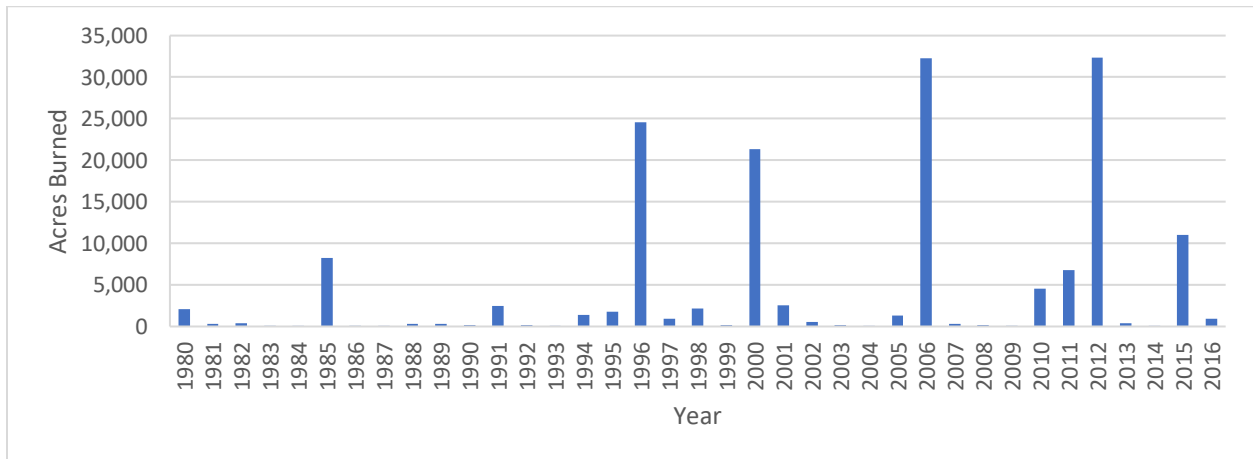


Figure 2 Acres of Land Burned in Natrona County (1980–2016) (USGS 2016)¹⁰

Table 2 Causes of Fires in Natrona County (1980–2016) (USGS 2016)

Cause	Total Occurrences	Total Acres Burned
Natural	370	108,551
Human	230	50,134

¹⁰ Acres are based on point data. The totals displayed above represent fires that were ignited within Natrona County. Acres burned may also include lands in adjacent counties. Likewise, fires that were ignited in adjacent counties and spread into Natrona County are not accounted for in this data set.

Cause	Total Occurrences	Total Acres Burned
Undetermined/Cause Not Listed	112	1,791
Grand Total	712	160,476

Broadly speaking, wildland fire may have both positive and negative impacts. From an ecological perspective, fire is an important component of the ecological processes of many plant communities. Certain vegetation types have developed under a regime of intermittent fire and have made appropriate adaptations to the occurrence of wildland fire (BLM 2015). Fire and fuels treatments are often employed for improving rangeland health, disease and insect control, and hazardous fuel reduction. Many factors contribute to wildfire behavior and future outlook, including weather patterns and climate, invasive annual grasses, forest disease, and past fire management practices. As vegetation conditions depart from reference conditions, fire return intervals and severity generally will also change. Cheatgrass invasion, for example, has become more widespread over the past 25 years. Areas impacted by cheatgrass will likely experience increased fire size and frequency (BLM 2015).

Wildfires may also negatively impact the county in a number of ways. Wildfires can impact water quality and quantity, long-term soil productivity, and increase threats to human life and property. Nearby smoke may contribute to health effects such as emphysema and heart disease. Furthermore, recreation and local businesses that rely upon it may also be impacted (Wildland Fire Leadership Council 2014).

Resource Management Objectives

1. Natrona County supports active management and the utilization of tools and treatments that prevent and/or minimize the negative effects of wildfire, including human health effects and safety, impacts to businesses, agricultural operations, and recreation.

Priorities

1. Fire management strategies shall consider firefighter and public safety and protect human life, property, and communities. There shall be a high level of cooperation between agencies and firefighter organizations in the County.
2. Federal and state land management agencies will incorporate local fire department plans and policies into fire suppression and control plans.
3. The County will seek to encourage federal and state agencies to use prescribed burns as a primary tool of vegetation management and weed and pest control, especially in areas where access or roads are limited. The County will become actively involved in planning for prescribed burns to mitigate potential wildfire threats.
4. Natrona County supports efforts to thin poorly managed forests and to remove dead and infested trees to mitigate wildfires.
5. Natrona County encourages active management, pre and post fire, and the development of vegetation treatments with the objective to lower high fuel loads and minimize wildfire risk, including but not limited to timber harvest, prescribe burning, biomass fuel removal, slash pile burning, livestock grazing treatments, herbicide application, and the creation of fuel breaks by modifying vegetation cover and density. Active management would include the use of, but not limited to, all tools and treatments listed or addressed in this NRMP and would occur on rangeland or forested stands that have been impacted by insect and disease, invasive annual

grasses, heavy loading of vegetation or biomass, or dead and downed fuels.

6. Natrona County knows that active management of cheatgrass and other invasive annual grasses, includes all available tools and treatments from mechanical, chemical or physical, and shall be aggressively pursued in order to reduce rangeland wildfire risk and decrease or control the spread of cheatgrass to intact ecological sites. Natrona County encourages the expedited approval of vegetation management planning where objectives to reduce wildfire risk or to slow wildfire spread has been identified.
7. Natrona County supports aggressive suppression and prevention of wildfires when private property structures or historic values are threatened.
8. Federal and state agencies shall coordinate with local fire agencies. Specifically, the USFS shall adhere to all requirements set forth in the Cooperative Forestry Assistance Act 16 USC §2106.
9. Federal and state agencies will incorporate local fire planning efforts into their overall fire suppression and management planning, and will support efforts of local fire departments in wildfire suppression activities and fire prevention planning and implementation.
10. Natrona County supports active rehabilitation of forests and rangeland damaged by wildfires in order to protect habitat values and wildlife, and to reduce the potential for erosion and the introduction or spread of invasive annual grasses or noxious weeds. Active rehabilitation can include, but is not limited to, seeding, grazing treatments, chemical treatments, salvage-logging operations, or another other forms of treatments that have been shown to be beneficial to post-fire rehabilitation.
11. Post-fire objectives shall be consistent with site potential as defined in approved Desired Future Conditions or Ecological Site Descriptions.
12. Natrona County supports the DOI's Secretarial Order 3372, Reducing Wildfire Risks on Department of Interior Land through Active Management (Department of the Interior 2019); and Secretarial Order 3336, Rangeland Fire Prevention, Management, and Restoration (Department of the Interior 2015) which ordered to identify and develop effective tools and practices to reduce frequency and extent of wildland fires that threaten property, ecological function and wildlife habitats across much of the west (both issued under the authority of Section 2 of Reorganization Plan No. 3 of 1950 (64 Stat.1262), as amended).
13. Active management on rangelands, including management and treatment of invasive annual grasses, shall be a priority for federal and state land management.

Forest Management

Resource Assessment

Active forest management is meant to promote healthy vegetation and prevent the spread of catastrophic wildfire and invasive species. Prior to the implementation of any treatments, however, knowledge of historic fire patterns is important in understanding characteristics of the landscape when fires burned as a natural part of the ecosystem. Fires historically moved through conifer forests of the western United States, clearing out brush and low branches. Today, active forest management practices are designed to achieve a similar effect. Many methods are available to thin fuels beneath the canopy and reduce crown fire potential. Treatments include thinning trees and brush with chainsaws, piling

fuels with dozers and excavators, controlled burning, and using livestock for grazing ([Rands 2019](#)).

Healthy forests serve as the basis for many ecosystem processes that ultimately dictate the availability of products that are used by the county. Healthy forests aid in providing clean water, diverse wildlife habitat, timber products, and a variety of recreation opportunities. The majority of Natrona County's forested areas are located in the northwest and southeast corners of the county (Map 2 in [Appendix A](#)). While forest and woodland communities are not prevalent in Natrona County, they are largely comprised of Ponderosa pine, lodgepole pine, Douglas fir, subalpine fir, and quaking aspen.

Resource Management Objectives

1. Natrona County encourages proper and active forest and woodland management to ensure healthy and vibrant watersheds for current and future generations and to sustain the stability of timbering, ranching and agriculture and other traditional and future uses.

Priorities

1. The private use of timber products from federal and state lands in Natrona County for fuel, posts and poles, Christmas trees, etc., shall be continued as an allowable use.
2. A sustainable wood products industry on federal and state lands in the county is an important aspect of economic diversity.
3. Fire, timber harvesting, and treatment programs will be managed in a way to promote forest health, reduce disease and insect infestation and prevent waste of forest products while providing opportunities for local businesses and small business.
4. Federal and state land management agencies shall participate in the National Forest County Partnership Restoration Program to formulate a multi-year plan that encompasses:
 - a. Community-based cooperation with stakeholders;
 - b. Integration of best management practices that incorporate peer reviewed science;
 - c. Expedited implementation of forest and watershed enhancement projects at the stand and landscape levels; and
 - d. Flexibility in authorities and planning.
5. Conservation forestry conclusions and proposals for action shall be consistent with the following:
 - a. Avoids management scenarios that result in a static forest condition;
 - b. Does not restrict management actions to a particular size or age of wood material;
 - c. Concentrates activities on current condition as compared to desired condition;
 - d. Contains an aggressive time table for management implementation;
 - e. Uses a systemic, diagnostic approach to anticipate forest health problems;
 - f. Works with and not against nature;
 - g. Accurately accounts for forest health costs and uses a long-term risk analysis;
 - h. Prepares the forest for inevitable periods of drought and encourages research into climate/forest health relationships and the aforementioned forest management scenarios utilize silviculturally sound harvest of forest products and material to finance

non-commercial management prescriptions to meet desired condition or funded in conjunction with local, state and federal programs.

6. Encourage the use of the authorities granted under the Healthy Forests Restoration Act, Healthy Forests Initiative and Good Neighbor Authority to expedite cross-boundary agency planning and collaboration processes and project implementation to economically and efficiently treat and protect the resources of Natrona County.
7. Natrona County supports local, regional, state, and federal partnerships in the manufacture and use of forest and forest by-products, including innovative ways to harvest timber.
8. Forest management shall support a coordinated, hands on, proactive approach to achieve overall forest health and ensuring a healthy and vibrant forest for current and future generations. Commercial timber harvesting and thinning, including salvage operations, and other actions such as chaining, thinning, prescribed fire, and managed livestock grazing shall be considered (but not limited) as methods to promote forest health, reduce insect and disease infestation, reduce wildfire impacts, and prevent waste of forest products while supporting local and regional economies.
9. Federal and state agencies shall support the ability of local communities to derive economic and social benefits from forested areas. Access to and use of forest products, such as, but not limited to, firewood, posts and poles, building materials, and live tree or Christmas tree permits, is part of an effective forest management plan and important to the local community culture. Access to these sites shall be maintained and considered to allow a wide demographic to harvest these products.
10. Natrona County endorses the Wyoming Forest Action Plan and supports the task force recommendations in the Forest Task Force Report (2015).

Chapter 3: Physical Resources

Air Quality and Climate Change

Resource Assessment

Air Quality

Air quality is important to the health, safety and welfare of Natrona County's residents. Under the Clean Air Act of 1970 (42 U.S.C. §7410 et seq.), the U.S. Environmental Protection Agency (EPA) is responsible for setting and enforcing air quality standards (. In Wyoming, local enforcement of many air pollutants is delegated to the Department of Environmental Quality (DEQ). 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. The status of areas with respect to federal ambient air quality standards are classified as nonattainment (violating the air quality standard), attainment (better than federal standards), or unclassified (due to an absence of monitoring data) (US EPA 2020). Air monitors in the Casper area measure air pollutants such as; NO₂; O₃, SO₂, PM_{2.5} and PM₁₀. Natrona County is currently considered in attainment or unclassified for all federal ambient air quality standards.

DEQ has also established limits on the quantity, rate and concentration of emissions of various air pollutants from various sources including, but not limited to:

- Vehicle engines
- Construction/Demolition activities (asbestos)
- Handling and transport of materials
- Agricultural practices
- Fuel burning equipment
- Oil and gas operations
- Manufacturing operations

Natrona County's air quality has been an issue of particular concern. The degradation of air quality comes from both natural and man-made sources. The county has a number of oil and gas facilities, feedlots, and other farm operations, which contribute to poor air quality. Open burning of fields is a cultural tradition in the agricultural community. Burning increases already high levels of total suspended particulates (TSP) in the air. TSP problems combine with fugitive dust, construction activity, woodstove and fireplace smoke, controlled burns by federal and State agencies, diesel-fueled vehicles, off-road vehicles and emissions from the sugar plant, etc. to create a potential health hazard.

Smoke from wildfires brought on by drought has aggravated this perennial problem under recent drought conditions. As more residents seek to live in unincorporated areas, the conflicts between existing agricultural, industrial and commercial interests and local residents are expected to become more prevalent.

Climate Change

Climate change is defined as the change in climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere, in addition to natural climate variability

observed over comparable time periods¹¹. Paleoclimatology, the study of climates at particular times in the geologic past to have a better understanding of the cause of and how it relates to the present and future climate events. Ice cores, tree rings, sediment cores, etc. are used as proxy records for understanding our current climate, which has shown that the climate of earth is in a perpetual state of change, but that environmental factors, such as continental drift, solar energy, greenhouse gases (GHG) in the atmosphere, and even variations in the earth's orbit can influence or impact the natural variations of climate change¹².

The potential causes and effects of climate change are varied. For example, if global climate change results in a warmer and drier climate, this could result in increased concentrations of TSP due to increased windblown dust from drier and less stable soils. Reduced snowpack and an earlier snowmelt could result in a longer wildland fire season, which could lead to higher concentrations of ozone and TSP. Energy development and industrial activities can generate carbon dioxide (CO₂) and methane (CH₄): CO₂ emissions result from the use of combustion engines, while CH₄ can be released during processing. Wildland fires also are a source of CO₂ and other greenhouse gas emissions, while livestock grazing is a source of CH₄. Other activities with the potential to contribute to climate change include soil erosion from disturbed areas and fugitive dust from roads, which have the potential to darken snow-covered surfaces and cause faster snow melt.

Executive Order 13783 (2017) *Promoting Energy Independence and Economic Growth* directed CEQ to withdraw guidance that was issued in 2016 for federal land management agencies on the consideration of the effects of climate change and greenhouse gas emissions in favor of promoting energy independence and economic growth. In 2019, CEQ published draft guidance to assist federal agencies in their consideration of GHG emissions in NEPA analysis and documentation, and to facilitate timely reviews and permitting decisions for infrastructure projects requiring federal agency approval¹³. Agencies are required to consider direct, indirect, and cumulative effects of the proposed action and connected actions on climate change when completing an analysis, subject to reasonable limits. The draft guidance recognizes the need to use qualitative analysis unless existing data is available for GHG only where emissions are substantial enough to warrant quantification. This draft guidance also removes the need to complete a monetary cost-benefit analysis using any monetized Social Cost of Carbon estimates and related documents or other similar cost metrics¹⁴. Land management practices such as prescribed burning, vegetation management and manipulation, soil conservation, commercial timber harvest, and grazing can result in both carbon emissions and carbon sequestration.

In an effort to respond to climate change, BLM has implemented policy to encourage the development of renewable energy in acceptable areas. In addition, Executive Order 13212 (2001)¹⁵ instructs agencies, including the BLM “to expedite projects that will increase the production, transmission, or conservation of energy.” The Climate Change Program Office (CCPO) coordinates U.S. Department of Agriculture’s (USDA) and the USFS’s responses to climate change, focusing on implications of climate change on agriculture, forests, grazing lands, and rural communities (USDA 2013). Regional Climate Science Centers

¹¹ As defined by the Intergovernmental Panel on Climate Change in its November 2007 *Fourth Assessment Report of Climate Change 2007/*

¹² <https://www.nationalgeographic.org/encyclopedia/paleoclimatology-RL/>

¹³ https://ceq.doe.gov/guidance/ceq_guidance_nepa-ghg.html

¹⁴ <https://www.govinfo.gov/content/pkg/FR-2019-06-26/pdf/2019-13576.pdf>

¹⁵ <https://www.fedcenter.gov/Bookmarks/index.cfm?id=702>

provide scientific information and tools that land and resource managers can apply to monitor and adapt to climate changes at regional and local scales (DOI 2010).

Climate change science and projections of climate change is a continually growing and emerging science. Additional and recent information on climate change and regional projections of climate change for the Planning Area can be found through the following links:

- U.S. Global Change Research Program: <http://www.globalchange.gov/>
- Intergovernmental Panel on Climate Change (IPCC): <http://www.ipcc.ch/>

Resource Management Objectives

1. Air quality is one of Natrona County's substantive concerns. Maintaining the county's air quality above state and federal air quality standards is critical to the health and well-being of its residents. A high level of air quality is important to future economic development as it reduces the possibility of development restrictions as a result of air quality standards being exceeded
2. Natrona County supports reasonable actions that reduce adverse effects from climate change while maintaining the economic viability and growth of the county.

Priorities

1. Natrona County supports the purpose of the Clean Air Act amendments (1990) which balance the need for the highest level of environmental protection with the need to maintain economically viable and sustainable communities.
2. Natrona County supports the goals of the Wyoming Environmental Quality Act, which implements the Clean Air Act, as amended. The Wyoming DEQ establishes emission standards and permit procedures that are economically achievable and protect the public health and welfare.
3. Wyoming DEQ's recommendations shall be followed when the agency documents a significant risk to human health from a proposed project on federal lands.
4. Federal land management agencies shall conduct intensive analysis of any action proposed on federal lands that would, or could, have the effect of changing quality of air resources in the county. Such actions shall be critically considered in relationship to the historic and current uses of air resources in the county by humans, vegetation, livestock and wildlife.
5. Federal land management agencies shall involve Natrona County in the development of mitigation strategies to reduce air quality impacts. Mitigations must be implemented to reduce or eliminate impacts of activities that are expected to impact air quality and that individually or cumulative result in exceeding state or federal air quality standards.
6. Federal land management agencies shall involve Natrona County in the development of enforcement strategies and procedures to be implemented in the case of violations. These procedures and enforcement strategies shall be agreed upon before a permit or lease for a proposed activity or project is approved.
7. Federal land management agencies shall coordinate with the County when formulating permitting and leasing stipulations for proposed activities or projects that have significant impacts to air quality. Permitting and leasing stipulations shall include: provisions for the

implementation of agreed upon mitigation strategies to reduce or eliminate criteria pollutants where state and federal air quality standards are likely to be violated; and provisions for the implementation of agreed upon enforcement strategies to be implemented in case of a violation.

8. Dust-suppression measures on roads traversing federal lands are required for industrial development projects in order to reduce air quality impacts from traffic.
9. Maintaining the county's air quality above state and federal air quality standards is critical to the health and well-being of its residents. A high level of air quality is important to future economic development as it reduces the possibility of development restrictions as a result of air quality standards being exceeded.
10. Air quality baselines for the area must be established with the full participation of the county and the Natrona County Conservation District.
11. To maintain high air quality, state and federal land management agencies will work to protect the area's air from degradation from non-area sources. These non-area sources shall be identified and quantified.
12. Certain criteria pollutants, such as ozone, are not generally emitted directly from a specific source, but are formed from a combination of precursor compounds. Criteria pollutants formed by this process may be in danger of violating air quality standards while the precursor compounds may not be in danger of violation. If the criteria pollutant is likely to exceed Wyoming and/or National Ambient Air Quality Standards, measures for the reduction of the precursor compounds shall be implemented even if they are not likely to exceed standards in and of themselves.
13. All oil and gas field development plans must provide for air quality monitoring. Data development must be coordinated with, and the findings provided to, the Board and the Natrona County Conservation District.
14. Any development or expansion of an activity known to have an impact or have reasonably foreseeable impact on air quality shall occur in such a way as to avoid exceeding Wyoming and/or National Ambient Air Quality Standards. The determination of whether or not air quality standards will likely be exceeded will be based on quantitative analysis of data gathered from monitoring and the expected emissions of that development expansion.
15. All air quality studies undertaken by or on behalf of a federal land management agency or the Wyoming DEQ must be coordinated with the county and the Natrona County Conservation District.
16. All air quality analyses for proposed federal projects that have any reasonably foreseeable impacts to air quality shall be quantitative unless otherwise approved in writing by Natrona County.
17. Study methods for air quality analysis shall be developed with, and agreed upon by the County. If necessary, a third-party consultant approved by the County may be enlisted to complete the required air quality analysis so long as that consultant conforms to the agreed upon methods.
18. Natrona County shall notify any federal land management agency, in writing, of inconsistencies

between county policies and procedures regarding air quality and those policies and procedure of federal guidance, resource management plans and amendments to management framework plans.

19. The individual and cumulative impacts to air quality and the significance thereof, of any proposed actions on federal lands shall be analyzed thoroughly and quantitatively by the federal agency proposing the activity. Analysis of individual and cumulative impacts must be coordinated with, and the findings provided to, the County.
20. Alternatives for a proposed activity on federal lands must be developed with the cooperation of the County.
21. Climate change analysis shall occur when required based on proposed action and connected actions on a local or regional level that is determined in consultation and review with the County. Federal climate change analysis that does occur shall be a qualitative analysis that considers impacts to the local custom and culture and economies from climate change. If peer reviewed and credible scientific data is currently available, this can also be used in the analysis. Additional studies, regulation, or mitigations shall not be required as part of the proposed action if this current quantitative data is not available.
22. Natrona County supports land management practices that restore through active management, high carbon-value ecosystems, such as forests and grasslands, and reduce wildfire frequency and intensity.
23. Natrona County supports education, in partnership with state and federal entities, on climate-smart land management practices, including but not limited to low-emission agriculture, forestry, industrial emissions, open space conservation, and burning.

Cultural, Historical, Geological, and Paleontological Resources

Resource Assessment

The National Register of Historic Places is the official federal list, not just of buildings, but also of the sites, districts, structures, and objects “significant to the understanding of the historical and cultural foundations of the nation.” As of January 9, 2015, the National Register of Historic Places lists the following Historic Places in Natrona

County: Independence Rock, Martins Cove, Pathfinder Dam, Split Rock Twin Peaks, Stone Ranch Stage Station, Tom Sun Ranch, Teapot Rock, Bridger Emigrant Road, and Waltman Crossing.

The BLM lists Ryan Hill along the Oregon Trail; southwest, Bessemer Bend and Emigrant Gap, both near Casper and the Oregon-Mormon trail, as “National Register Quality.”

Portions of these are eligible for nomination to the National Register.



Photo 3 Split Rock Twin Peaks, Natrona County 1870. USGS Photo

Many significant cultural, paleontological, and archeological sites have already been identified on public and private land; with the likelihood additional important sites have yet to be identified. Since the majority of land is publicly owned, it is reasonable to assume most future discoveries will occur on federal and state land. The BLM lists three “prehistoric sites” in the county: Notches Dome, Teepee Ring and Campsite, all in the South Bighorns north of Waltman. These three sites are all on federal land.

The Archaeological Resources Protection Act (ARPA) of 1979 provides substantial penalties for destroying sites on public land and for taking artifacts. To reaffirm their importance, in the FLPMA of 1973, Congress declared that the national interest public lands and their resources shall be inventoried periodically and, that they shall be managed to protect the quality of historical and archeological values.

Currently, the BLM does not allow commercial collecting of fossils from public lands, except petrified wood which is managed as a mineral material and is salable under the Mineral Materials Act (43 CFR 3600). Congress passed the Paleontological Resources Preservation Act (PRPA) in March 2009. This Act supplements existing laws and guidance regarding paleontological resources on BLM-administered lands.

Under current policy, the BLM allows the public to collect common invertebrate or plant fossils in reasonable quantities for personal use, making negligible disturbance using only hand tools (casual-use or hobby collecting). Permits may be issued to qualified researchers and fossils collected remain public property and must be curated in an approved repository.

The BOR does not allow for the removal or disturbance of natural or cultural resources on Reclamation-administered lands in accordance with 43 CFR § 423.29. Engaging in renewable natural resource gathering activities such as picking berries and mushrooms, collecting antlers, and other similar activities is permitted as regulated by part 423 and other applicable Federal, State, and local laws.

Resource Management Objectives

1. Natrona County supports the protection, and/or excavation of unique archeological features that occur in the county, including the responsible stewardship of these resources through balancing resource protection with visitor values.
2. Natrona County recognizes the value cultural, archeological, paleontological and geological resources have on the county’s custom and culture and supports the development of public education and stewardship programs to increase awareness about cultural, paleontological, and archeological resources to enhance responsible visitation and appreciation of history and meaning of various sites, and to heighten protection strategies carried out within the context of multiple use.

Priorities

1. Natrona County supports the protection, and/or excavation of unique archeological features that occur in the County, including the responsible stewardship of these resources through balancing resource protection with visitor values.
2. Natrona County will be recognized by federal land management agencies as a consulting party as described in Section 106 of the National Historic Preservation Act and subsequent amendments. As a consulting party, Natrona County will request periodic review and comment on classification and management of significant cultural resources on federal lands in the

County, and the impact of proposed land use actions on those sites. Natrona County may also periodically suggest endangered cultural resources that shall be classified and managed as more significant.

3. Where practical, federal and state land management agencies shall provide public visitation opportunities to designated public use cultural and archeological sites with sufficient site protection.
4. Federal and state agencies will not jeopardize private property rights or existing land uses, such as oil and gas extraction, mining, logging and harvesting of forest products, road maintenance, and grazing, through the protection of cultural and archeological sites. This can be accomplished by carefully assessing the sensitivity and importance of the site relative to the economic and cultural impacts associated with land management decisions based around cultural and archeological sites in the county. Natrona County realizes there can be a balance of existing uses and the need to protect cultural sites.
5. Potential adverse effects to significant and high-quality cultural resources will be managed to the extent possible through avoidance and confidentiality of location before other protections are considered.
6. Many sites represent a unique culture and are closely related to early agricultural settlement of the area. They continue to have historical significance and are held by many residents as reverent or consecrated sites. These sites must be preserved and remain accessible.
7. The maintenance of the resources and their physical attributes such as trails, cabins, livestock facilities, etc., is critical to present and future tourism development.
8. The land, its people, and their heritage form an inseparable trinity for the majority of the area residents and this relationship must be considered in all proposed actions.

Energy, Mining, and Mineral Resources

Resource Assessment

Mineral and energy production has and continues to play one of the most significant roles in the culture and economy of Natrona County. Natural gas, oil, and bentonite constitute the minerals in Natrona County. Sand and gravel are other economic resources present within the county.

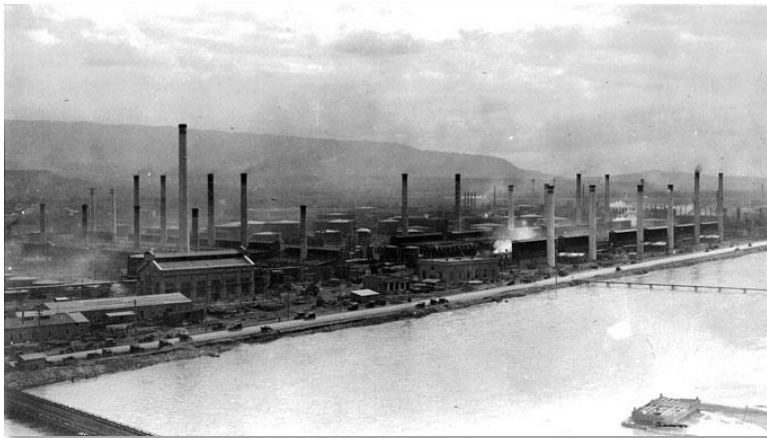


Photo 4 The Midwest Oil Company Refinery in Casper, 1920

Although the production of minerals, and associated economic and cultural activity, have waxed and waned with demand and pricing over the past; it has been, and remains a significant portion of Natrona County's tax base (Figure 3 in Chapter 6).

Congruently, the County uses this funding to provide the industry with infrastructure and services such as roads, bridges, medical services, and law enforcement. It is also Natrona

County's duty and obligation to be a part of and/or intervene in the regulatory process as provided for by Federal and State Law. This requires interaction and cooperation with agencies such as the BLM, USFS, Wyoming Oil and Gas Commission, and State of Wyoming DEQ.

NATRONA COUNTY ASSESSED VALUATION: 2019

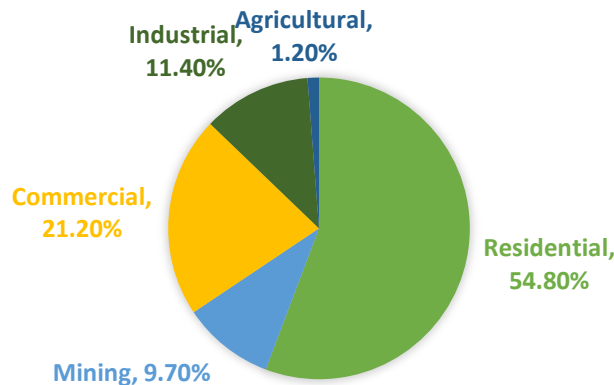


Figure 3 Natrona County Assessed Valuation in 2019 (Wyoming Department of Revenue 2019)

The extraction of these energy resources plays a significant role in the culture and economy of Natrona County, starting with the filing of the first oil lease in the 1880's. It is known today that substantial amounts of crude oil and natural gas are present in the county. There are currently 1,612 active oil wells, 297 active gas wells and 1,363 miles of pipeline (Map 6 in Appendix A). Oil and gas production contribute substantially to tax dollars within Natrona County (Table 3).

The BLM lists about three-fourths of the county in the high potential range for occurrence of oil and gas and only the southeast and southwest area in the moderate and low potential zones. The BLM also explained that the occurrence or potential for oil and gas is but one of the important factors in where there will be exploration and production of oil and gas. Predicting where exploration will occur is a factor of the site specifics and economic viability of the particular source and site. The oil and gas exploration industry determine where they will drill, not the BLM.

Bentonite claims occur in the South Bighorns and west of Casper in the Poison Spider area. The Pratt sodium sulfate mine along U.S. Highway 20-26 near Powder River is listed as well. Locatable minerals, oil, gas, uranium, bentonite, and limestone occur in the southwest two-thirds of the county. Predominately, the Salt Creek Oil Field and scattered uranium and bentonite claims occur in the northeast corner. Limestone occurs on the face of Casper Mountain and in the South Bighorns. Sand and gravel deposits are primarily along the river and creeks. The mineral locations are in the rural areas of the county with the exception of Midwest-Edgerton in the Salt Creek Oil Field where urban development arose to serve the industry. Sand and gravel are perhaps the most conflicting minerals. They occur within the flood plains of the rivers and creeks, where many people want to build houses and/or recreate. The county established new guidelines for gravel (non-mineral mining) recently to address these issues.

*Table 3 Energy and Mineral Resource Production and Value in Natrona County (Wyoming Department of Revenue 2019)**

Mineral Production and Value in Natrona County	2014	2015	2016	2017	2018
Production or Sales (units)					
Oil (barrels)	5,601,003	5,362,691	5,162,130	4,944,826	4,868,110
Gas (mcf)	13,909,291	14,276,242	14,790,817	14,286,314	12,428,167
Coal (tons)	0	0	0	0	0
Gypsum (tons)	0	0	0	0	0
Sand and Gravel (tons)	863,081	768,146	477,991	407,493	462,974
Bentonite (tons)	117,212	123,315	137,748	\$225,350	210,718
Taxable Valuation (\$ millions)					
Oil	\$435.90	\$212.20	\$186.60	\$212.80	\$265.20
Gas	\$51.20	\$23.70	\$21.40	\$23.20	\$23.10
Coal	\$0	\$0	\$0	\$0	\$0
Gypsum	\$0	\$0	\$0	\$0	\$0
Sand and Gravel	\$1.80	\$2.20	\$1.30	\$1.10	\$1.20
Bentonite	\$1.10	\$1.00	\$1.30	\$1.70	\$1.70
Total (\$ millions)	\$490.00	\$239.10	\$210.60	\$238.80	\$291.20

*Source: Wyoming DOR Annual Report (2015-2019). Valuation is not adjusted from the values indicated in the report; thus, it is generally in January of the previous year dollars (based on the reporting dates). Notes: Taxable valuation may differ from market or sales value because it excludes certain costs of production. This table includes all minerals for which Wyoming DOR provides data on production from the county.

Only a small percentage of mineral ownership, mostly around Casper, is private, thus creating a split estate and potential for conflict. Private mineral/private surface ownership land is rare (Table 4).

Table 4 Percentage of Split Estate Property within Natrona County

Split Estate/Do Not Own Mineral Rights	Acres	Percent (%)
On Local Government	11,987	64
On Private	1,123,423	71
On State	142,220	37
Total Split Estate	1,277,630	65

Wyoming Pipeline Corridor Initiative Project (WPCI):

The Natrona County Commissioners, Natrona County Conservation District, and other Wyoming county agencies are currently involved in the Wyoming Pipeline Corridor Initiative (WPCI). The WPCI is a proposal from the State of Wyoming to designate approximately 1,914 miles of pipeline corridors across private, state, and BLM-managed lands throughout the central and western portions of the state that are essential to future production and distribution of oil and gas products viable to the state's economy. Approximately 1,105 miles of the proposed corridors is located on BLM-managed lands in nine field offices: Buffalo, Casper, Cody, Kemmerer, Lander, Pinedale, Rawlins, Rock Springs, and Worland. Approximately 306 miles lie in Natrona County as lateral and trunk lines. The WPCI Project, as proposed by the State of Wyoming, would designate a statewide pipeline corridor network dedicated to pipelines and facilities associated with carbon capture, utilization, and storage (CCUS), and of pipelines and facilities associated with enhanced oil recovery (EOR). The CO₂ will be injected into existing, often "played-out" oil fields, thereby increasing oil production beyond conventional recovery methods with little additional surface disturbance. The project would not authorize any new pipelines or construction but would amend several BLM resource management plans (RMPs) across the state (Map 6 in [Appendix A](#)).

Renewable Energy Resources:

Wind

Natrona County encourages development of wind energy in acceptable areas, consistent with the National Energy policy of 2001 and the Energy Policy Act of 2005. There are currently several privately-owned wind turbines east of Evansville (Casper Wind Farm (Chevron)).

Solar

According to the Department of Energy, an area must receive an average of 520-watt hours/feet sq./day to be a viable source of solar energy¹⁶. The majority of Natrona County falls slightly short of this threshold. However, if solar energy development technology improves, there is BLM land available for leasing in the Casper Field Office (FO). Solar energy development is not allowed anywhere in the Lander FO planning area.

Hydroelectric

The Alcova and Pathfinder dams and reservoirs, both located on the North Platte River, are managed by the BOR. Refer to Chapter 4-Dams/Reservoirs section for more details.

Resource Management Objectives

1. Natrona County supports future mineral exploration, extraction and development that are conducted in an environmentally responsible manner (taking into consideration land, air, and water quality and quantity, as well as other resource values) and utilizing public involvement.
2. Natrona County supports the continued development of oil and gas on federal and state lands within county, federal, and state jurisdiction in keeping with the local and regional custom and culture and to ensure local economic diversity and stability.
3. Natrona County encourages new opportunities for the development of energy industries and the adoption of new technologies for existing energy industries, in order to balance responsible renewable and non-renewable energy development while supporting traditional energy developments.

Priorities

1. Natrona County encourages development of wind energy in acceptable areas, consistent with the National Energy Policy of 2001 and the Energy Policy Act of 2005.
2. Natrona County encourages industry companies to conduct science-based research applicable to mineral and mining industry expansion and new development.
3. Federal and state land managers shall provide consideration to the needs of public and private enterprises relative to gravel, rock for stabilization projects and other material resources. New gravel pit excavation possibilities shall be available on federal and state lands dispersed throughout the county, as well as opportunities for year-round gravel crushing and screening operations, in areas where the materials are needed and where it is economically feasible to extract them.
4. Federal and state agencies shall consider the potential economic impact of any proposed land

¹⁶ <https://www.energy.gov>

management changes or natural resource related to the minerals industry, and on the residents of the county, through in-depth economic impact descriptions in planning documents.

5. Federal lands shown to have reasonable mineral potential shall be open to oil and gas leasing with stipulations and conditions that will protect the lands against undue and unnecessary degradation to other significant resource values. This shall include reasonable and effective mitigation and reclamation measures and bonding for such where necessary.
6. Mineral development proposals shall not be approved without complete and proper scientific analysis of the development in compliance of federal environmental laws, regulations and guidelines. The analysis must quantify and disclose all reasonable and foreseeable adverse impacts, offer possible mitigations both on-site and off-site, of the development to all other existing multiple use activities including but not limited to livestock grazing, recreation opportunities, timber harvest, outfitting, hunting, fishing, and to the County's national, economic, socio-economic, and cultural resources.
7. The ability of private mineral owners to access, extract and transport their mineral resource shall not be limited or infringed upon by federal land managers, including in areas determined set aside for no mineral leasing on federal lands.
8. An accurate analysis of full-field development scenarios needs be disclosed at the earliest feasible stage in the planning process.
9. Impacts from the pace of mineral development cumulative impact from all mineral developments in the area, and the impact from a sharp decline in development levels will be fully considered in federal land management decisions involving mineral development.
10. Federal and state agencies shall analyze and consider all fiscal and economic impacts to the minerals industry, the County and other local governments, and to the residents of the County from any proposed land management changes or natural-resource related plans.
11. Planning shall consider up-to-date mineral potential reports.
12. Mitigation plans must include monitoring and incorporation of county and other local governmental roles in the monitoring program and it must be a condition of approving mineral proposals.
13. Each mineral company operator shall designate a contact person to handle concerns of Natrona County, livestock permittees and other stakeholders, and share that contact information with the County and its representatives.
14. Natrona County opposes the waste of fluid and gaseous minerals, and recommends such waste be managed to the least negative impact possible.
15. Federal land managers shall aggressively inspect and enforce operating requirements for oil and gas operations since this is critical to the protection of the environment, public health and safety, proper accounting of production, and to ensure oil and gas resources are developed in a manner that maximizes recovery while minimizing waste.
16. Wastewater disposal pits, wastewater disposal reinjection wells, and other mineral industry infrastructure shall be located within the industrialized areas of federal lands and away from

fresh water sources.

17. Transportation planning for industrial projects shall occur at the project level rather than at the individual well pad level.
18. Federal land managers shall require the use of environmental best management practices, lease stipulations and other restrictions for oil and gas operations, energy related activities, and other industrial developments, including, but not limited to:
 - a. Interim reclamation of well locations and access roads soon after the well is put into production;
 - b. Painting of all new facilities a color that best allows the facility to blend with the background;
 - c. Design and construction of all new roads to county standards, “no higher than necessary” to accommodate their intended use unless a higher standard is appropriate to control dust and soil erosion; and
 - d. Final reclamation re-contouring of all disturbed areas, including access roads, to the original contour or a contour that blends with the surrounding topography.
19. Other environmental BMPs, lease stipulations or restrictions shall be on a case-by-case basis, depending on their effectiveness, the balancing of increased operating costs vs. the benefit to the public and resource values; the availability of less restrictive mitigation alternatives that accomplish the same objective; and other site-specific factors. Examples of typical, case-by-case BMPs, lease stipulations or restrictions include, but are not limited to, the following:
 - a. Seasonal drilling restrictions;
 - b. Avoidance or prohibitions on surface disturbance of sensitive areas (near homes, visual areas, developed recreation sites, migration corridors, grouse leks, rare plant areas, wetlands, crucial winter range, etc.);
 - c. Paced development and zone development;
 - d. Cluster of new infrastructures to minimize footprint;
 - e. Installing raptor perch avoidance;
 - f. Burying of distribution power lines and/or flow lines in or adjacent to access roads;
 - g. Centralizing production facilities;
 - h. Installing submersible pumps;
 - i. Directional/horizontal drilling;
 - j. Drilling multiple wells from a single pad/clustered development;
 - k. Using noise reduction techniques and designs to reduce noise from compressors;
 - l. Monitoring wildlife;
 - m. Avoidance placement of production facilities on hilltops and ridgelines;
 - n. Screening facilities from view or siting facilities to reduce visibility;

- o. Use of remote monitoring on wells;
 - p. Minimizing the foot print of development in overall energy infrastructure;
 - q. Bioremediation of oil field wastes and spills; and
 - r. Using common utility or right-of-way corridors.
- 20. The use of best available technologies will be required in energy development projects to reduce all pollution impacts during all stages of development.
- 21. The analysis, monitoring of air and water, and identification of health risks associated with energy development will be required, with the costs to be paid for by the industry.
- 22. Except for congressional withdrawals, federal lands shall remain open and available for mineral exploration and development unless withdrawal or other administrative actions are clearly justified in the national interest and withdrawal procedures are followed.
- 23. Certain areas of federal land may be withdrawn from mineral leasing in an administrative process, so long as such designation is for the term of a resource planning document, and not a permanent designation.
- 24. Natrona County encourages development of wind and solar energy in acceptable areas, consistent with the National Energy Policy of 2001 and the Energy Policy Act of 2005.
- 25. In order to mitigate impacts from energy development on federal and state lands in Natrona County, it is the county's policy that:
 - a. Annual operator meetings be held with permittees;
 - b. Compensation for cattle lost to oil and gas activities, including deaths from pits and animals hit on the roads be provided;
 - c. A fund be established to develop range improvement projects away from industrial activity, or in the alternate, a commitment to fund these projects as development is proposed;
 - d. Cattle and sheep movement corridors shall not be impacted to the point livestock can't get through the area;
 - e. Pipeline projects shall be coordinated to lessen the impact on cattle's natural movement through the field, including leaving gaps in the trenches to allow cows to move, or completion of pipeline work while cattle are not allotments.
 - f. Standardized fencing of pits shall be required to prevent wildlife and livestock from drinking contaminated water. This shall include wooden H braces, a fence support to keep hoses from knocking down fence, and closure of gates.
 - g. Maintenance of cattle guards on all roads shall be required to keep cattle from getting onto highways, drill pads or other allotments.
 - h. Speed limits shall be enforced to lessen the chance of animals getting hit on roads.
 - i. A provision that when/if level of industry activity dominates the field to a point that it is uneconomical for permittees to continue grazing allotments, operator mitigation may

include replacement of feed, provide for spring grazing pasture, hay, etc., for the duration of the impact period.

26. Natrona County encourages that, when appropriate and based on site specific evaluation, environmental disturbances be located in close proximity in order to reduce negative impacts to less-disturbed areas.
27. State and federal land management agencies shall:
 - a. Have efficient, streamlined permitting processes to approve plans of development in a timely manner;
 - b. Base wildlife buffers, occupancy stipulations, and restrictions on peer reviewed and credible scientific data and provide all data to the affected private property owners or local agencies upon request;
 - c. Refer to the Cultural Resource Compliance When Managing Minerals on Split Estate (Gary Stumpf) for guidance on managing cultural resources on split estate lands; and
 - d. Not limit or infringe, without adequate compensation, upon the ability of private mineral owners to access, extract and transport their mineral resource, including in areas determined as a set aside for no mineral leasing on federal lands, if that determination takes place after leasing has already occurred.
28. Locate energy transmission infrastructure, such as oil and gas pipelines and high voltage electric transmission lines in existing utility corridors and on state and federal lands, where feasible.
29. Use streamlined permitting processes to enable the placement of energy transmission infrastructure on federal and state lands rather than impacting private property owners.
30. Encourage and assist carbon capture and sequestration projects and development of pipelines to transfer carbon dioxide to markets.
31. Encourage the delineation and management of oil and gas fields, and associated residual oil zones, that are amenable to tertiary recovery efforts.
32. Encourage the delineation of carbon dioxide, water and oil and gas pipeline infrastructure to facilitate tertiary recovery efforts.
33. Obtain full bonding to ensure removal and reclamation of abandoned renewable and non-renewable energy projects.
34. Natrona County shall meet at least annually with state and federal land management agencies, including but not limited to: BLM, USFS, and the Wyoming State Planning Office regarding potential and proposed energy development and infrastructure projects that may impact Natrona County citizens, industries, and economy. Natrona County asks to be a cooperating agency in corridor and field developments and preplanning implementation for energy development and infrastructure projects.
35. Natrona County authorities, affected stakeholders, including private property owners, shall receive ample notice and mapping for potential eminent domain, energy development, and infrastructure projects that may affect citizens and industries. Natrona County expects that

impacted individuals or entities receive full compensation for eminent domain acquisitions pursuant to state and federal law.

Soils

Resource Assessment

Soil conservation is crucial to sustaining a viable agricultural economy, wildlife populations, and high-quality water and air resources. The Natural Resources Conservation Service (NRCS) has mapped and conducted research to support detailed soil surveys for Natrona County, which is available online at the Web Soil Survey website¹⁷. Soil surveys are the base information source used for evaluating land use development and disturbance activities. The soil survey identifies soil properties that are used in making various land use or treatment decisions and identifies soil limitations on various land uses. Great differences in soil properties can occur within short distances. Soils in Natrona County are diverse and highly variable, reflecting differences in parent material, position on the landscape, elevation, aspect, and climatic variables such as precipitation and temperature. The plant communities supported by such a wide diversity of soils are equally diverse, ranging from sparsely vegetated desert saltbush and sagebrush-bunchgrass communities to forests and alpine meadows. The NRCS soil database allows soil data to be applied for use and suitability interpretations. This database is adequate for most soil interpretations.

Resource Management Objectives

1. The protection of soils from wind and water erosion and the maintenance of productivity and fertility are critical to sustaining a viable agricultural economy, sustain wildlife populations, and high quality of air and water.
2. Natrona County recognizes the innate importance of soils, soil conservation, and soil protection in land use management and multiple use mandates in order to sustain the traditional and future land uses within the county.

Priorities

1. The protection of soils from wind and water erosion and the maintenance of productivity and fertility are critical to sustaining a viable agricultural economy, sustain wildlife populations, and high quality of air and water.
2. Soil-related activities will be based on all available survey data until a final survey is published. Any deviation from this material and soil data development must be coordinated with the USDA NRCS and Natrona County Conservation District.
3. Natrona County supports the prioritization of soil survey mapping and the uniform use of ecological site descriptions developed by the NRCS as the foundation for the inventory, evaluation, settling of monitoring objectives, and management of rangelands and forestlands because ecological sites are the basic units of soils and associated plant communities and they provide the basis for setting vegetation management objectives, monitoring and extrapolations of management impacts to other areas.
4. As soil is essential to the economy and environment, all new development proposals or changes

¹⁷ <http://websoilsurvey.sc.egov.usda.gov/>

in land use shall limit erosion.

5. Natrona County supports Natrona County Conservation District in their efforts to:
 - a. Reduce soil erosion and associated hazards;
 - b. Cooperate, consult, and coordinate with local, state, and federal agencies in studies, planning, and implementation activities related to soil resources; and
 - c. Provide natural resource education to urban and rural communities in Natrona County.
6. State and federal land management agencies shall consult, coordinate, and collaborate with local agencies, including Natrona County Conservation District, and any affected stakeholders regarding projects potentially affecting soil resources in Natrona County.
7. Natrona County supports the prioritization of soil survey mapping and the use of ecological site descriptions, or proxy, developed by the NRCS as a foundation for the inventory, evaluation, monitoring, and management of federal and state lands.

Chapter 4: Water Resources

Irrigation and Related Infrastructure

Resource Assessment

The majority of Natrona County's irrigated farmlands lie within approximately 20 miles of Casper. They are adjacent to Casper Creek, South Fork of Casper Creek, the North Platte River, Poison Spider Creek, and Bates Creek. Other irrigated lands are found in the southwest part of the county, adjacent to the Sweetwater River and in the far northern part of the county, adjacent to Buffalo Creek. Refer to Map 7 in [Appendix A](#), which shows Natrona County's major waterbodies, irrigated lands, and associated infrastructure.

Alcova and Pathfinder Reservoirs, discussed in the next section, were intended to provide irrigation to support farming operations in the area. During the irrigation season, water is released from Pathfinder to be diverted at Alcova Dam for irrigation on the Kendrick Project (Bureau of Reclamation 2020b). The irrigation distribution system below Alcova Reservoir consists of the Casper Canal, 59 miles long; 190 miles of laterals and sublaterals; and 41 miles of drains. Principal structures include the headgates located on Alcova Reservoir about one mile west of the dam; six concrete-lined tunnels having a total length of 3.4 miles; several siphons, and highway and farm road bridges; and many measuring and control structures. The main canal has a capacity of 1,200 cubic feet per second (Bureau of Reclamation 2020a).

Resource Management Objectives

1. Proper management of federal and state land watersheds that supply the majority of the agricultural, domestic, and industrial water use in this water-short area is critical. Natrona County will maintain or improve the integrity of watersheds within the county and prioritize the continued exploration for and the use of water sources and aquifers, and associated water storage needs on federal and state land in an environmentally responsible manner.

Priorities

1. Natrona County will continue to support and advocate for augmentation of water storage and conveyance facilities on federal and state land. Local agricultural interests rely on the strict compliance with state water law and water storage agreements, which give priority to agriculture in delivery and use of water.
2. Natrona County supports water development and restoration projects that increase water quantities and quality for beneficial use within the county, while also considering the traditional custom, culture, ecology, and economy of the area.
3. Natrona County recognizes the importance of irrigation systems that make up a critical part of the water cycle within and supports the implementation of irrigation best management practices.
4. Require that agencies process permits on federal lands for the construction, maintenance or expansion of irrigation distribution systems to private lands in a reasonable timeframe. If a review will take longer than 30 days, the agency must notify the County with an explanation for the delay and the revised timeframe.

5. Natrona County recognizes and will protect the existence of all legal canals, laterals, or ditch right-of-ways.

Dams and Reservoirs

Resource Assessment

Reservoirs are typically utilized for surface water storage, flood control, hydroelectric power generation, recreation development, and range improvements. Pathfinder and Alcova Reservoirs, located along the North Platte River are the two largest reservoirs in Natrona County and provide hydroelectricity, irrigation water, and recreational opportunities to the community. Refer to Chapter 6 for a discussion of recreation associated with Pathfinder and Alcova Reservoirs.

The North Platte River passes through Seminoe and Kortez Dams (located in Carbon County) before flowing downstream to Pathfinder Reservoir where it joined by the Sweetwater River. The North Platte River then flows to Alcova Dam, approximately 10 miles downstream of Pathfinder Dam. The construction of Pathfinder Dam began in 1905 as part of the BOR's North Platte Project, which extends 111 miles along the North Platte River between Guernsey, Wyoming and Bridgeport, Nebraska. Pathfinder Reservoir has a storage capacity of 1,070,000 acre-feet.



Photo 5 The Kendrick Project (formerly the Casper-Alcova Project) conserves waters of the North Platte River (BOR)

The BOR's Kendrick Project utilizes water from the North Platte River for irrigation and electric power generation. The Alcova Dam and power plant and Seminoe Dam and power plant (located 37 miles upstream in Carbon County) are the major features of the Kendrick Project. Construction of Alcova Dam began in 1935 and was completed three years later. Irrigation was diverted into the Casper Canal starting in 1946, and Alcova power plant began operations in 1955. All carriage, distribution, and drainage works are operated by the Casper-Alcova Irrigation District (Bureau of Reclamation 2020a).

Resource Management Objectives

1. Natrona County acknowledges the importance of dams and reservoirs for water storage and flood control purposes, recreational attractions, fisheries, sources of irrigation, municipal, industrial, and livestock water, and hydroelectric power generation, and supports active management to maximize benefits while reducing negative effects such as sedimentation.

Priorities

1. Agency actions must analyze impacts on facilities such as dams, reservoirs, delivery systems, monitoring facilities, etc., located on or downstream from land covered by any water related proposal.
2. Natrona County supports additional water storage facilities on federal and state lands in the County that assure future growth protection of Wyoming's water rights pursuant to the Colorado River Compact.

3. Natrona County supports the prevention and management of reservoir sedimentation, and will promote best management practices that reduce sedimentation.
4. Natrona County asserts that the applicable owner of each water storage facility location be proactive in the maintenance and monitoring of that facility.
5. Natrona County supports agency actions that analyze impacts on facilities such as dams, reservoirs, delivery systems, monitoring facilities, etc. located on, or downstream from, land covered by any water-related proposal.
6. Maintain the primary use of all reservoirs within the county for the purpose for which they were originally intended.

Water Rights

Resource Assessment

Wyoming water law is based on the doctrine of prior appropriation, as are most western states. Users with earlier rights are entitled to water during periods of limited supply, over those with later rights. The Wyoming State Engineer's Office¹⁸ is the chief administrator of Wyoming waters and oversees appropriation, distribution, and application to beneficial uses of state water resources.

Resource Management Objectives

1. Natrona County will work with local, state and federal government to encourage and support state control of water rights and to maintain opportunities for future water right allocations.

Priorities

1. It is Natrona County's policy that the Wyoming Constitution and Wyoming statutes are the legal basis for all water use in the County and all planning efforts need to reflect this reality. Specifically, the County recognizes:
 - a. A water right is a right to use the water of the state, when such use has been acquired by the beneficial application of water under the laws of the state;
 - b. Beneficial use shall be the basis, the measure and limit of the right to use water at all times;
 - c. Water always being the property of the state, rights to its use shall attach to the land for irrigation, or to such other purposes or object for which acquired in accordance with the beneficial use made; and
 - d. Preferred water uses shall have preference rights in the following order:
 - i. Water for drinking purposes for both man and beast;
 - ii. Water for municipal purposes;
 - iii. 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

¹⁸ <https://sites.google.com/a/wyo.gov/seo/>

- iv. Industrial purposes.
- 2. All water rights desired by the federal government must be obtained through the state water appropriations system.
- 3. Movement toward nationalization of federal control of Wyoming's water resources or rights will be opposed.
- 4. Privately held water rights shall be protected from federal and/or state encroachment and/or coerced acquisition.

Water Quality

Resource Assessment

The use and enjoyment of a variety of natural resources is linked to water quality. As such, it is often a useful tool in assessing overall habitat conditions in the surrounding area. In addition, many beneficial uses of water resources are contingent on healthy watersheds, including drinking water, recreation, propagation of aquatic life, agricultural water supply, and industrial water supply.

Under the Clean Water Act, states are required to monitor water pollution and report to the U.S. Environmental Protection Agency (EPA) biannually. Waters that do not meet water quality standards (referred to as impaired waters) are placed on the State 303(d) list. The state identifies which pollutant is causing the impairment and also assigns a priority for developing a Total Maximum Daily Load (TMDL). A TMDL is the maximum amount of a given pollutant allowed to enter a waterbody, given that the waterbody still meets that pollutant's water quality standards. By developing a TMDL, pollution reduction targets can be determined. A 303(d) listed waterbody generally remains listed until the EPA approves the TMDL developed by the state.

Natrona County is comprised of the Powder, Big Horn, North Platte, and a very small part of Cheyenne River Basins. Of these, the Powder and North Platte River Basins each have impaired waterbodies within Natrona County. Currently, the following streams within Natrona County are listed on the State 303(d) list: South Fork Powder River (selenium), Willow Creek (selenium), Salt Creek (selenium and oil spills), Poison Spring Creek (selenium), Poison Spider Creek (selenium), Oregon Trail Drain (selenium), and Casper Creek (selenium). The source of excess selenium loading was determined to be irrigation return flows across the naturally selenium rich marine shales (Wyoming Department of Environmental Quality 2018).

The North Platte River and Middle Fork of the Powder River were previously listed on the State 303(d) list but were later removed and placed in Category 2. Placement in Category 2 indicates that at least one designated use is supported, while one or more other uses are either indeterminate or not assessed (Wyoming Department of Environmental Quality 2018). In addition, Rasmus Lee Lake, Goose Lake, Thirty Three Mile Reservoir, and Ilco Pond are all on the State 303(d) list, due to selenium (Wyoming Department of Environmental Quality 2018).

Wyoming DEQ ensures compliance with the Clean Water Act. Detailed, up-to-date water quality information is available in their biannual Integrated 305(b) and 303(d) Reports¹⁹. Map 8 in [Appendix A](#) depicts Natrona County's assessed waterbodies.

¹⁹ <http://deg.wyoming.gov/wqd/water-quality-assessment/resources/reports/>

Riparian Areas and Wetlands

Wetlands and riparian ecosystems are critical to maintaining water quality. Specifically, they help to maintain stream flows, provide shading to stream channels, and act as a buffer which reduces erosion and sediment inputs into the channel. It is unlikely that the selenium exceedances described above are related to any riparian or wetland degradation. Severe damage to riparian areas or wetlands would typically lead to waterbody impairments caused by sediment or temperature exceedances or habitat alterations.

Resource Management Objectives

1. Natrona County will maintain the ground and surface water quality within the County to prevent or mitigate potential harm to the health and safety of county residents, while balancing the needs and uses for economic growth and stability.

Priorities

1. It is Natrona County's policy that protection of the county's groundwater quality and quantity is an issue of utmost importance.
2. Baseline water quality sampling and cataloging of that data shall be required for all industrial water wells (including injection wells) drilled on federal or state lands. This information shall be shared with Natrona County.
3. Natrona County shall be officially notified, as an interested party, of all voluntary remediation of contaminated sites on federal and state lands in the county.
4. All oil and gas field development plans must provide for water quality monitoring. The Natrona County Board of County Commissioners and Natrona County Conservation District shall be directly involved in developing monitoring protocol for air quality and water quality. Development must be coordinated with the County and the findings provided to the County.
5. Agencies must analyze the effect of decisions on water quality, yields, and timing of those yields. Any action or lack of action, or permitted use that results in a significant or long-term decrease in water quality or quantity will be opposed.
6. The quality and quantity of water shall not be reduced below current levels.
7. Natrona County will support projects that improve water quality and increases quantity and dependability of water supply.
8. Management and resource-use decisions by federal land management and regulatory agencies concerning the vegetative resources within the County shall reflect serious consideration of the proper optimization of the yield of water within watersheds of the County.
9. Proper management of federal and state land watersheds that supply the majority of the agricultural, domestic, and industrial water use in this water-short area is critical.
10. An adequate supply of clean water is essential to the health of county residents and the continued growth of its economy.
11. Ensure any recovery plan, habitat management plan, critical habitat designation or any other plan proposing an in-stream flow requirement adequately considers local existing and anticipated future water uses, local custom and culture, local economic and individual needs

and is consistent with Wyoming water laws.

12. Natrona County supports the wise management and use of the County's surface and groundwater resources to sustain local use, economic development, and maintain or improve stream, floodplain, wetland, and groundwater function.
13. Natrona County supports locally-led watershed-based planning with federal and state participants, and encourages the acquisition of grants or funding for watershed and water quality improvement projects on public and private lands that benefit overall watershed integrity or water quality.
14. Natrona County recommends, where practical, environmentally sound, and economically viable, the recycling of water, use of appropriately treated reclaimed water, and use of alternative water sources to reduce the use of potable water for industrial uses, agricultural uses, maintenance of roads and dust abatement, and for energy production.
15. It is Natrona County's policy that protection of the County's groundwater and surface water quality is of utmost importance. Active management from federal or state agencies shall occur to reduce impacts to watersheds and groundwater from wildfires.
16. Industrial or energy development proposed actions on federal or state lands that impact ground or surface water must provide for water quality monitoring, and implement requirements to reduce impacts to downstream or adjacent water sources federal and state agencies shall involve the Conservation District and the County in developing and setting water quality monitoring protocol.

Wild and Scenic Rivers

Resource Assessment

No federal lands within the Casper RMP planning area were determined to meet Wild and Scenic River eligibility criteria and suitability factors, as identified in the Wild and Scenic Rivers Act of 1968, as amended (Jonas Consulting 2002a). While the Lander RMP planning area contains two land parcel units determined to meet eligibility criteria and suitability factors, neither are located in Natrona County (Jonas Consulting 2002b). As such, Natrona County contains no waterways suitable for designation under the Wild and Scenic Rivers Act.

Resource Management Objectives

1. Natrona County balances local uses, scenic and recreational values, and economic stability and requests involvement in the consideration of areas with special designations.

Priorities

1. No waterways in Natrona County are suitable for designation pursuant to the Wild and Scenic Rivers Act and Natrona County opposes any such designations in the county.
2. Federal land managers will coordinate with and involve the County on any determinations, suitability screenings or discussions involving Wild and Scenic Rivers.

Chapter 5: Wildlife and Fisheries

Fisheries

Resource Assessment

Natrona County is home to the North Platte River, which has 76.3 miles of classified blue-ribbon trout streams²⁰. The North Platte River is known for its abundant biodiversity, broad canyons, sloping valleys, consistent temperatures, and being an overall productive fishery. Additionally, Natrona County supports four red ribbon trout streams²¹ (17.8 miles), and 16 yellow ribbon streams²² (184.7 miles) (Wyoming Game and Fish Department 2019a) (Map 9 in [Appendix A](#)). Classified trout streams attract anglers and commercial fishing guides not only to the local waterbodies but to the surrounding communities and towns. This increased visitation draws valuable revenue to the county and its residents. Statewide, gross license revenue has increased more than 22 percent in the last decade (USFWS 2019b). WGFD manages four walk-in fishing areas (one in the Powder River drainage and three in the North Platte River drainage (Wyoming Game and Fish Department 2019b). Walk-in fishing areas consist of private land of which land owners have given permission for the public to access water ways for the purpose of fishing.

Resource Management Objectives

1. As an important component to the tourism industry and local recreational enjoyment, maintain adequate stream flows and water quality to sustain fisheries.

Priorities

1. Natrona County supports the sensible management and use of the County's fishable streams and waterbodies to maintain or improve fish habitat function.
2. Natrona County encourages the preservation of blue and red designated streams and their inherent characteristics and qualities to maintain fisheries for public enjoyment and economic benefits.

Threatened, Endangered, and Sensitive Species

Resource Assessment

Natrona County does not support habitat for any federally listed animal species (USFWS 2020). However, if any proposed actions that may lead to consumptive use of water or have the potential to affect water quality in the Platte River system, there may be impacts to threatened and endangered species inhabiting the downstream reaches of this river system (USFWS 2019a). Before such projects are approved, the USFWS requires that effects to the following federally endangered species be considered: least tern (*Sterna antillarum*), piping plover (*Charadrius melodus*), whooping crane (*Grus americana*), and pallid sturgeon (*Scaphirhynchus*).

The Medicine Bow-Routt National Forest published an updated sensitive animal list on December 18, 2018. Responsibilities of the Forest and management guidelines for these species can be found in the FSM 2600, Chapter 2670 (USDA 2018). Additionally, the 2003 revised Land and Resource Management Plan identifies 10 Management Indicator Species, and species of local concern. Management Indicator

²⁰ Blue ribbon streams contain more than 600 pounds of trout per stream mile

²¹ Red ribbon streams contain 300–599 pounds of trout per stream mile

²² Yellow ribbon streams contain 50–299 pounds of trout per stream mile

species would be considered during management decisions; species of local concern would be considered with less rigor.

The most recent (2010) BLM sensitive species list²³ includes 42 wildlife species which require management considerations by the Casper and Lander Field Offices within Natrona County. A complete discussion of BLM responsibilities relating to special status species can be found in the BLM Manual 6840 (BLM 2008).

The WGFD published an updated State Wildlife Action Plan²⁴ in 2017. This plan identifies threats and conservation strategies for 229 species (Wyoming Game and Fish Department 2017). These conservation strategies are meant to maintain the health and diversity of wildlife within the state, as well as reducing the need for future federal listings.

Executive Order 2019-3²⁵—Greater Sage-grouse Core Area Protection—provides management guidelines for greater sage-grouse throughout Wyoming and Natrona County, and will be consulted when making land management decisions. Specific to local (county) governments the Executive Order (2019) states:

"Counties are political subdivisions of the State and are statutorily granted enumerated powers to be exercised to promote the general welfare of the public. For example, Wyoming statutes § 18-s-201(a) grants counties the authority to regulate and restrict land use and development in the unincorporated area of the county through zoning and comprehensive planning to limit impact to wildlife, such as Greater sage-grouse.

Per Wyoming Statute § 18-s-208(a) a county involved in federal land planning and management 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." Counties regularly advocate for county interests related to wildlife management, state species, recreation, private property rights, water rights or leasehold rights as pursuant to Wyoming Statute § 9-4-218(a)."

Greater sage-grouse habitat is shown in Map 10 in [Appendix A](#).

The Wyoming Natural Diversity Database (WYNDD) maintains a list of Species of Concern and Species of Potential Concern for the State of Wyoming. Wildlife species are considered for inclusion in the Species of Concern list due to: (1) the species rarity, (2) their inherent vulnerability, and (3) threats to the species. Species of Potential Concern includes species that appear to be currently secure, but because they have limited distribution as regional or state endemics they could become vulnerable following large-scale changes (Wyoming Natural Diversity Database 2020a). According to a 2020 data request, there are 22 WYNDD Species of Concern (not including BLM or USFS sensitive species) and 60 WYNDD Species of Potential Concern (not including BLM or USFS sensitive species) that are or are predicted to occur in or within 1 mile of Natrona County (Wyoming Natural Diversity Database 2020b). These lists are intended solely to be a reference for decision makers and the public, and not all species on this list

²³ <https://www.blm.gov/policy/im-wy-2010-027>

²⁴ <https://wgfd.wyo.gov/Habitat/Habitat-Plans/Wyoming-State-Wildlife-Action-Plan>

²⁵ https://wgfd.wyo.gov/WGFD/media/content/PDF/Habitat/Sage%20Grouse/Governor-Gordon-Greater-Sage-Grouse-EO-2019-3_August-21-2019_Final-Signed_2.pdf

require specific management considerations.

The Migratory Bird Treaty Act, as amended, made the taking, killing, or possessing of migratory birds unlawful. Executive Order 13186 of 2001 clarified the responsibilities of federal agencies regarding migratory bird conservation and directed federal agencies to evaluate the effects of Federal actions on migratory birds with an emphasis on species of concern. The Executive Order also directed federal agencies to develop a MOU with the USFWS regarding their role with respect to the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act.

In December 2008, the USFS entered into a MOU with USFWS that further clarified the responsibility of the USFS to protect migratory birds (USDA and USDI 2008). In the 2008 MOU, the USFS agreed to consider the most up-to-date USFWS list of Birds of Conservation Concern when developing or amending land management plans, and to evaluate the effects of agency actions on migratory birds within the NEPA process, focusing first on species of management concern along with their priority habitat and key risk factors. When negotiating the 2008 MOU both the USFWS and USFS focused on bird populations and effects at that level, not at the individual level.

Because raptors are protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act, and because they are particularly sensitive to disturbance during the breeding season, raptors are afforded further protection. The USFWS Wyoming Ecological Service Field Office recommends seasonal and spatial buffers for raptors, as well as recommended steps for addressing raptors in project planning²⁶. 2020 WYNDD data shows that there have been over 3,900 observations of 14 raptor species in Natrona County in the last decade.

USFS Region 2 incorporates 98 Conservation Assessments²⁷ into their management approaches. These assessments outline the life history, risks, and management opportunities for each species. Incorporating these management opportunities and considerations, the USFS has the goal of precluding risks, and in some cases, the downward trend in viability or federal listing of these species.

Resource Management Objectives

1. Natrona County will participate in all decisions and proposed actions which affect the county regarding threatened or endangered species, and supports the management of these species in a cooperative way that balances traditional uses with species management, with an emphasis on keeping species from being listed.

Priorities

1. Recovery planning efforts for sensitive, threatened, and endangered species shall evaluate, mitigate, and support Natrona County's custom and culture and economic viability.
2. Preparation of an environmental impact statement is necessary to consider impacts of proposed critical habitat designations, including a detailed analysis of local economic and social impacts of such designations on the local community. Where analysis indicates economic impacts or socio-economic impacts will be substantial, these areas shall be excluded from critical habitat designations.

²⁶ <https://www.fws.gov/wyominges/Species/Raptors.php>

²⁷ <https://www.fs.usda.gov/detail/r2/landmanagement/?cid=stelprdb5177128>

3. There shall be no introduction or reintroduction of threatened or endangered species into the County unless the County is involved in the effort as a cooperating agency and is satisfied with the analysis and mitigation measures.
4. Federal land planning efforts shall differentiate between special statuses species and those finally listed pursuant to the Endangered Species Act because special status species do not require the same level of protection.
5. Once population goals set out in recovery plans have been reached, species shall be delisted.
6. Natrona County support efforts to conduct plant surveys to validate existing data and add plant inventory data.
7. Recovery planning efforts for sensitive, threatened, and endangered plant species shall evaluate, mitigate, and support the County's custom and culture and economic viability.
8. Natrona County supports locally driven efforts to identify desired plant communities that do not compromise the custom and culture and the economy of the county.
9. Natrona County supports alternates to listing under the ESA, including conservation plans, initiatives or agreements to address threats to species and their habitats. Natrona County will be involved in the review of federal actions regarding ESA listings, delisting, and management plans.
10. Decisions to list any species shall be based on quantifiable monitoring data that proves the threat to the species supports listing. Natrona County opposes the listing of any species with insufficient, unsupported, or questionable data not meeting the minimum criteria for its listing or protection level.
11. Natrona County requires the avoidance of single-species management in all planning efforts and requires multiple uses of lands and resources as required by federal law.
12. Natrona County requests involvement in discussions and decisions regarding any proposed introduction of experimental populations.

Wildlife

Resource Assessment

Natrona County is home to several well-distributed big game wildlife species and their habitats. Table 5 below shows the available seasonal and crucial habitat of big game species. Map 11, Map 12, Map 13, Map 14, and Map 15 in [Appendix A](#) present big game habitat within the county. Seasonal habitat reflects land that may be used by the animal during any given part of the year, and generally reflects the estimated range of the species. Crucial habitat is measured by lands that have characteristics that are the determining factor in a population's ability to maintain itself at a certain level (Wyoming Game and Fish Department 2015). These population levels typically reflect WGFD population objectives. The acres of habitat are created by WGFD Standardized Definitions²⁸.

²⁸ <https://wgfd.wyo.gov/WGFD/media/content/PDF/Get%20Involved/ShirleyRange-Definitions.pdf>

Table 5 Acres of Big Game Habitat in Natrona County

Species and Habitat Type	Acres of Habitat	Percent of Natrona County (%)
Pronghorn Seasonal	494,820	14.4
Pronghorn Crucial	411,318	12.0
Pronghorn Year-long	2,372,920	69.0
Elk Seasonal	99,144	2.9
Elk Crucial	70,620	2.1
Elk Year-long	374,159	10.9
Mule Deer Seasonal	231,671	6.7
Mule Deer Crucial	377,154	11.0
Mule Deer Year-long	2,580,442	75.0
White-tailed Deer Seasonal	1,764	0.1
White-tailed Deer Year-long	19,847	0.6
Moose Crucial	3,308	0.1
Moose Year-long	12,836	0.4

Pronghorn, bighorn sheep, elk, mule deer, and white-tailed deer can be hunted legally in Natrona County. Wyoming's ungulate migration corridors and stopover areas are vital to maintaining big game populations. WGFD issued a Ungulate Migration Corridor Strategy²⁹ which outlines the goals and objectives for managing ungulate migration (Wyoming Game and Fish Department 2019c). The strategy ultimately guides the WGFD to: (1) update the Wyoming Game and Fish Commission's mitigation policy, (2) designate ungulate migration corridors, (3) conduct risk assessments, research, and proactive actions to conserve migration corridors, and (4) provide input on federal surface projects and planning efforts. While there are no currently available published migration corridor data, WGFD is expected to develop such in the next three to five years. This data will help better guide County Management decisions.

Resource Management Objectives

1. Natrona County supports integrated long-term wildlife management. The County believes any planning process needs to account for both consumptive and non-consumptive management strategies and tactics addressed in an environmentally responsible manner from the perspective of impacts on the human environment.

Priorities

1. Natrona County supports responsible wildlife habitat preservation, development, and management.
2. It is Natrona County's policy that federal and state land management agencies shall adopt mitigation measures that would effectively mitigate impact on Natrona County wildlife populations as a result of energy development and agricultural practices (i.e., the use of wildlife friendly fencing).
3. Federal and state land management agencies shall approve the implementation of the recommendations of the Wyoming Brucellosis Coordination Team that pertain to federal and state lands in order to reduce brucellosis in wildlife populations and to reduce the risk of transmitting the disease to cattle herds.

²⁹ https://wgfd.wyo.gov/WGFD/media/content/PDF/Habitat/Habitat%20Information/Ungulate-Migration-Corridor-Strategy_Final_012819.pdf

4. It is Natrona County's policy that land management agencies consider wildlife use in the context of healthy range standards.
5. Natrona County supports "Executive Order 13443 of August 16, 2007: Facilitation of Hunting Heritage and Wildlife Conservation" and the provisions requiring federal land management agencies to:
 - a. Evaluate the effect of agency actions on trends in hunting participation and, where appropriate to address declining trends, implement actions that expand and enhance opportunities for the public;
 - b. Consider the economic and recreational values of hunting in agency actions;
 - c. Manage wildlife habitats on federal and state lands in a manner that expands and enhances hunting opportunities, including through the use of hunting in wildlife management planning; and
 - d. Work collaboratively with state governments to manage and conserve game species and their habitats in a manner that respects private property right and state management authority over wildlife resources.
6. Management plans shall consider the overall health of all natural resources, not management for one individual species.
7. Federal or state agencies shall coordinate with Natrona County where federal and state resources are committed for wildlife introductions or reintroductions, for the development of management plans, migration corridors, population objectives, or other decisions that may affect the economic stability of Natrona County.
8. It is Natrona County's policy that federal and state land managers shall, as needed, conduct wildlife damage management, such as controlling small mammal populations, in order to protect ecosystem health, land and resource values, and public safety.

Predator Control

Resource Assessment

Predators can have a detrimental effect on livestock, agriculture, and wildlife. Predatory animals are defined in Wyoming Statute (W.S.) 23-1-101 as coyote, jackrabbit, porcupine, raccoon, red fox, skunk, or stray domestic cat. Predacious birds are defined in W.S. 23-1-101 as English sparrow and starling. Details of the predatory animal regulations for the State of Wyoming, including specifics on gray wolf, as well as responsibilities of each county can be seen in the full text of W.S. Title 23³⁰.

Resource Management Objectives

1. Wildlife management efforts shall manage predation to minimize impacts on sensitive species, increase hunting and fishing opportunities within appropriate carrying capacities, decrease game damage conflicts, and generally balance wildlife numbers with other factions representing the custom and culture and multiple use values of the county.

Priorities

³⁰ <https://wyoleg.gov/statutes/compress/title23.pdf>

1. In carrying out animal damage management activities, federal and state land managers shall:
 - a. Allow currently recognized methods of predator control, including aerial gunning of predators, as viable options for predator control on federal and state land in the county.
 - b. Rely upon the USDA Animal and Plant Health Inspection Service, WGFD and Natrona County Predator Management Board to provide the expertise and conduct predator control on federal and state lands, to determine livestock losses, and to determine methodology for animal damage management.
 - c. Coordinate with other federal and state agencies to improve effectiveness of control program activities conducted on federal and state lands.
 - d. Use an integrated approach to the prevention of animal damage and management of animal damage control programs.
 - e. Consider a full range of methods, including physical barriers, repellents, habitat manipulation, biological controls, silvicultural methods (for example, fertilizing to improve soil fertility), pesticides, and hunting and trapping. Use licensed hunting, fishing, and trapping as a control technique where practicable.
2. There shall be no imposition of land use restrictions on federal and state lands for the purpose of protecting species classified as predators under state statute.
3. Natrona County supports proactive efforts to reduce and control predator populations; and more especially, prevent the spread of predator species such as grizzly bears and wolves from migrating or re-locating to grazing allotments. Natrona County expects predator control strategies to balance with the best science available, economics and the pragmatic logistics of the livestock industry.
4. Natrona County supports control of predators and diseases that negatively impact sensitive species/species of concern.
5. Support efforts by the Wyoming Department of Agriculture, the WGFD, and other wildlife management agencies to reduce predation on domestic livestock and wildlife.
6. Recognize the right of private property owners to protect their property and livestock from predation through state and federally approved control methods.

Wild Horses and Burros

Resource Assessment

There are a mere 300 designated acres (0.03 percent) of the 116,712-acre Green Mountain wild horse Herd Management Area in the very south west corner of Natrona County (BLM 2020b). The Herd Management Area is bounded by Highway 287 on the eastern edge and is on BLM land. There are no other Herd Management Areas in Natrona County. Wild horses are managed by the BLM.

Resource Management Objectives

1. Natrona County supports wild horse management for viable healthy herds within currently established Herd Management Areas that will not adversely impact the rangeland resources, wildlife habitat and resources, soil resources or any other resources.

Priorities

1. Designation of any new wild horse management areas in Natrona County is inappropriate and federal land managers shall provide for the removal of wild horses from federal lands in the county.
2. Natrona County opposes the introduction or reintroduction of wild horses on federal and state lands within the county.
3. Natrona County supports herd management plans that include provisions for periodic gathers of all horses in the herd management area to limit populations to planned levels, to remove trespass horses, to test for equine diseases as prescribed by the Wyoming state veterinarian and to prevent habitat degradation.
4. Natrona County supports the idea that forage adjustments to livestock grazing also make proportionate adjustments for wild horses, when wild horses are a causal factor in the area not meeting the Wyoming Healthy Rangeland Standards.
5. Natrona County opposes any proposed enlargement or expansion of current HMA boundary or the establishment of any new HMAs or Herd Areas.

Aquatic Invasive Species

Resource Assessment

There are three aquatic species known to exist in the county's waterways. Table 6 below shows the species, known occurrences, and threats that may ensue as a result of their presence. There are State regulations³¹ in place so that the spread of aquatic invasive species and the effect to native wildlife, municipal water supplies, recreation, agriculture, and other commercial activities is minimized throughout Wyoming and neighboring states.

Table 6 Aquatic Invasive Species Presence in Natrona County

Species	WGFD Threat Rank ³²	Threats	Waterway(s) in Natrona County
Zebra and Quagga Mussel	1	Outcompete native mussels, remove nutrients from water, clog pipes and waterways, damage boats	None known
New Zealand mudsnail	2	Outcompete native species, alter water chemistry	North Platte River, just downstream of Pathfinder Reservoir
Asian carp	3	Outcompete and reduce forage for native fish, transmit disease	None known
Rusty crayfish	4	Outcompete native crustaceans, reduce plant diversity and abundance	None known

³¹ <https://wgfd.wyo.gov/Fishing-and-Boating/Aquatic-Invasive-Species-Prevention/AIS-Boating-Information>

³² <https://wgfd.wyo.gov/Fishing-and-Boating/Aquatic-Invasive-Species-Prevention/Threats>

Species	WGFD Threat Rank ³²	Threats	Waterway(s) in Natrona County
Brook stickleback	Invasive Species of Concern	Prey on native and non-native fish eggs which may negatively impact fish populations and reduced fishing opportunities	Springsteen Draw, Cooper Draw, Sand Draw, Wallace Creek, and North Platte River.
Asian clam	Invasive Species of Concern	Clog pipes, including power generation and water supply facilities	None known
Snakehead	Invasive Species of Concern	Predator of native fish, insects, plants, crustaceans, reptiles, small birds, and mammals; able to adapt to many habitats and can live up to four days out of water	None known
Whirling disease	Invasive Species of Concern	Fish deformities and death, resulting in fishery losses and high economic costs	None known

Resource Management Objectives

1. Natrona County supports cooperative effort with federal, state and private land managers to enhance cooperative aquatic invasive species management efforts countywide, coordinated with, and primarily managed by the Natrona County Weed and Pest Control District.

Priorities

1. Natrona County supports aggressive prevention and management measures of aquatic invasive species such as zebra mussels and quagga mussels, and other forms of invasive species in all waters in Natrona County.

Chapter 6: Economics & Society

Recreation and Tourism

Resource Assessment

BLM recreation sites include Trappers Route, a world-class blue-ribbon fishing area, between Casper and Alcova in addition to several campgrounds, historic sites and larger areas with potential for recreation uses. These sites are scattered throughout the county. The major recreation areas at Alcova are administered by the county through an agreement with the BOR and BLM. The BLM field offices offer special recreation permits for outfitting, activities and events. BLM field offices collect permitting fees and spend this revenue on visitor services, maintenance, monitoring, and law enforcement in public lands. Natrona County Roads, Bridges and Parks Department and the US Fish & Wildlife Service are currently engaged in recreation management agreements with the BOR in Natrona County that covers almost all Reclamation's lands.

The county also maintains snowmobile and cross-country skiing areas on Casper Mountain with a Biathlon course under construction. Other, perhaps more traditional recreation enjoyed within the county include hunting & fishing, rock hunting, skiing, horseback riding, hiking, camping, mountain biking, and enjoying the abundant wildlife of the area. Natrona County has many outdoor recreation opportunities, which include:

- Bear Trap Meadow
- Rotary Park
- Gray Reef Reservoir
- Alcova Reservoir
- Pathfinder Reservoir
- Ponderosa Park
- Independence Rock
- Edness Kimball Wilkins State Park



Photo 6 Alcova Dam and Reservoir, Natrona County, WY

Resource Management Objectives

1. Federal and state land management shall support recreation and tourism and associated businesses in Natrona County, including the broad range of activities included, from off-road vehicle use to primitive outdoor adventures.

Priorities

1. Federal and state land outdoor recreational access shall not discriminate in favor of one particular mode of recreation to the exclusion of others.
2. Existing motorized public access to traditional outdoor recreational designations in the county shall be continued, via both snow machine and OHV use.
3. Traditional levels of group camping, group day use and all other forms of outdoor recreation,

motorized and non-motorized, shall be continued.

4. The permitting process for commercial recreational permits on federal lands in the county shall be streamlined and expedited.
5. Permitting of commercial enterprises on federal lands that reflect the custom and culture of the county in terms of recreation and outdoor lifestyle/uses shall be encouraged.
6. Motorized, human, and animal-powered outdoor recreation shall be integrated into a fair and balanced allocation of resources within historical and cultural framework of multiple-uses in rural Natrona County, and outdoor recreation shall be supported as part of a balanced plan of local economic support and growth.
7. Potential development shall include family-oriented activities and development that are accessible to the general public and not limited to special interest groups.
8. Recreational facility development that supports and cultivates maintenance partnerships with other entities, agencies and special interest groups shall be encouraged.
9. Outfitting and lodge operations are an important part of local history and tradition as well as contribute substantially to the local economies. Management decisions must be provided for the continuation or expansion of these activities and fully disclose the impacts to them.
10. Existing recreational residences and access to them, on federal lands in Natrona County may continue to be reauthorized depending on appropriate authorities.
11. Natrona County deems it incumbent upon federal and state offices and agencies to provide sufficient sanitary facilities on major highway corridors, at recreation areas, historic sites, and other attractions throughout the county.
12. Natrona County asserts federal and state land use and management plans are incomplete and materially deficient unless there is a thorough discussion and evaluation of the need for public sanitary facilities and material for road maintenance and repair to and in recreation areas. Each plan needs to incorporate standards and objectives, which sustain and support local recreation and tourism economic interests.
13. The County will coordinate with municipal, state and federal officials to encourage recreational opportunities, support development of recreational opportunities and provide promotion of recreational opportunities.
14. Natrona County asserts that federal and state recreational planning shall consider local community resources and long-term economic stability and diversity when determining facilities and services that support increased recreational use patterns.

Visual Resources

Resource Assessment

Natrona County has a combination of mountains and wide-open spaces, natural landscapes and skylines that are important to all citizens. Protection of viewsheds along highways enhances tourism, and encourages travelers to stop and enjoy the county's scenic vistas.

The USFS views landscape components of landform, vegetation types, and cultural modifications as the

basis for the definition of visual resources. Visual or scenic quality is described by the BLM as the relative worth of a landscape from a visual point of view. The character and quality of visual resources in Natrona County vary due to changes in landscape character and their patterns. Visual character describes the visual patterns of form, line, color, texture, dominance, scale, and diversity of elements in the landscape. Visual resources are managed in accordance with Visual Resource Management (VRM) class objectives. VRM classes define the “amount of noticeability” a project can have in a specified area. The BLM considers VRM objectives before authorizing land uses that may affect the visual character of the landscape.

- Class 1-most natural
- Class 2-want it to be not noticeable to the casual observer
- Class 3-can be noticeable
- Class 4-can be substantially noticeable.

The Casper and Lander Field Offices have calculated Natrona County to have 60,214 acres classified as Class I, 1,152,053 acres as Class II, 2,626,919 acres as Class III, and 2,679,011 acres as Class IV (Map 16).

The BLM may also set limits to protect viewsheds. A viewshed can be described as a “... landscape that can be seen under favorable atmospheric conditions from a viewpoint (key observation point) or along a transportation corridor.” Casper FO conducted a Visual Resource Inventory in 2004 (BLM 2007). The Lander Field Office is currently conducting a viewshed analysis to identify and evaluate potential impacts to trails, their associated historic landscapes, and their associated historic features. This strategy is necessary until the BLM determines that, based on the results of the completed viewshed analysis and archeological inventory, the existing land use plans (Resource Management Plans) have to be amended.

Resource Management Objectives

1. The County shall make every attempt to protect and improve the aesthetic quality of the environment, and prevent negative impacts on property values, the historic culture and custom of the county, and the community’s quality of life.

Priorities

1. Natrona County recognizes that different levels of scenic values on federal and state lands in the county require different levels of management. While management of an area with high scenic value might be focused on preserving the existing character of the landscape, management of an area with little scenic value might allow for major modifications to the landscape.
2. Federal land management agencies shall conduct assessments of visual impacts in determining how an area shall be managed, with the goal of protecting the visual resource while not burdening authorized land uses and maintaining economic stability.
3. Federal land management shall provide for a wide array of visual resource management objectives on federal lands in the county, including: preserving the existing character of the landscape with very low levels of change; retaining the existing character of the landscape; partial retention of the existing character of the landscape, with moderate levels of change; and major modifications of the existing character of the landscape, with high levels of change acceptable.

4. It is Natrona County's policy that in considering visual resource management objectives, federal land management agencies shall recognize the importance of communication sites to the security, health and welfare of Natrona County's citizens.
5. Preservation and protection of natural habitats shall be strongly encouraged. Protecting and preserving the native vegetation shall be a high priority.
6. Proposed actions for energy development, mining, and other infrastructure developments will be sited and managed to minimize visual appearance in order to maintain visual qualities of the area. Management of visual appearance will be balanced with the overall benefit of the proposed action and the needs of other resources, and will not be the sole determinant of a mitigation.
7. Cost benefit to local economic diversity and stability shall be considered and balanced in deciding how mining, or other similar disturbances can be implemented in more visually sensitive areas.

Law Enforcement

Resource Assessment

The US Constitution is the supreme law of the land (Article VI US Constitution), however, those laws that are not held by the federal government are retained by the states (Amendment X US Constitution). Under the authority of the Wyoming State Constitution, the sheriff has jurisdiction to protect the health, safety and general welfare of its citizenry.

Federal government retains authority over federal lands pursuant to Article 1 Section 8 and Article 4 Section 3 of the US Constitution. Aside from lands reserved for exclusive federal jurisdiction (i.e., Yellowstone National Park), the State of Wyoming retains its state jurisdiction on those federal lands.

Generally speaking, federal laws or regulations pertaining to federal land are restricted to those prohibitions which affect federal land or have a nexus. Violations or crimes affecting people or private property when there is no federal nexus are not prohibited by federal law. That authority to enforce those crimes generally remains with the State.

The Federal Land and Policy Management Act (FLPMA) provides a means for federal land management agencies to work with local law enforcement authorities to assure law enforcement protections have no gaps. The pertinent language follows: "The Secretary may authorize Federal personnel or appropriate local officials to carry out his law enforcement responsibilities with respect to the public land and their resources."

The search and rescue program for Natrona County is conducted through the Natrona County Sheriff's Department. In addition, the Natrona County has a Homeland Security Coordinator on staff to assist with the coordination of local and state resources and liaison for federal resource needs.

Law enforcement communications equipment and radio towers, vital to law enforcement and search and rescue operations are often located on federal and state land. Communication facilities on federal and state land are important for public and law enforcement safety and welfare.

Resource Management Objectives

1. Natrona County supports cooperation between and among county, state and federal

authorities for uninterrupted communications, expedited emergency response, and unimpeded law enforcement protection.

Priorities

1. All federal law enforcement activities will be fully coordinated with the Natrona County Sheriff's Office.
2. Natrona County and the State of Wyoming have primary jurisdiction for law enforcement throughout Natrona County.
3. Natrona County will maximize the use of a cooperative law enforcement program, to improve protection of persons and their property when visiting federal and state lands, and to utilize the opportunity to cooperate with land management agencies in carrying out their specific responsibilities related to the land management.
4. Federal and state land management agencies will make available sites for the strategic location of communications towers to aid in law enforcement activities.
5. It is Natrona County's policy to provide protection to the public and their property through cooperation with other law enforcement agencies.
6. Search and rescue (SAR) efforts on federal and state lands will be closely coordinated between the local SAR organization, Natrona County Sheriff's Office and federal and state land managers and other agencies; be outlined through mutual aid and assistance agreements as much as possible; and be facilitated by access.

Economic Considerations

Resource Assessment

Recognizing that socioeconomic data changes on a yearly basis, [Appendix C](#) has been created to allow updated information to be appended as needed to this plan and to allow for the most up-to-date socioeconomic profile for the county. The following discussion captures the socioeconomic changes in the county over time, while [Appendix C](#) is intended to be the "snapshot" of the socioeconomics in that immediate time period. Both are relevant components in the socioeconomic profile of Natrona County.

Between 2000 and 2017, Natrona County experienced significant growth, increasing from 66,603 residents to 79,547 residents (+19 percent). This accurately reflects the state growth rate (+19 percent) and is higher than the national growth rate (+13 percent) during those years (HEA, 2019). The median age for the county in 2018 (37.9 years) was around 1 percent younger than the median age for Wyoming (38.5) and for the median age in the U.S. (38.2 years). In 2017 per capita income for Natrona County was \$68,632 in 2018 dollars. This level of income was 11 percent above the per capita income for Wyoming (\$61,584) and for the per capita income in the U.S (\$61,937). The county's 2018 unemployment rate (4.6 percent) was slightly higher than Wyoming's unemployment rate (4.2 percent) and lower than the U.S. unemployment rate (5.3 percent). There are 15 Natrona County residents per square mile and they travel an average of 16.8 minutes to work.³³

When making county-wide project decisions, disproportionate effects to one or more environmental justice populations could occur. These impacts could potentially be either adverse or beneficial, depending on the specific project setting and the specific actions being implemented. Executive Order

³³ <https://www.census.gov/quickfacts/fact/dashboard/natronacountywyoming/>

12898 directs federal agencies to identify and address the disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations, to the greatest extent practicable and permitted by law. The order also directs each agency to develop a strategy for implementing environmental justice. The order is also intended to promote nondiscrimination in federal programs that affect human health and the environment, as well as provide minority and low-income community's access to public information and public participation.³⁴ In 2017, the Tax Cuts and Jobs Act was passed that a change in the tax law expanding "Opportunity Zones", which essentially gives individuals and businesses preferential tax treatment for investing in communities going through economic distress.³⁵ There areas within Natrona County that qualify for this tax relief (see Map 17 in [Appendix A](#)).

Natrona County's character is defined by three primary economic influences: agriculture, recreation, and the mineral extraction industry. All three are heavily dependent on federal and state lands for viability. Public lands constitute over 55 percent of the area in Natrona County and approximately 70 percent of the subsurface mineral ownership. These land resources are extremely important to the overall economy and tax base. Agriculture is a specifically important part of the LUP because of its extensive amount of public land use. While the travel and tourism industry account for a relatively minor portion of the economic activity, the sector is growing and will likely have a further impact on Natrona County economics. Figure 4 below displays the trends of employment (number of full- and part-time jobs) of Natrona's defining industries that rely on federal and state land.

Natrona County's largest federal land management agency, the BLM, incorporates its Socioeconomics Strategic Plan (SSP) as a guide in land management decisions. As communities grow and diversify, they become increasingly involved in federal and state lands management. Communities of place (such as small settlements and growing towns) and communities of interest (such as ranchers, mining and oil/gas extraction workers, off-road vehicle user, and wilderness advocates) continue to play an important role in providing public perspectives and input for the BLM's staff and managers to consider in the decision-making process (BLM 2013b).

When compared to the nation as a whole, Natrona County is very specialized in agriculture and mining/oil and gas extraction. Natrona County has 2.5 times the national average of county residents is employed in agriculture and an astounding 21 times the national average is employed in mining (U.S. Department of Commerce 2019).

Oil/Gas/Mining

County revenue from property taxes are greatly impacted by the oil and gas industry. Over 9 percent of the county's property taxes came from the oil and gas industry in 2019. Oil and gas extraction/non-metal mining/petroleum and coal product manufacturing valuations totaled \$97.8 million.³⁶

As a major energy resource producer, the state of Wyoming is significantly affected by the fluctuations in the national energy market, and the historic cycles of boom and bust in the oil/gas/coal industries are familiar to Wyoming residents (see Table 3 and Figure 4).

Agriculture

³⁴ <https://www.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice>

³⁵ <https://www.cdfifund.gov/Pages/Opportunity-Zones.aspx>

³⁶ Wyoming Department of Revenue. 2010-2019. Annual Report.

Since the mid-1800s, the vast open rangelands of Wyoming have been pivotal for livestock production within the state. As irrigation techniques evolved, Wyoming's importance in meat and fiber for markets across the U.S. increased.

Currently, agriculture provides a consistent economic base for local economies including county revenues to provide public services. In 2017, there were 430 agricultural operations in Natrona County with an average size of 4,496 acres. That year the county ranked 13th out of 23 counties in Wyoming in terms of cattle and calves inventory and 10th out of 23 counties in terms of sheep and lambs inventory. It also ranked 10th in barley production, and 9th in wheat production. In 2019, irrigated land valuations totaled \$12.8 million, and non-irrigated agricultural land valuations totaled \$3.4 million.³⁷ The market value of agricultural products and livestock sold in the county were over \$82 million according to the 2017 Census of Agriculture.

In addition to jobs and revenue, agriculture provides important natural resource services such as open space. Open space offers landscapes, lifestyles, and wildlife habitat that can have immeasurable value to both residents and visitors. Open space is particularly important because it determines the character of the landscapes surrounding a community.

Recreation and Tourism

In 2017, visitors spent \$293 million while in Natrona County and supported 2,630 direct jobs. This represents 4.8 percent of total employment in the county. The tax revenue associated with the county's travel industry \$14.8 million going to state and local governments (Wyoming Office of Tourism 2018).

Most recreation and tourism opportunities occur on federal and state land but draw on county resources and infrastructure to provide support for that experience. Since public land is not taxed, the county relies on programs like the Payments in Lieu of Taxes (PILT) program to provide infrastructure, and public services.

³⁷ See above

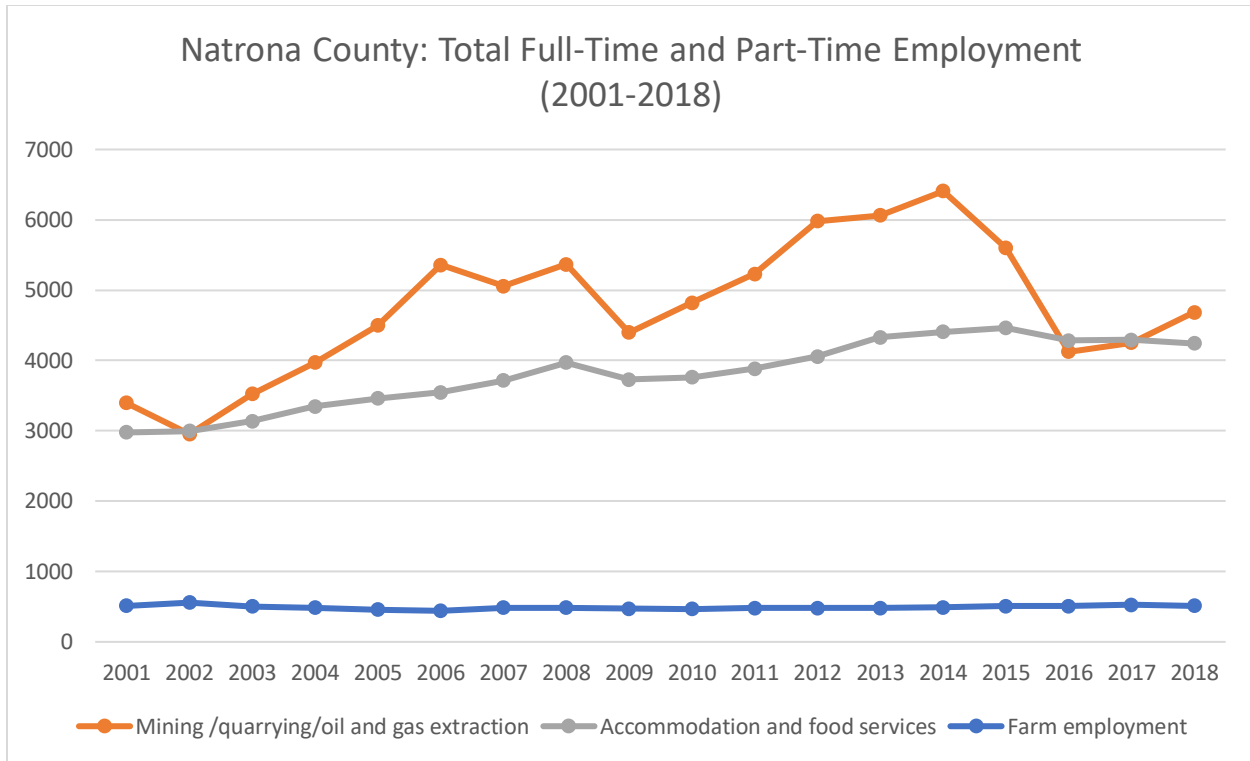


Figure 4 Natrona County Employment Trends (U.S. Department of Commerce 2019)

*Accommodation and food service are used as a proxy for the tourism and recreation industry.

Resource Management Objectives

1. Natrona County supports efforts to maintain or improve the overall economic base of the county through the judicious use and enjoyment of federal and state lands in the county.

Priorities

1. Natrona County will not support federal and state agencies on land management decisions when economics is not carefully considered in the decision. In such cases, Natrona County may be forced to appeal or seek other relief.
2. Natrona County recommends federal and state agencies entertain and evaluate opportunities for free trade and enterprise based on their merits and impacts to federal and state lands. While economics shall not always be the driving factor in decision making, it shall be part of the balance of interests considered.
3. Federal and state land management agencies must work in tandem with Natrona County to accurately provide socioeconomic impact analysis and provide socioeconomic impact mitigation recommendations to both the agencies overseeing the development as well as county government officials. Agencies overseeing the development shall make every reasonable attempt to implement the socioeconomic impact mitigation recommendations while working with local government officials.
4. Any development that will require the employment of more than 250 workers for a period of more than 90 days will incorporate mitigation to compensate for impacts on community services and housing.

5. Natrona County recommends that socio-economic monitoring and analysis be performed by experts familiar with the area's unique history, culture, economy and resources. It is Natrona County's policy that such monitoring and analysis be paid for by the industry creating the impact, and that this requirement be understood by all involved, early in the process.
6. Large employers may also be required to pay impact fees or provide supplemental services to reduce the impacts on county and other services.
7. It is Natrona County's policy that economic diversity and long-term stability are beneficial to the welfare of county residents.
8. Federal and state land management agencies shall notify Natrona County of any action or regulations that affect the economic base of the county; and Natrona County will review and comment on proposed actions significant to the economic base of the county.
9. When a negative impact of a proposed action is unavoidable, provisions shall be made to mitigate or compensate for those impacts.
10. It is Natrona County's policy that analysis of proposed major federal actions must include consideration of the following socioeconomic factors:
 - a. An evaluation of the social and economic conditions in the area of site influence;
 - b. The social and economic conditions shall be inventoried and evaluated as they currently exist, projected as they would exist, projected as they would exist in the future without the proposed industrial facility and as they will exist with the facility;
 - c. A study of the area economy including a description of methodology used. The study may include; but is not limited to, the following factors:
 - i. Employment projections by major sector availability
 - ii. Economic bases and economic trends of the local economy
 - iii. Family and per capita income
 - iv. Purchasing power of earnings within the area of site influence
 - v. Short- and long-term fluctuations in resource consumption and resource
 - vi. Employment dislocation and skill obsolescence
 - vii. Diversity of economy
 - viii. Estimates of basic versus non-basic employment
 - ix. Unemployment rates
 - x. Population, optionally including demographics and projections
 - xi. Housing, including quantitative evaluations of the number of units on the area and discussion of vacancy rates, costs, and rental rates of the units
 - xii. Transportation
 - xiii. Governmental facilities

- xiv. Sewer and water distribution and treatment facilities
 - xv. Solid waste collection and disposal services
 - xvi. Health and medical care facilities and services
 - xvii. Human services facilities
 - xviii. Recreational facilities
 - xix. Schools
 - xx. Mental health services, problems due to the transition from temporary, consumption employees to operating workforces
 - xxi. Fiscal analysis over the projection period for all local governments, including revenue structure, expenditure levels, mill levies, and services provided through public financing, and the problems in providing public services
 - xxii. Estimate of sales and use taxes and ad valorem taxes generated by the proposed activity
 - xxiii. Impact controls and mitigating measures proposed by the applicant to alleviate adverse social and economic impacts associated with construction and operation of the proposed industrial facility
11. Natrona County acknowledges the importance of promoting and seeking out sustainable economic industries and uses of federal and state lands that are not subject to cyclic fluctuations that can negatively affect a local community's custom, culture, and economic well-being and growth. This is supported by public concerns expressed in the survey found in [Appendix B](#).

Chapter 7: Agriculture

Livestock and Grazing

Resource Assessment

Livestock and grazing are of large economic and cultural significance in Natrona County. There are over 1.3 million acres of county land currently designated as range land that are assessed at over \$9.3 million (State of Wyoming Department of Revenue 2019). There are 288 active grazing allotments in the county totaling 3,069,925 acres (Map 18 in [Appendix A](#)). The average size of a grazing allotment is approximately 10,660 acres. Allotments are situated on various land ownerships (Table 7).

Table 7 Allotment Acres by Owner across Natrona County

Land Ownership	Allotment Acres
Bureau of Land Management	1,388,630
Private	1,295,940
State	357,543
U.S. Forest Service	14,703
U.S. Fish and Wildlife Service	5,838
Bureau of Reclamation	2,873
Open Water	2,232
County	1,968
Federal Aviation Administration	198
Total	3,069,925



Photo 7 Sheep crossing at North Platte River, Natrona County, 1903

In 2019, the Casper Field Office sent grazing bills based on a total of 158,403 BLM Animal Unit Month (AUM) in Natrona County (Roberts 2020). In 2019, the Lander Field Office reported 55,246 Active AUMs on 41 allotments that are entirely or partially within Natrona County (BLM 2020a).

The AUMs can change each year because there are some allotments that have a BLM Allotment Management Plan. These Allotment Management Plans give the grazing lessee the flexibility to be billed based on how many AUMs they actually used during the grazing year. The majority of the grazing leases are billed before the grazing season starts and reflect standard authorized BLM AUMs (Roberts 2020).

Resource Management Objectives

1. Livestock grazing on federal and state lands in the county shall continue, at levels consistent with custom, culture, and proper stewardship of the vegetative resource.
2. The continued viability of livestock operations and the livestock industry shall be supported on

the federal and state lands within the county by management of land and forage resources by the proper optimization of AUMs for livestock, in accordance with supportable science and the multiple use provisions of federal and state law.

Priorities

1. Natrona County will not support any action that causes the net loss of AUMs for livestock on any allotment, permit, or lease on lands owned or managed by the State of Wyoming or the federal government, which is not based on sound science or provides a net benefit to the authorized user and without full consultation between the permittee and administering agency. If a documented resource condition indicates a need for temporary reduction to improve condition, any reduction shall include a plan to reinstate AUMs when the resource condition has been addressed.
2. Federal land management agencies shall not permit the relinquishment, transfer or retirement of livestock grazing AUMs in favor of conservation, wildlife or other uses besides livestock grazing.
3. Federal land management agencies shall promote public respect for authorized private structures (corrals, fences, water development, etc.) on federal land in an effort to reduce vandalism, educate land users, and promote multiple-use concept.
4. Categorical exclusions for issuance or renewal of livestock grazing permits on federal lands shall be allowed for use if the new grazing permit/lease is consistent with the use specified on the previous permit/lease such that the same kind of livestock is grazed, the action does not exceed the active use previously authorized, and grazing does not occur more than 14 days earlier or later than as specified in the previous permit/lease. Issuance or renewals would occur if the grazing allotment(s) is meeting land health standards, or if the reason for not meeting standards is due to factors that do not include existing livestock grazing.
5. AUMs shall not be placed in a suspended use category unless there is a rational and scientific determination that the conditions of the rangeland allotment or district in question will not sustain the AUMs proposed to be placed in suspended use.
6. Any grazing AUMs that are placed in a suspended use category can be returned to active use when range conditions improve.
7. Natrona County supports and encourages joint cooperative monitoring programs based on the monitoring Memorandums of Understanding developed between the National Public Lands Council, USDA USFS and USDI BLM.
8. State-of-the-art monitoring data shall be the basis for grazing management decisions on BLM and USFS grazing allotments. Natrona County supports the review and incorporation of data collected by a permittee, or qualified team or third-party, for use in management decisions by federal land management agencies.
9. Proper Functioning Condition Assessment (PFC) will be used as intended by the National Riparian Team that developed PFC: i.e. proper monitoring protocol and objectives shall be developed and actions shall be implemented when PFC indicates the need.
10. Natrona County considers it a priority and supports the timely processing of all term grazing

permit renewals. The term permit renewal process must consider actions and practices proposed by the permittee for inclusion in the term permit. Natrona County supports the inclusion of flexible options regarding season of use, livestock kind, and other actions as they relate to fuels reduction and mitigating wildfire risk as part of term grazing permits.

11. Natrona County supports livestock grazing as a tool for the sound management of private, state and federal lands.
12. Natrona County opposes the reduction of domestic livestock grazing AUMs to provide additional forage for another species or strictly for conservation purposes. Natrona County supports, instead, the addition of active and adaptive management by the permittee to manage forage and vegetation to benefit the ecological site as a whole.
13. Livestock grazing management plans shall incorporate standards and objectives that maintain the economies, culture, health, safety and welfare of the county's agriculture interests.
14. Natrona County supports the development and use of new technologies and range management practices in federal grazing authorizations that are alternatives to permanent reductions in stocking rates.
15. Natrona County supports allowing adaptive grazing management practices and treatments, adaptive seasons of use, triggers and response, and cooperative monitoring, and the inclusion of those practices in term permits to allow flexible management practices to decrease fuel loads and fine fuels on the landscape, particularly in areas with heavy grass understory.
16. Natrona County supports the use of current site-specific soils and ecological site data, as developed by NRCS, to create appropriate objectives for livestock management.
17. When a grazing allotment is in non-use, it shall be available for other permittees to utilize. If there is a resource concern on that allotment, the grazing plan shall acknowledge the concern and utilize livestock as a tool to help in recovery if feasible. If the allotment is in non-use and the range is in good condition, the grazing plan must fully utilize all available grazing AUMs.
18. Grazing rest prescriptions related to wildfires or prescribed burns will be determined on a site-specific basis and post-fire monitoring. Post-fire grazing will not be limited when cooperatively collected post fire monitoring and subsequent evaluation produces relevant, accurate data that demonstrates that grazing will not unduly harm the long-term sustainability.
19. Encourage the improvement of or development of range improvements when the opportunity is presented. Range improvements are a vital component for range management that benefit both livestock and wildlife.

Noxious Weeds and Invasive Species

Resource Assessment

Plants and animals that are determined to be noxious in Wyoming are identified on the State Designated Weed and Pest List³⁸. The 2018 Wyoming State Noxious Weed and Pest List includes 30 plants and six animals or insects. Since 2016, four plant species have been added to the noxious weed list. Noxious species are plants and animals that are considered detrimental to the health or welfare of Wyoming due

³⁸ https://wyoweed.org/wp-content/uploads/2018/07/StateDesignatedList_2018.pdf

to their ability to:

- Aggressively invade native plant communities and/or agricultural crops;
- Be injurious or poisonous to livestock;
- Carry disease or parasites; and
- Negatively impact management of agricultural systems and/or natural ecosystems.

Wyoming Statute 11-5-105(a)(i) directs that “The district board shall: Implement and pursue an effective program for the control of designated weeds and pests.”

Additionally, each county may consider plants or animals as noxious within their county. These species are recognized by the Wyoming Board of Agriculture and the Wyoming Weed and Pest Council as “declared” weeds and pests within that county only. Wyoming Statute 11-5-102(a)(vii) defines declared weeds and pests as “[any plant, animal, or insect that] the Board and the Wyoming weed and pest council have found, either by virtue of its direct effect, or as a carrier of disease or parasites, to be detrimental to the general welfare of persons residing within a district”. The Natrona County Declared Weed and Pest List³⁹ was amended in April 2018 and contains 13 plants and one insect.

Some invasive species of priority to Natrona County are cheatgrass and bulbous bluegrass. Cheatgrass is an invasive annual grass that carries a multitude of impacts, ranging from increased wildfire risk, loss of forage for grazing, loss of wildlife and native plant habitat, and reducing soil health. Cheatgrass is common throughout all of Natrona County and state. Bulbous bluegrass is an invasive perennial grass that is found on shallow soils of disturbed sites. The species was once used in agricultural experiments for soil cover but is no longer recommended for seeding due to its ability to outcompete with native grasses.

Various tools can be implemented for combatting noxious weeds within Natrona County. These include, but are not limited to prescribed fire, biological control, cultural control, preventative measures, mechanical and physical control, and chemical control. Different control measures have varying degrees of success depending on the target weed or pest. It is recommended that land managers contact the local Conservation District and/or the local Wyoming Weed and Pest District or conduct literature reviews in order to understand the implications of various control techniques before implementation.

Resource Management Objectives

1. Federal and state land management agencies shall participate in cooperative efforts with federal, state, county and private land managers to enhance cooperative weed management efforts of Natrona County.

Priorities

1. Early detection and control of noxious or invasive weeds and insect infestations are essential to the public health, welfare and economy of the citizens of Natrona County.
2. Mosquito control on federal and state lands in the County shall be permitted in order to reduce the risk of transmission of West Nile Virus and other diseases that pose a threat to the health of humans, livestock and wildlife.

³⁹ https://wyoweed.org/wp-content/uploads/2018/07/DeclaredList_2018.pdf

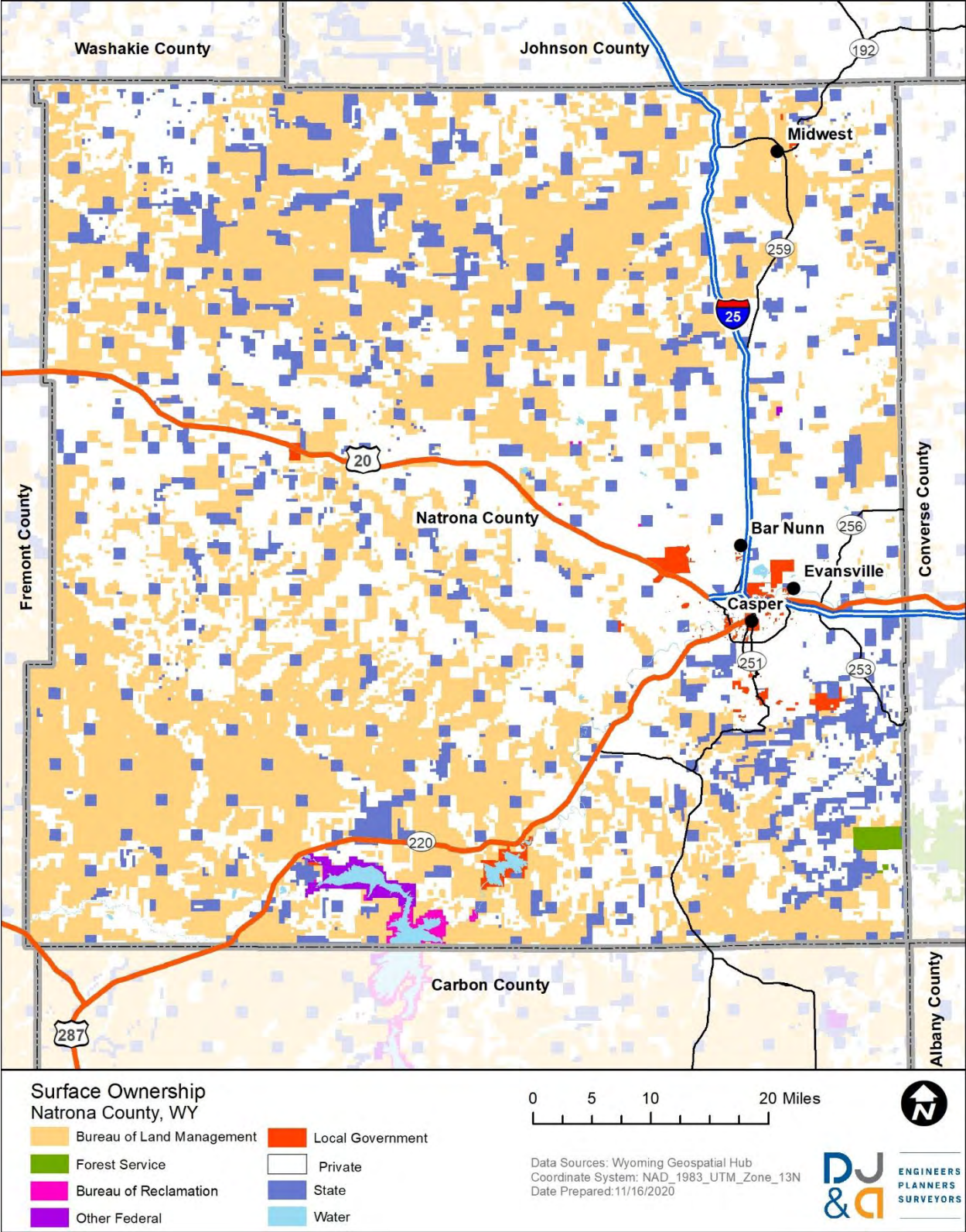
3. Natrona County relies on Natrona County Weed and Pest Control District to make use of cooperative agreements, NEPA, the Wyoming Wilderness Act and broad-based legal precedent to assure recognition of local conditions and circumstances in the decision-making process, and to keep the County and the public informed of those efforts.
4. The County will seek to encourage federal and state agencies to use prescribed burns as a primary means of weed and pest control. The County will become actively involved in planning for prescribed burns to mitigate potential wildfire threats.
5. Natrona County will support cooperative efforts with federal, state and private land managers to enhance cooperative weed management efforts countywide coordinated with and primarily managed by the Natrona County Weed and Pest Control District.
6. The County supports and strongly encourages the control of noxious weeds, invasive species, and pests by owners, managers, and users of all private, state and federal lands including easements, right-of-ways, and municipalities.
7. Natrona County encourages the active management and sharing of information between all entities and agencies managing noxious and invasive species.

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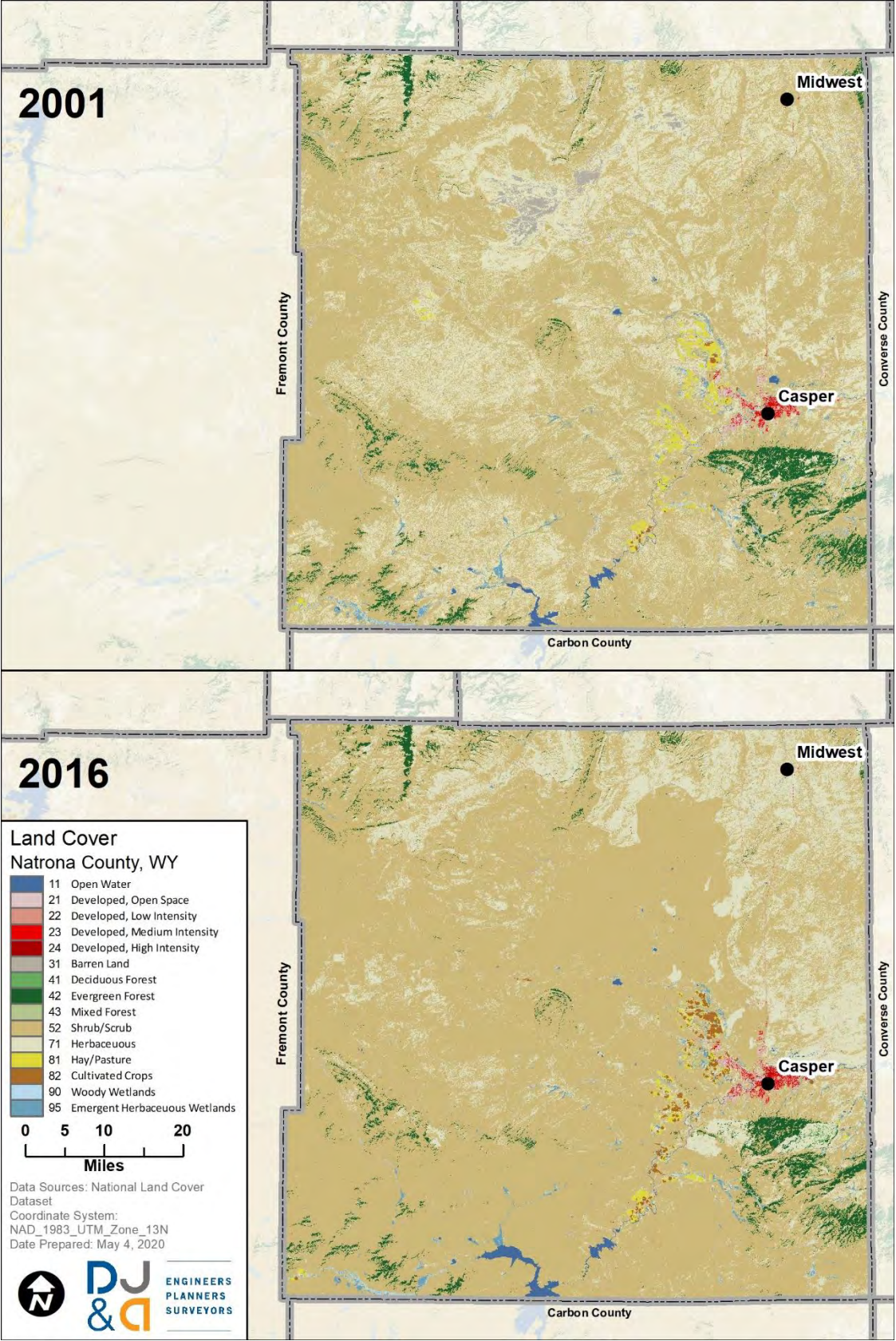
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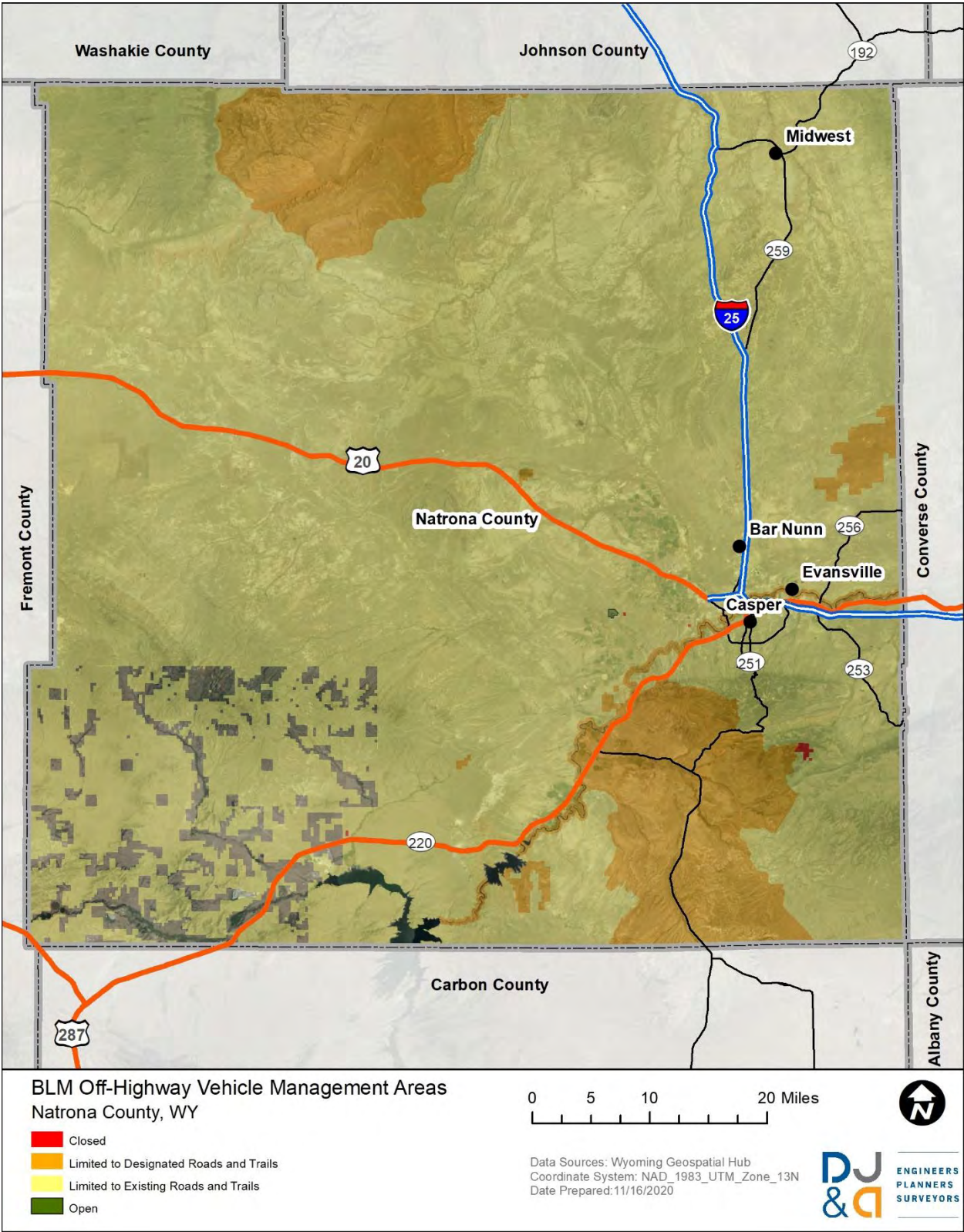
Appendix A—Maps



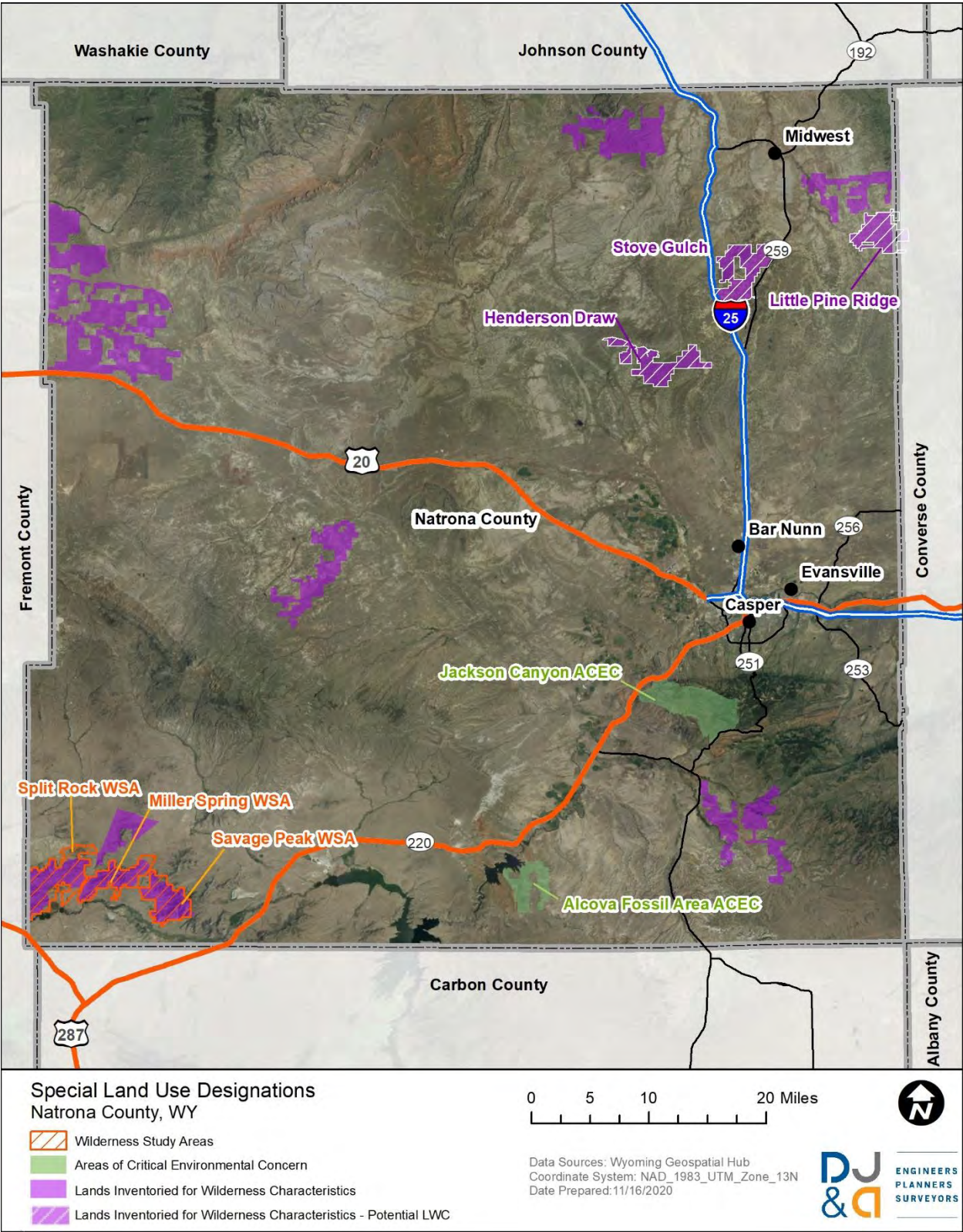
Map 1 Surface Ownership within Natrona County



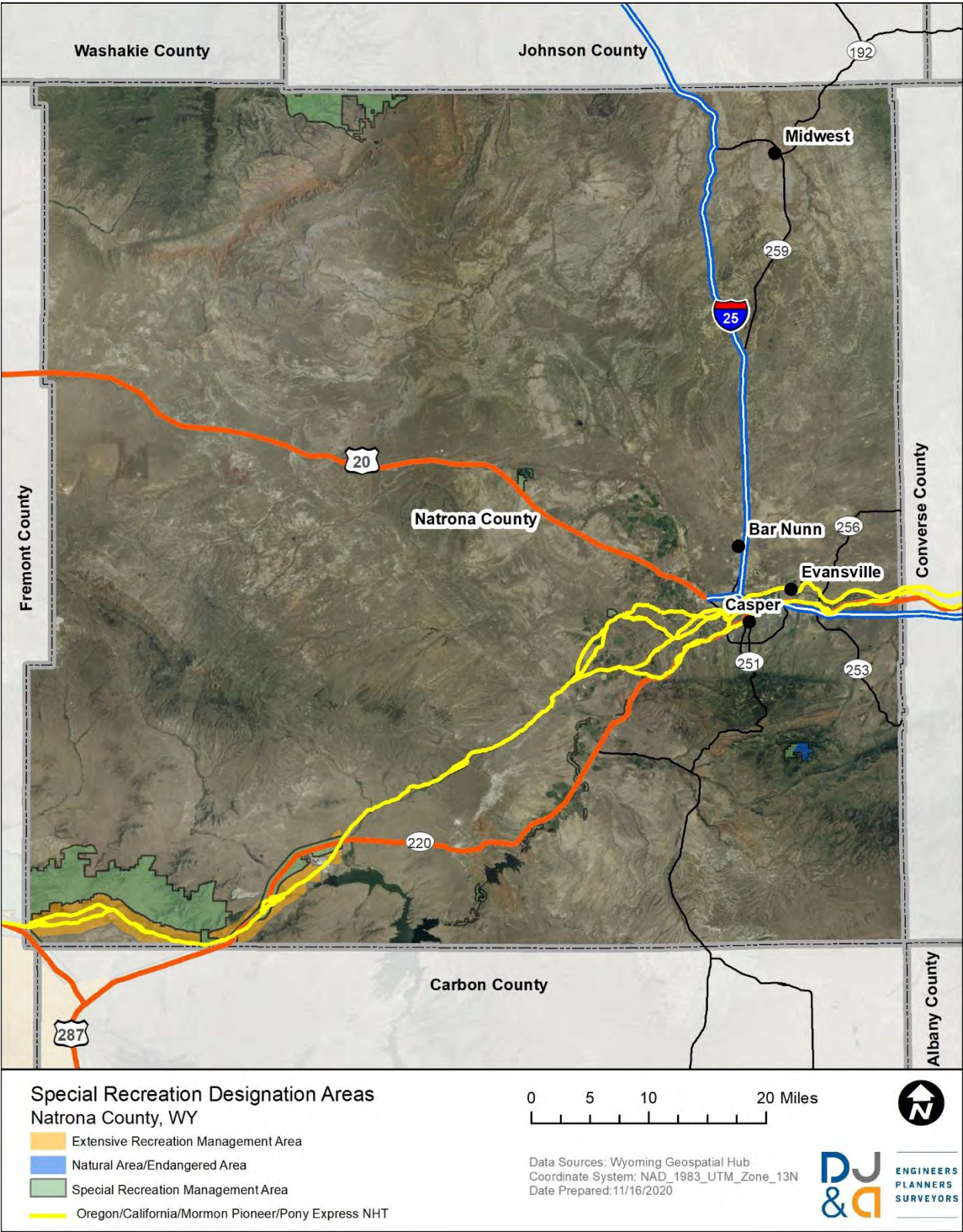
Map 2 Land Cover within Natrona County, 2001–2016



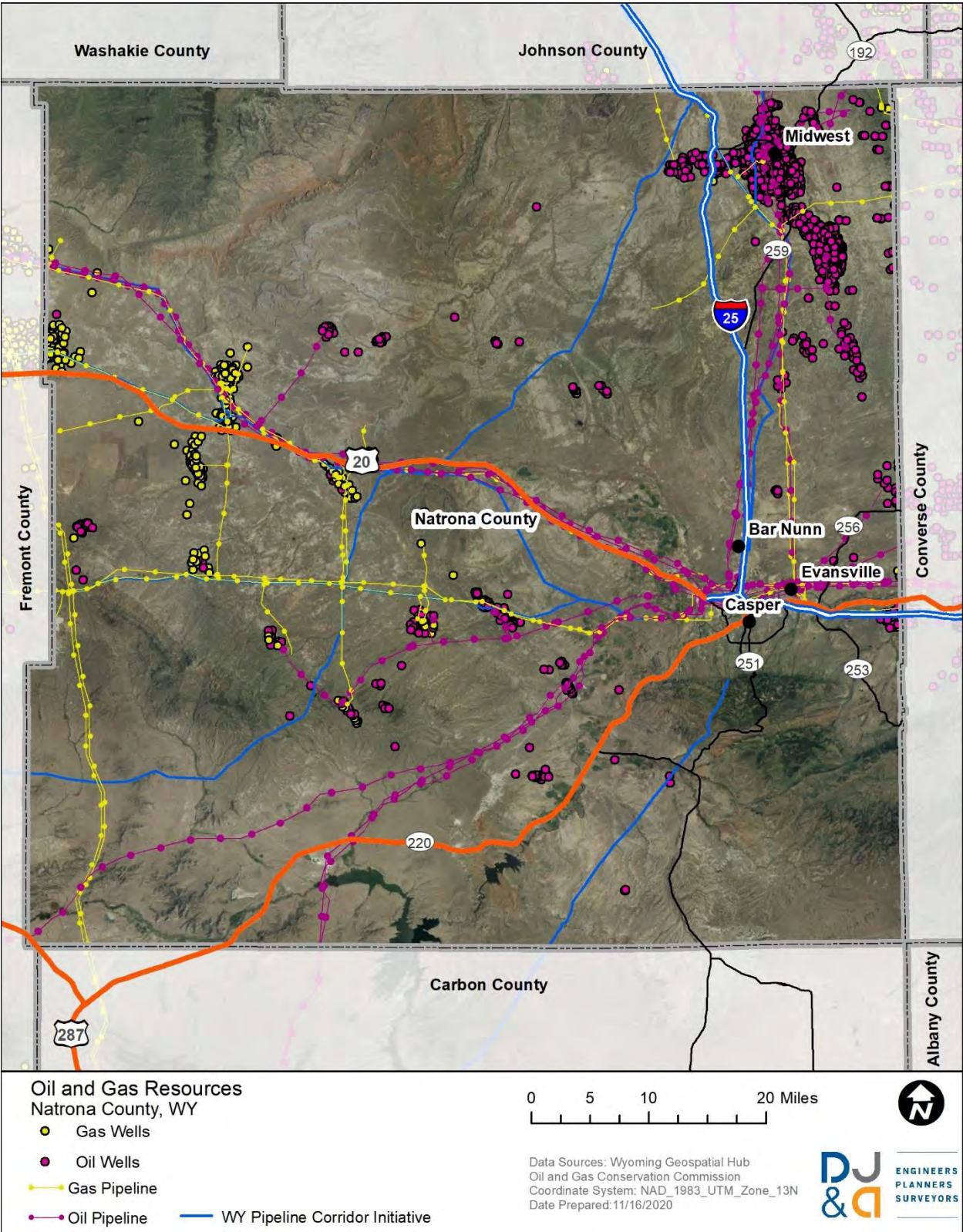
Map 3 Off-Highway Vehicle Management Areas within Natrona County



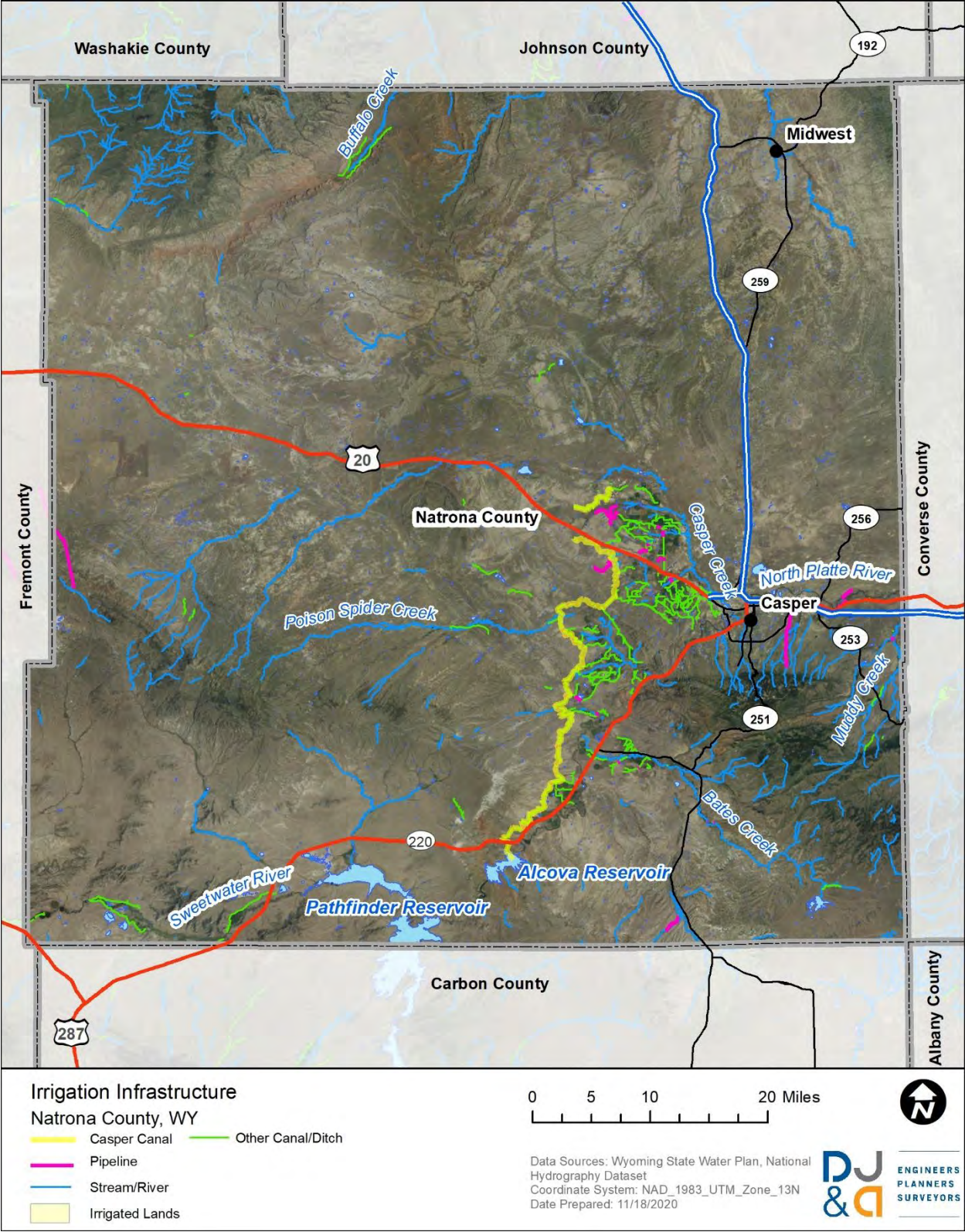
Map 4 Special Land Use Designations within Natrona County



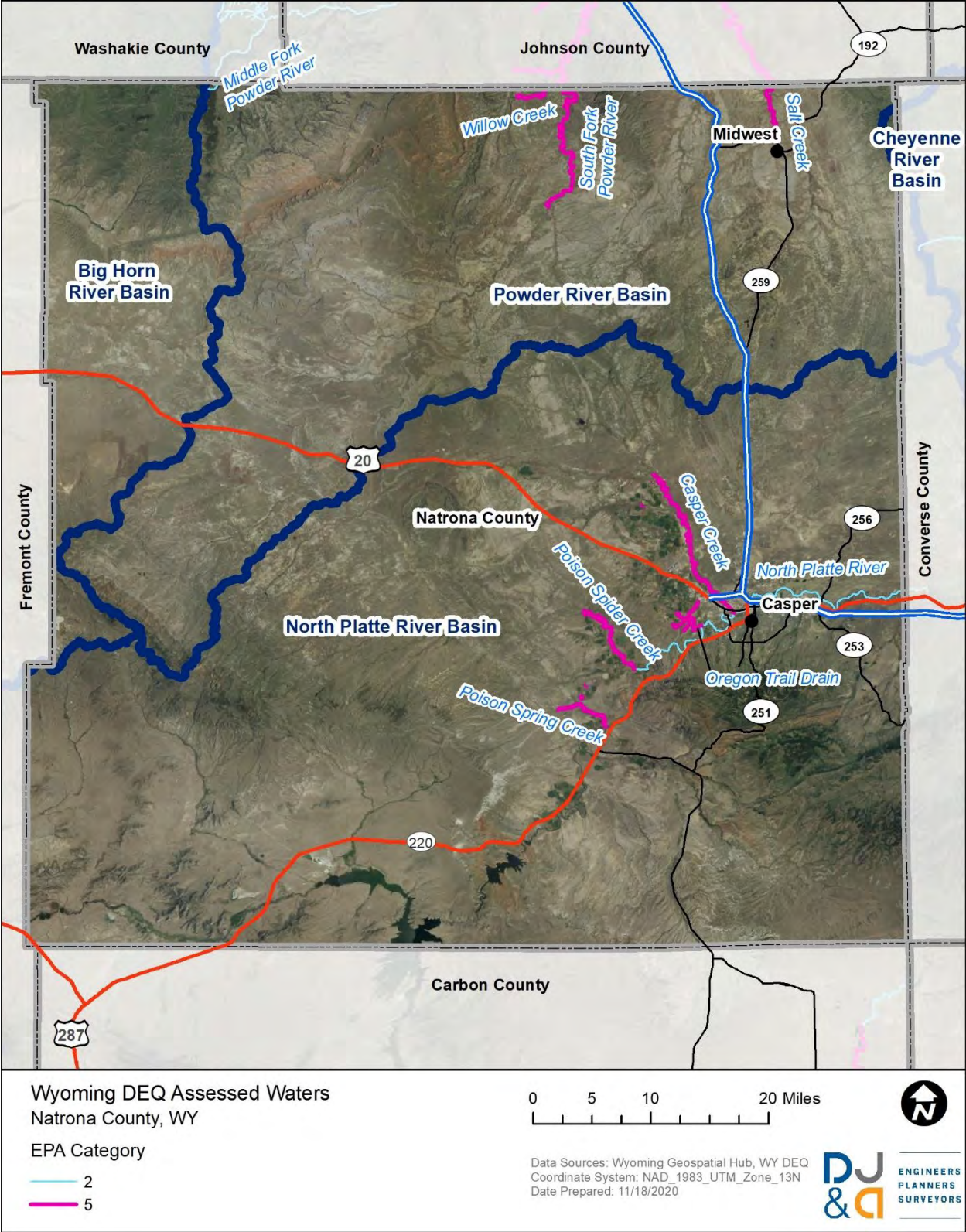
Map 5 Special Recreation Designation Areas within Natrona County



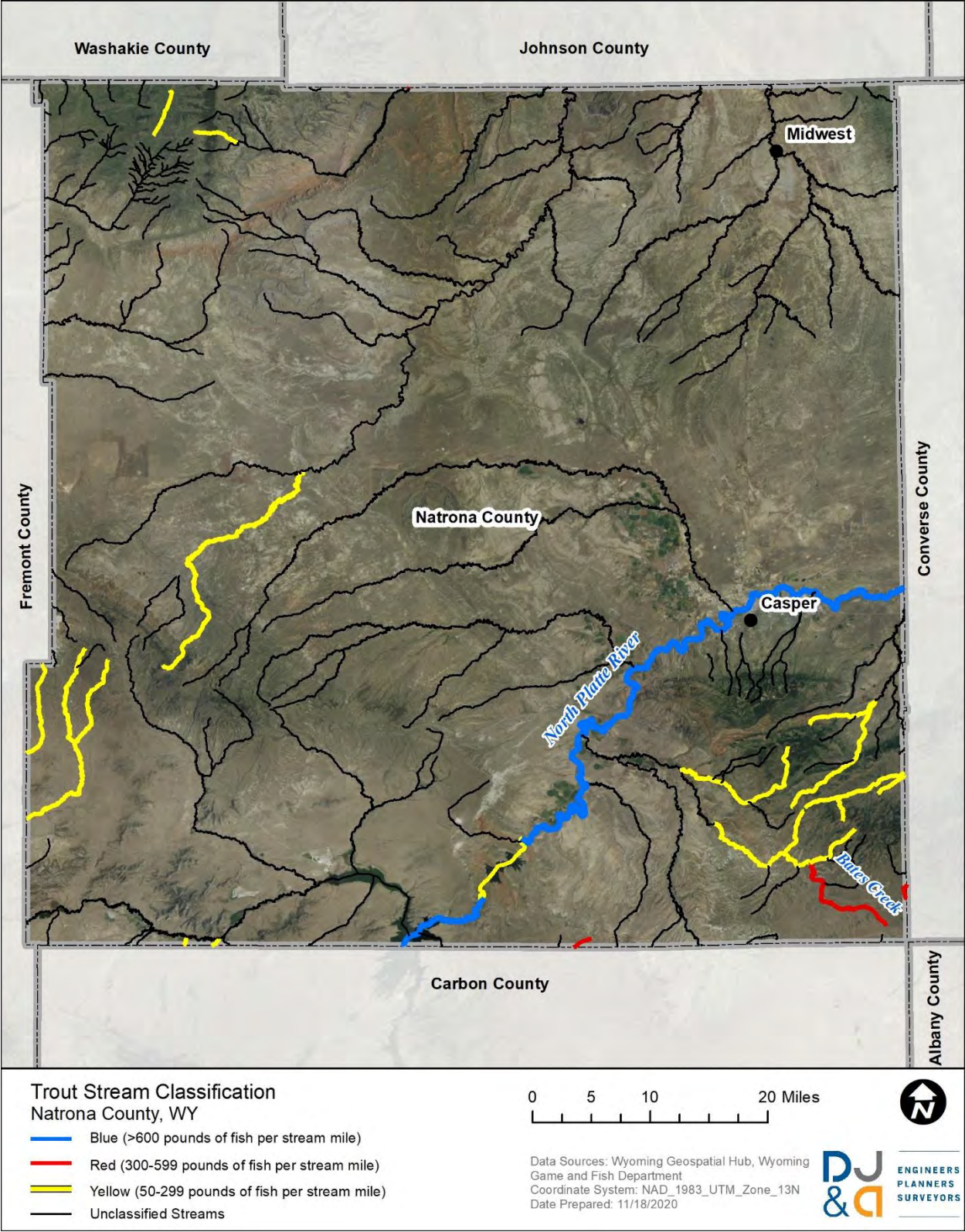
Map 6 Oil and Gas Resources within Natrona County



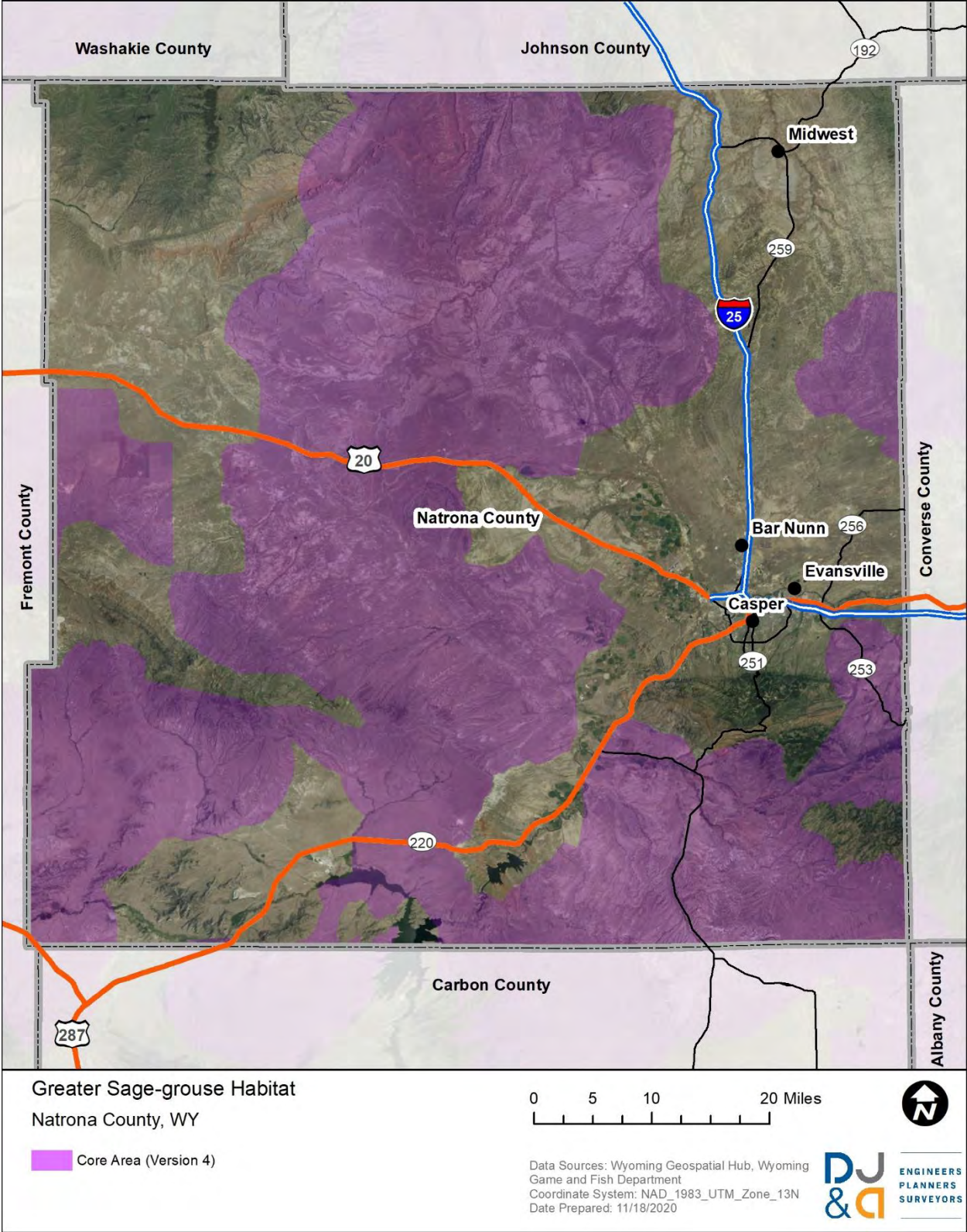
Map 7 Irrigation Infrastructure within Natrona County



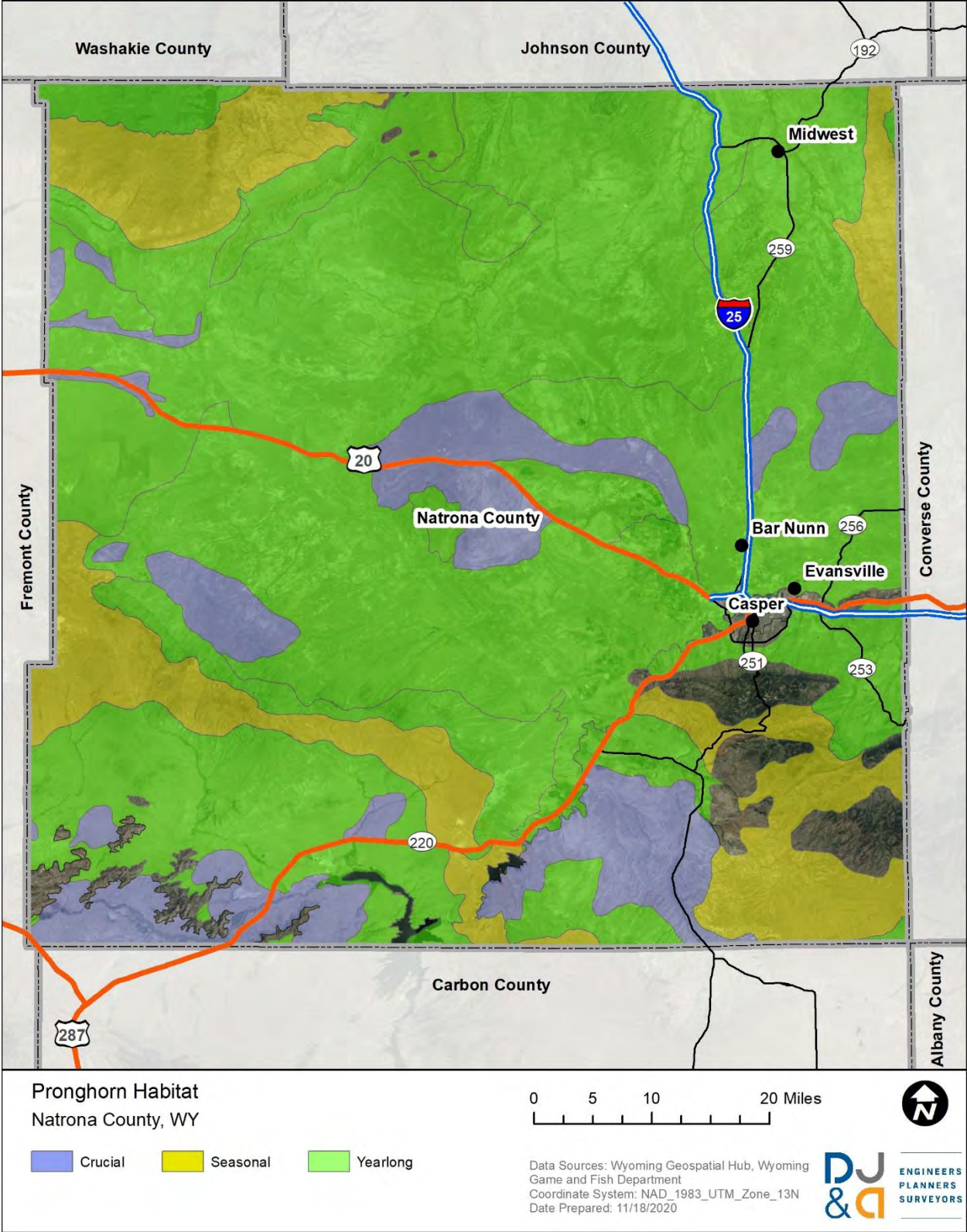
Map 8 Wyoming Dept. of Environmental Quality Assessed Waters within Natrona County



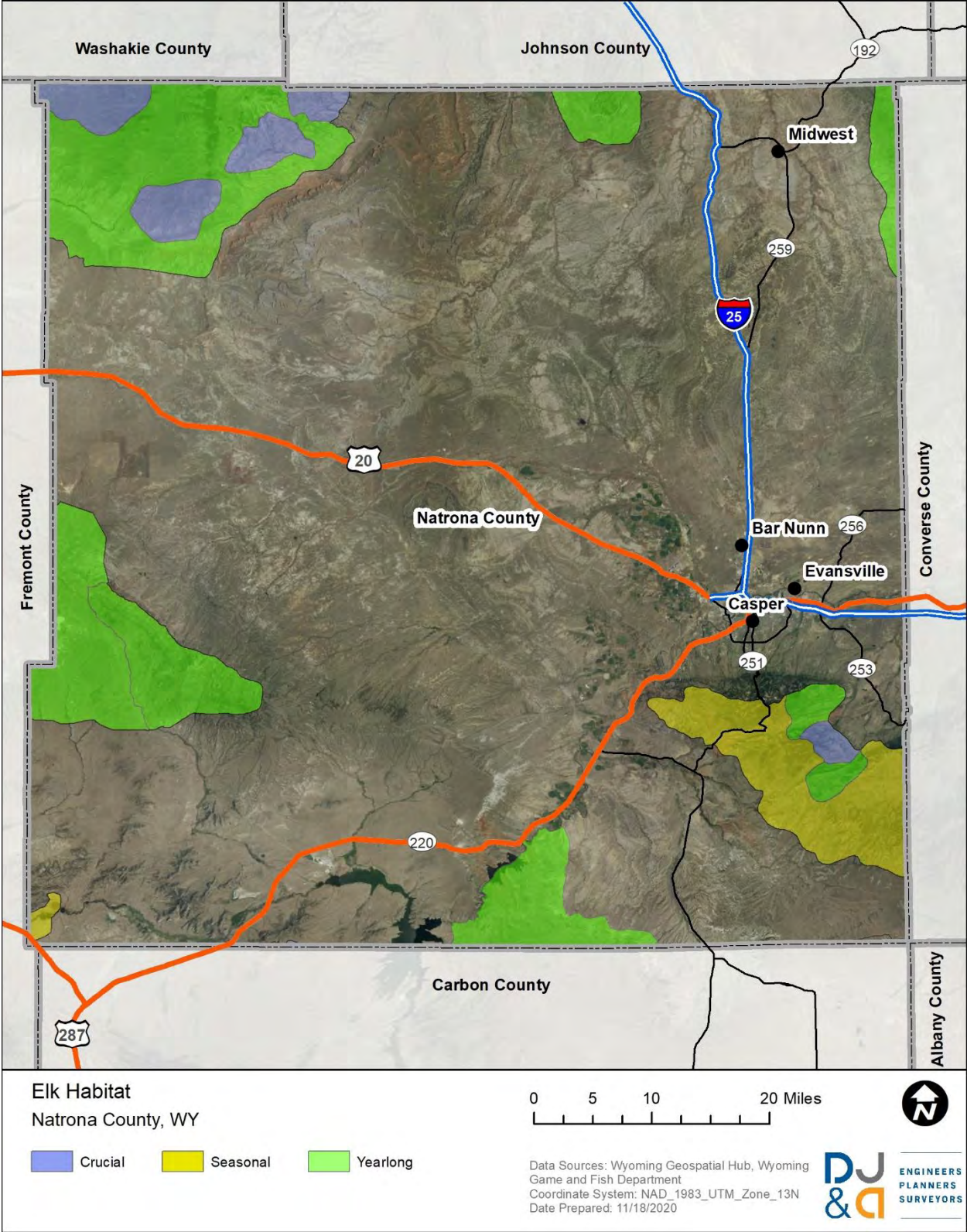
Map 9 Trout Stream Classification within Natrona County



Map 10 Greater Sage-grouse Habitat within Natrona County



Map 11 Pronghorn Habitat within Natrona County



Map 12 Elk Habitat within Natrona County



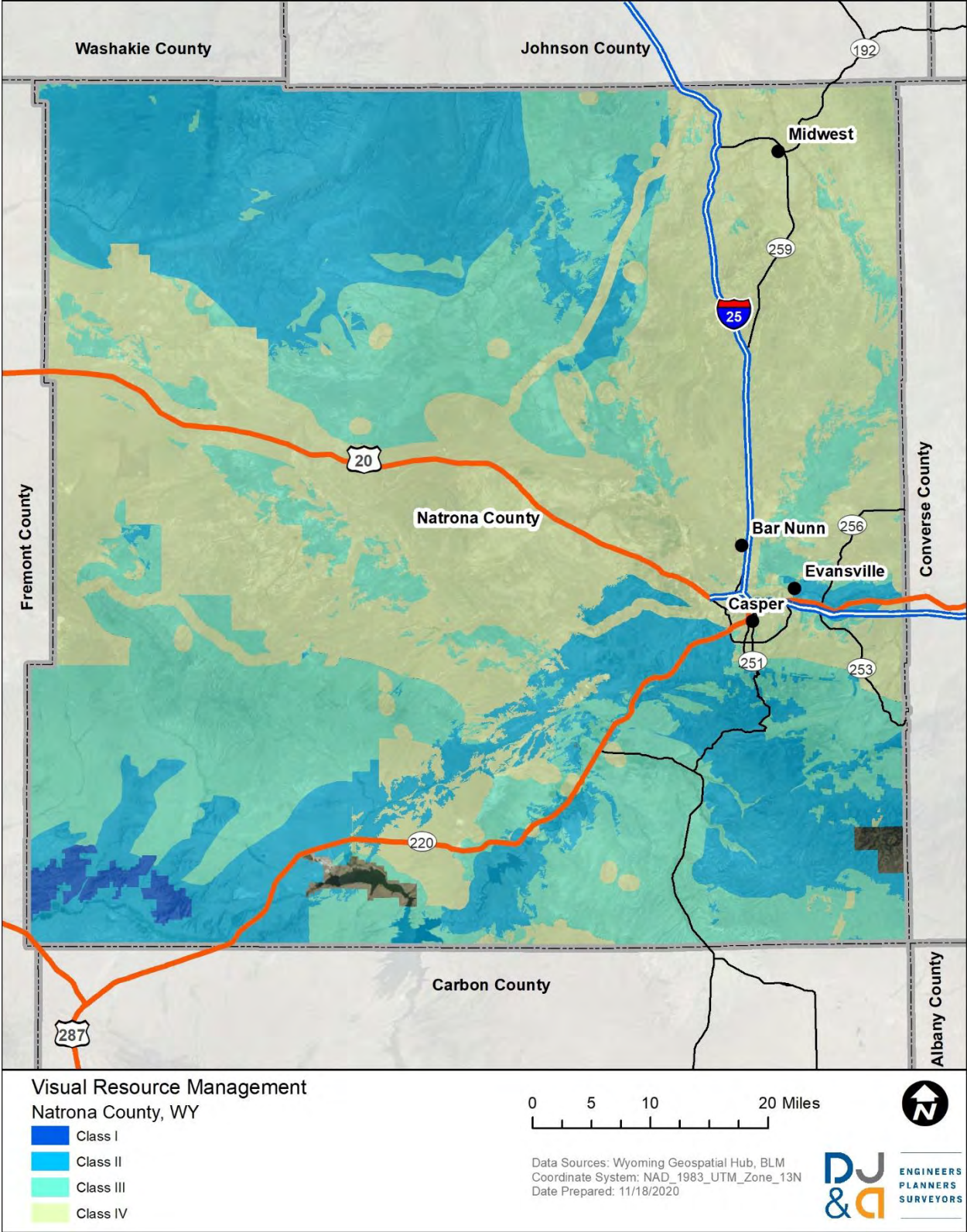
Map 13 Mule Deer Habitat within Natrona County



Map 14 White-Tailed Deer Habitat within Natrona County



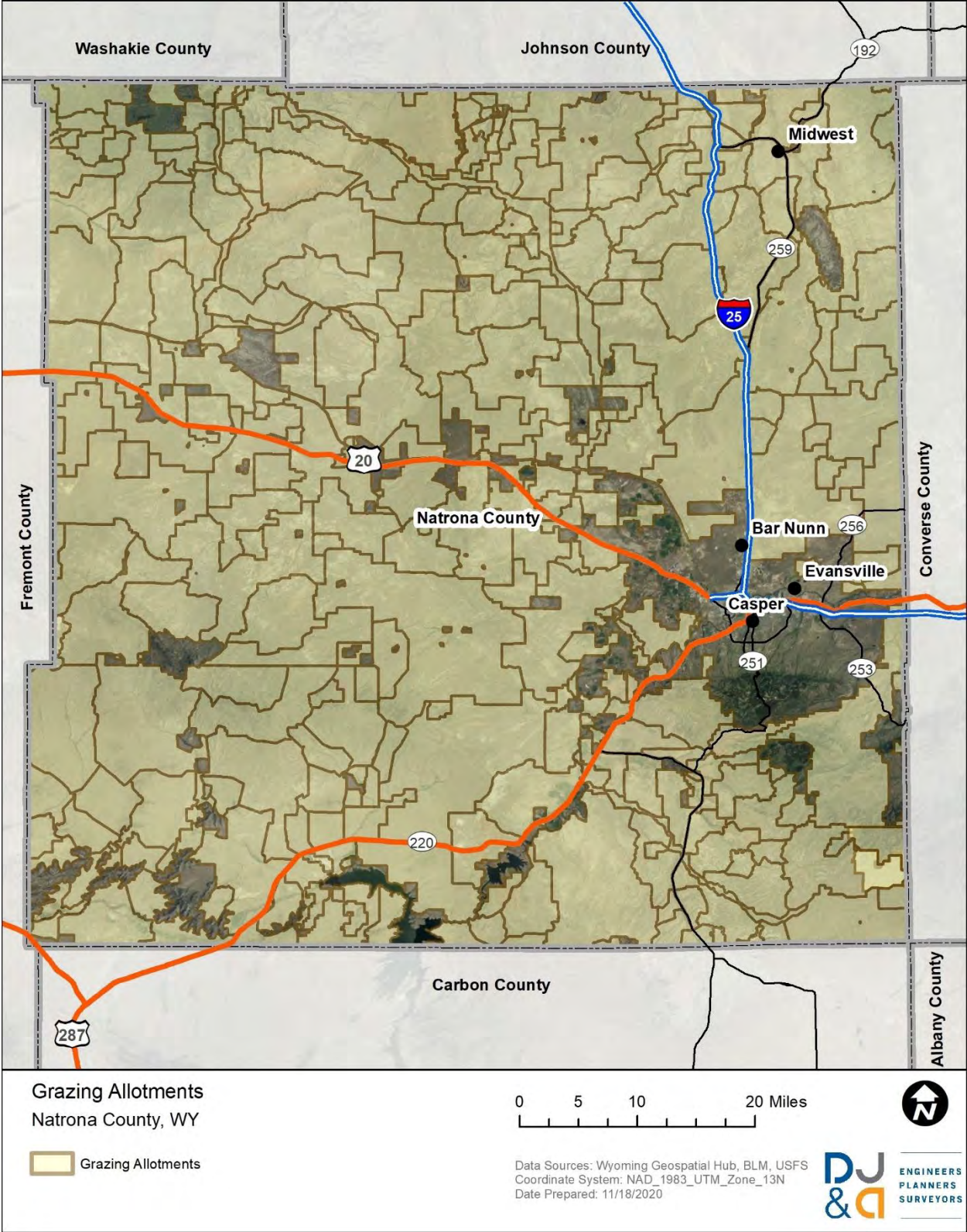
Map 15 Moose Habitat within Natrona County



Map 16 Visual Resource Management Classification within Natrona County



Map 17 Opportunity Zones within Natrona County



Map 18 BLM Grazing Allotments within Natrona County

Appendix B—Public and Agency Survey

Appendix C—Socioeconomic Profile