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# Mesa County Resource Management Plan



Natural Resource Management Plan  
Y2 Consultants, LLC & Falen Law Offices

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## ACRONYMS

ACEC- Areas of Critical Environmental Concern  
APHIS- Animal and Plant Health Inspection Service  
ARPA- Archeological Resources Protection Act  
AUM- Animal Unit Month  
BGEPA- Bald and Gold Eagle Protection Act  
BLM- Bureau of Land Management  
BMP-Best Management Practice  
BOCC- Board of County Commissioners  
CAA- 1970 Clean Air Act  
CAP- SSE- Community Assistance Program - State Support Services  
CCA- Candidate Conservation Agreements  
CCAA- Candidate Conservation Agreements with Assurances  
CEQ- Council on Environmental Quality  
CLG- Certified Local Government  
CO- Colorado  
CRP- Conservation Reserve Program  
CWA- Clean Water Act  
DEQ- Department of Environmental Quality  
DOD- Department of Defense  
DOE- Department of Energy  
EA- Environmental Assessment  
ECOS- Environmental Conservation Online System  
EIS- Environmental Impact Statement  
ENSO- El Niño-Southern Oscillation  
EPA- Environmental Protection Agency  
ERFO- Emergency Relief for Federally Owned Roads  
ESA- 1973 Endangered Species Act  
ESD- Ecological Site Description  
FAC- Functioning-at-risk  
FAST- Fixing America’s Surface Transportation act  
FDQA- Federal Data Quality Act  
FHWA- Federal Highway Administration  
FLAP- Federal Lands Access Program  
FLMPA- 1976 Federal Land Management and Policy Act  
FLTP- Federal Lands Transportation Program  
FSA- Farm Service Agency  
FUDs- Formerly Used Defense Sites  
GHG- Greenhouse Gas  
GLO- General Lands Office

GMUG- Grand Mesa, Uncompahgre, and Gunnison National Forests  
GPC- Groundwater Pollution Control  
GVAQC- Grand Valley Air Quality Committee  
IMR- Intermountain Range  
IPCC- International Governmental Panel on Climate Change  
LUP- Land Use Plan  
LWCF- Land and Water Conservation Fund Act of 1964  
MBA- Migratory Bird Act  
MCCWPP- Mesa County Community Wildfire Protection Plan  
MOA- Memorandum of Agreement  
MOU- Memorandum of Understanding  
MUSY- 1960 Multiple Use Sustained Yield Act  
NAAQS- National Ambient Air Quality Standards  
NAO- North Atlantic Oscillation  
NEPA- 1973 National Environmental Policy Act  
NF- Non-functioning  
NFHL- National Flood Hazard Layer  
NFIP- National Flood Insurance Program  
NFMA- 1976 National Forest Management Act  
NFS- National Forest System  
NHPA- National Historic Preservation Act  
NPS- National Park Service  
NRCS- Natural Resource Conservation Service  
NRMP- Natural Resource Management Plan  
NSFLTP- Nationally Significant Federal Lands and Tribal Projects Program  
NSS- Native Species Status  
NWR- National Wildlife Refuge  
OAA- 1897 Organic Administration Act  
OHV- Off-Highway Vehicle  
OMB- Office of Management and Budget  
PDO- Pacific Decadal Oscillation  
PFC- Proper Functioning Condition  
PRPA- Paleontological Resources Protection Act  
PILT- Payments In Lieu of Taxes  
R&PP- Recreation and Public Purposes  
Reclamation- Bureau of Reclamation  
RMP- Resource Management Plan  
RTP- Recreational Trails Program  
SWAP- State Wildlife Action Plan  
UMTRA- Uranium Mill Tailings Remedial Action Program  
UNEP- United Nations Environment Program

USACE- U.S. Army Corps of Engineers  
USFS- United States Forest Service  
USFWS- U.S. Fish and Wildlife Service  
USGS- U.S. Geological Survey  
USRS- U.S. Reclamation Service  
UT- Utah  
WMO- World Meteorological Organization  
WSA- Wilderness Study Area  
WSFR- Wildlife and Sport-Fish Restoration

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## EXECUTIVE SUMMARY

This Resource Management Plan (RMP) is a non-binding document, prepared and adopted by the Board of County Commissioners (BOCC) for Mesa County, Colorado, that Federal agencies are required to review and consider when making decisions that may affect Mesa County. The Board of County Commissioners are locally elected officials that have far ranging and important responsibilities to their constituents, described by state statutes as protecting their “health, safety, and welfare.” That responsibility includes specifically interacting with Federal agencies on all federal issues impacting the local community and counties. Rural counties’ socioeconomic well-being, health, safety, and culture can be strongly impacted by the management of the surrounding federally managed and public lands. To give Mesa County the strongest voice it can have during interaction with the federal agencies, Mesa County has adopted this local RMP.

The RMP establishes local policy regarding Mesa County’s desired use and administration of federally managed lands in their jurisdiction over which they exercise no direct authority, but can influence the development and implementation of federal policies, programs, and other types of federal decision-making regarding federal lands and natural resources that affect local communities within Mesa County or the entirety of Mesa County. This RMP is intended to help evaluate, articulate, and protect the local citizens’ interest in, and access to, federal and public lands and resources and to ensure the history, as well as the economic and socioeconomic well-being of Mesa County are adequately considered in federal decisions.

This RMP was developed by a steering committee from constituents across Mesa County and through public process which involved four public meetings across the County (Collbran, Gateway, Glade Park, and Grand Junction) and a 45-day public comment period.

Within this plan, each of the natural resources within the County are discussed. There are four components to the plan: the history, economics, and socioeconomics discusses the history and economic impact of the natural resource within the County; the resource assessment and legal framework describes the current status of the resource within the County and any federal legal background on the resource; the resource objectives are the overarching objectives or state how the County wishes to see a resource utilized and/or managed; and the policy statements are the instructions the County has for how to reach the resource objectives.

# CHAPTER 1: INTRODUCTION

## 1.1 FUNDAMENTAL PRINCIPLES

A Resource Management Plan (RMP) is a non-binding document prepared and adopted by a local government that Federal agencies are required to review and consider when making decisions that may affect the local area. Locally elected officials have far ranging and important responsibilities to their constituents, described by state statutes as protecting their “health, safety, and welfare.” That responsibility includes specifically interacting with Federal agencies on all federal issues impacting the local communities and counties. Rural counties’ socioeconomic well-being, health, safety, and culture can be strongly impacted by the management of the surrounding federally managed public lands. To give the locally elected government the strongest voice it can have during “government-to-government” interaction, local governments can formally adopt local land use plans (LUPs) or RMPs. These plans establish local policy regarding the County’s desired use and management of federally managed lands in their jurisdiction over which they exercise no direct authority, but can influence the development and implementation of federal policies, programs, and other types of federal decision-making regarding federally managed lands and natural resources that affect a local community or the county. RMPs are intended to help elevate, articulate, and protect the local citizens’ interest in, and access to, federally managed public lands and resources and to ensure the history, as well as the economic and socioeconomic well-being of the County are adequately considered in federal decisions (Budd-Falen, 2018).

These local LUPs or RMPs are not zoning and do not regulate the use of private or public lands. When people think of LUPs, they typically think of the general planning document that counties use to determine future land use and zoning on private lands. A RMP is a separate type of land use plan prepared by counties, containing the County’s policies and recommendations relating to the management of federal and public land within the county. (Budd-Falen, 2018).

RMPs are different from federal resource management plans like Bureau of Land Management (BLM) Resource Management Plans (RMPs) or U.S. Forest Service (USFS) Land and Resource Management Plans (LRMPs) and are not binding documents that control future management documents for the Federal agencies or Mesa County. Local governments do not have jurisdiction over federal lands. County RMPs cannot require Federal agencies to take specific actions. However, Federal agencies can be mandated by various federal statutes to engage local governments during the decision-making process on federal plans, policies, and programs that will impact the management of land and natural resources within a community and ultimately affect the local tax base and lives of local citizens and RMPs are a way to allow for a local government to better utilize those statutes. Having a concise plan of the County’s positions helps to make the County more effective as a cooperator and coordinator with federal and state agencies and helps position the County to best represent its interests and the interests of its citizens. Federal agencies are required to coordinate and consult with local governments and to give meaningful consideration to policies asserted in written plans prepared and adopted by local governments concerning federally managed lands in their area. Thus, the purpose and goal of a RMP is to clearly purvey the local government’s objectives and policies for the federally managed lands within its jurisdiction to the local agencies in order to allow the agencies to meaningfully conduct consistency review and coordination and encourage greater cooperation between the parties in the future. (Budd-Falen, 2018)

## 1.2 MESA COUNTY'S PLAN OVERVIEW

### 1.2.A Organization

This plan considers the current conditions of federal resources, Mesa County's (the County) objectives for each resource, and how Mesa County would recommend those objectives be cooperatively achieved. For all federal resources in the County, this plan addresses the following:

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

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

**Policy Statements.** Describes specific policy statements on how to achieve the County's Resource Management Objective for each resource. Policy statements tier to the Resource Management Objective for each resource and address the question, "How would Mesa County like to see its objectives achieved?"

### 1.2.B Process

By state statute, Colorado county governments like Mesa County have the authority to (Colo. Rev. Stat. § 30-11-101(k)):

Coordinate, pursuant to 43 U.S.C. sec. 1712, the "National Environmental Policy Act of 1969", 42 U.S.C. sec. 4321 et seq., 40 U.S.C. sec. 3312, 16 U.S.C. sec. 530, 16 U.S.C. sec. 1604, and 40 C.F.R. parts 1500 to 1508, with the United States Secretary of the Interior and the United States Secretary of Agriculture to develop land management plans that address hazardous fuel removal and other forest management practices, water development and conservation measures, watershed protection, the protection of air quality, public utilities protection, and private property protection on federal lands within such county's jurisdiction.

Thus, based on this statutory authority the policies and powers of Mesa County encompass the obligation to protect the best interests of the local citizens, to provide for community stability, and to protect the natural environment and resources. The purpose of this RMP is to be a guide to efficiently and effectively manage and sustainably utilize the resources while protecting the environment.

Mesa County developed this plan with the assistance of a consultant, steering committee, and in public meetings that allowed for participation and contribution from all interested parties. The steering committee consisted of twelve citizens with a range of expertise and interests and six federal and state agencies.



The RMP was developed through consolidation of existing resolutions, policies, land use plans and codes, by recommendations from the steering committee, and from comment letters developed during past National Environmental Policy Act (NEPA) processes. The draft RMP was vetted through the steering committee. The County hosted a series of public meetings in Gateway, Glade Park, Collbran, and Grand Junction. The public was invited to review the plan, speak with steering committee members and County employees, and submit comments for incorporation into the final draft. A summary of public comments received can be found in Appendix D.

The RMP was then taken through public hearings by the Planning Commission and the Board of County Commissioners, who ultimately adopted the plan.

### **1.2.C Amending the Plan**

This plan can be amended following the same process for public involvement and adoption as described in the previous section. It is recommended to review the plan at least every five years or when a new majority of County Commissioners are seated to ensure the Plan represents the current policies of the Board of County Commissioners.

## **1.3 LAND USE PLANNING PROCESS AND LEGAL FRAMEWORK**

### **1.3.A Statutory Requirements for Local Government to Federal Interaction and Influence**

Federal agencies are required to identify and analyze the impacts to local economies and communities when making decisions. RMPs outline the present economic and cultural conditions and desired future conditions of a local community and demonstrate how those conditions can be enhanced, or sometimes harmed by, activities on adjoining federally managed lands. The plan establishes the local government's preferred policies for the planned use, management, protection, and preservation of the natural resources on the federally managed lands within its jurisdiction. An adopted RMP is a critical tool that allows a local government to advocate on behalf of its citizens and have a substantive impact on federal decisions, plans, policies, and programs. A written plan can play a key role in the success of a local government engaging the federal government (Budd-Falen, 2018).

Required engagement between Federal agencies and local governments takes the form of “consistency review” under NEPA and the Federal Lands Policy and Management Act (FLPMA), the requirement for “coordination” under both FLPMA and the National Forest Management Act (NFMA), and engaging local governments acting as a “cooperating agency” under NEPA, and a State Governor’s consistency review process. Mesa County has a long and successful track record as a “cooperating agency” in many federal public lands planning processes and other NEPA decisions. The County wishes to build on the collaborative spirit and long-developed relationships between the County, stakeholders, and land managers to develop “win-win” decisions for natural resources.

Memoranda of Understanding (MOU) with local offices of Federal agencies may require, among other things, that both entities cooperate in land use projects and planning decisions, which may impact the other. Under the following federal enabling legislation, Mesa County has numerous MOUs for cooperative planning with local offices of BLM, USFS, U.S. Fish and Wildlife Service (USFWS), National Park Service (NPS) and Department of Energy (DOE). This RMP provides an efficient central document as a holding



place for the various policies Mesa County has adopted or suggested over time as well as new policies addressing issues related to Federal actions impacting Mesa County.

### ***The National Environmental Policy Act (NEPA)***

The National Environmental Policy Act (NEPA) applies to “every major Federal action significantly affecting the quality of the human environment” (42 U.S.C. § 4332(1)(C)). The courts have interpreted this to mean that every time the federal government makes a decision for almost any action that may have an environmental impact, NEPA compliance is required. Some courts have even required agencies to follow NEPA when the agency spends a small amount of money on a project or program that they are not the lead agency (See *e.g. Citizens Alert Regarding the Environment v. United States Environmental Protection Agency*, 259 F. Supp.2d 9, 20 (D.D.C. 2003)).

NEPA requires that agencies undertake an environmental analysis to determine whether a federal action has the potential to cause significant environmental effects. If a proposed major federal action is determined to significantly affect the quality of the human environment, Federal agencies are required to prepare an Environmental Impact Statement (EIS). The regulatory requirements for an EIS are more detailed and rigorous than the requirements for an Environmental Assessment (EA). There are several ways local governments can participate in the NEPA process depending on the type of federal decision, the level of commitment of the local government, and the goals of the local government.

First, local government can use RMPs as part of the federal agency’s “consistency review” process. Under this provision, if the federal agency receives a local plan in the course of the environmental analysis, NEPA regulations direct the federal agency to discuss any inconsistency of a proposed action with any approved state or local plan and laws (whether or not federally sanctioned). “Where an inconsistency exists, the [environmental impact] statement should describe the extent to which the [federal] agency would reconcile its proposed action with the [local government] plan or law.” (40 C.F.R. § 1506.2(d)). For the local government to effectively engage with the consistency review requirements, a written and adopted local plan is necessary. With a written plan, this analysis happens even when the local government does not know about the pending decision or action if the RMP was provided in advance to the reviewing federal agency with decision-making authority under NEPA.

NEPA requires that copies of comments from state or local governments accompany the EIS or EA throughout the review process (42 U.S.C. § 4332(c)(v)). Typically, all comments from cooperating agencies and the public are published as well. However, due to the fact that there would be no actual document to conduct consistency review and coordination with, as specified under the applicable laws under FLPMA, NEPA, and NFMA, written comments submitted by a local government not tied to a formally adopted RMP require less consideration than those tied to an adopted RMP. (See *e.g.* 40 C.F.R. § 1506.2(d) (requiring consistency review when an agency receives a local plan in the course of its NEPA analysis); 43 U.S.C. § 1712(c)(9) (land use plans...under this section shall be consistent with State and local plans))

Local governments can separately participate in the NEPA process as a “cooperating agency” (40 C.F.R. § 1508.5). “Cooperating agency status” directs Federal agencies to work with cooperators such as local governments early in the process and to utilize analysis and proposals of cooperating agencies to the maximum extent possible. Should a local government request cooperating agency status for a particular agency proposed action (for example, the designation of critical habitat for a listed threatened or endangered species), the local government can participate, at the request of the lead agency, in drafting portions of the relevant NEPA document (40 C.F.R. § 1501.6 (b)(3)). This can involve identifying

appropriate scientific data, assisting with alternative development for the proposed federal action, and ensuring that the discussion of impacts to the local economy or the local citizens is accurate. A RMP, while not required, can aid this process and analysis. Cooperating agency status can be reserved for more significant federal decision likely to have a larger impact on a community and is not required for every federal action.

Pursuant to NEPA, an applicant for cooperating agency status must be a locally elected body such as a conservation district, board of supervisors, or a county commission and possess “special expertise.” A local government’s special expertise is defined as the authority granted to a local governing body by state statute. See Section 2.5 for county authority under state law.

## ***Bureau of Land Management (BLM)***

### ***The Federal Land Policy and Management Act (FLPMA)***

The Federal Land Policy and Management Act (FLPMA), which governs the BLM, provides detailed requirements for “coordination” and “consistency” with local land use plans. With regard to the requirements for “coordination”, FLPMA states that the BLM must:

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

To the extent the Secretary of Interior finds practicable:

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

FLPMA directs the BLM to coordinate land use plans with other federal plans and resource plans of state and local governments. FLPMA states: “Land use plans of the Secretary [of the Interior], under this section shall be consistent with state and local plans to the maximum extent he finds consistent with Federal law and the purposes of this Act.” (43 U.S.C. §1712(c)(9)). FLPMA requires both “coordination” and “consistency review.” Coordination should include both regularly scheduled meetings between the various local governments and BLM managers, as well as inviting local BLM staff to local government meetings. Pursuant to FLPMA’s consistency review requirement, if a BLM land use plan is inconsistent with a local land use plan, the BLM should provide an explanation of how achieving consistency would result in a violation of federal law or be inconsistent with FLPMA.

Mesa County’s experience as an active cooperating agency for nearly eight years as the Grand Junction Field Office Resource Management Plan (RMP) was drafted and adopted ensured coordination, cooperation, and consistency with local land use plans and policies.



## **U.S. Forest Service (USFS)**

### The National Forest Management Act (NFMA)

The National Forest Management Act (NFMA) governs the USFS and requires the agency to “coordinate”. The NFMA requirements are as follows:

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

The coordination required under NFMA creates an engaging process between the USFS and the local governments and ensures USFS plans and local plans and policies are considered, and the USFS’s Land and Resource Management Plans are compatible with the County’s whenever possible. Additionally, all USFS plans, including Forest Management Plans, are required to go through a NEPA process and thus as required by law, offer cooperating agency status for local governments.

## **Other**

### National Park Service (NPS)

In accordance with Executive Order 13352, the NPS is required to carry out its natural resource management responsibilities in a cooperative manner that considers the interests of individuals “with ownership or other legally recognized interests in land and other natural resources” (Executive Order 13352, 2017). NPS is also expected to accommodate local participation in Federal decision-making (Executive Order 13352, 2017). MOUs exist between Mesa County and the Colorado National Monument (CNM) and have ensured cooperative planning and communication for decades.

## **1.3.B County’s Expectations for Land Use Planning Process and Land Use Plan**

### **County Expectations for Resource Management Plan**

While the statutes and regulations outlined above spell out the legal requirements of the Federal agencies in their duties in dealing with local governments, Mesa County also recognizes that part of this land use planning process is to enhance and maintain a productive, cooperative working relationship with the Federal agencies operating within Mesa County. The County also recognizes that “coordination,” “cooperating agency status”, and “consistency review” require actions from both the Federal agencies and the local governments.

To that end, consistent with adopted MOUs with the federal agencies, the County commits to the following policies and actions:

1. Within 30 days of the date of adoption of this plan, the County will transmit a copy of this RMP to the local Federal agencies within Mesa County for their consideration as part of any consistency review that is required pursuant to federal statute.
2. Mesa County supports the continuation of a multi-agency stakeholder group hosted by the County Commissioners to review and discuss ongoing issues on federally managed and public lands and





propose regular meetings on a schedule to be determined, but not less than bi-annually. Any agencies that are not currently involved with this group will be invited.

3. In a timely manner, the County will continue to review NEPA documents to determine if they will request “cooperating agency status” and will consider entering into Memorandums of Understanding (MOU) or Memorandums of Agreement (MOA) as appropriate. The County reserves the right to negotiate an MOU or MOA on a case-by-case basis, although an MOU or MOA is not appropriate nor necessary in all cases.

### **Credible Data**

To the greatest extent possible, credible scientific data should drive all land use planning decisions. Credible scientific data is defined as rigorously reviewed, scientifically valid social, demographic, economic, chemical, physical and/or biological monitoring data, timely collected under an accepted sampling and analysis plan, including quality control and assurance procedures and available historical data (Office of Management and Budget, 2004). In this plan, “data” refers to information that meets, at a minimum, the Federal Data Quality Act (FDQA). The FDQA directs the Office of Management and Budget (OMB) to issue government-wide guidelines that “provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies” (Sec. 552(a) Pub. Law. 106-554; HR 5658; 114 Stat. 2763 (2000)).

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

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

- a) quality
- b) utility (i.e., referring to the usefulness of the data for its intended purpose)
- c) objectivity (i.e., the data must be accurate, reliable, and unbiased)
- d) integrity

In addition to following the OMB guidelines, all Federal agencies were also to issue data quality guidelines to ensure and maximize the quality, objectivity, utility, and integrity of information for dissemination by October 1, 2002. 67 Fed. Reg. 8452. Those guidelines can be found at the following links.

- BLM Data Quality [Guidelines](#)
- USFS Data Quality [Guidelines](#)
- NPS Data Quality [Guidelines](#)
- Reclamation Data Quality [Guidelines](#)
- DOE Data Quality [Guidelines](#)

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

## Resource Objective

- A. Credible data has a universal meaning for all Federal agencies in the County and is the basis for all agency decisions within the County.

## Policy Statements

1. Quantitative data should be included in federal land use planning decisions that meets credible data criteria, even if the data were not produced by a federal agency.
2. Support the use of credible scientific data.
3. All Federal agencies should only use data that meets the minimum criteria described in their respective handbooks and manuals, as updated:
  - a. BLM: BLM H-1283-1 Data Administration and Management (Public) (Bureau of Land Management, 2012)
  - b. USFS: FS FSH 1909.12, Chapter 40, Land Management Planning Handbook – Key Processes Supporting Land Management Planning (US Forest Service, 2013)
  - c. Reclamation: Reclamation RMP, *Scientific Integrity* (CMP 13) (Bureau of Reclamation 2016) and Reclamation RMP, *Peer Review of Scientific Information and Assessments* (CMP 14) (Bureau of Reclamation 2019)
  - d. NPS: NPS PM 07-03 *NPS Interim Guidance Document Governing Code of Conduct, Peer Review, and Information Quality Correction* (National Park Service 2008); unless other criteria are agreed upon between the County and agencies.



# CHAPTER 2: HISTORY, ECONOMICS, AND SOCIOECONOMICS

## 2.1 COUNTY OVERVIEW, ECONOMICS, AND SOCIOECONOMICS

### 2.1.A Overview of Geographical Area

Mesa County is located along the western border of Colorado (CO) and is bordered by Delta County, CO to southeast, Garfield County, CO to the north, Grand County, Utah (UT) to the west, Gunnison County, CO to the east, Montrose County, CO to the south, and Pitkin County, CO to the east (Figure 1).

Mesa County is named for the large mesas within the County, most notably the Grand Mesa, which is the largest flat top mountain in the world spanning approximately 500 square miles and rising over 11,000 feet above sea level (Mesa County, Colorado | Map, History and Towns in Mesa, CO, n.d.). The Book Cliffs are a series of desert mountains and cliffs that span nearly 200 miles from east to west beginning where the Colorado River descends south through De Beque Canyon into the Grand Valley near Palisade to Price Canyon in Utah. The Colorado portion of the Book Cliffs had significant coal resources that were important to building the historic economy of Mesa County. (Kiefer, n.d.)

Mesa County is well known for its fruit orchards, wineries, and vast recreational opportunities, including the Colorado National Monument (CNM), the Dominguez- Escalante National Conservation Area (NCA), and the McInnis Canyons NCA (Encyclopedia Staff, 2016). Mesa County is bisected by the Colorado River, and contains the confluence with its largest Colorado tributary, the Gunnison River, giving rise to the name of the city. The Colorado River is relied upon by 30 million people in the American Southwest for water resources, and Grand Junction is the largest city along its banks upstream of Yuma, Arizona.

### 2.1.B Demographics

Table 1 below shows the population and median age within Mesa County and the incorporated towns and unincorporated areas within the county. The total population of Mesa County is 154,933 and median age is 39.1 years.

Table 1. Population and median age within Mesa County’s incorporated towns and unincorporated areas.

Incorporated Town or Unincorporated Area	Total Population <sup>1</sup>	Median Age <sup>2</sup>
Collbran	711	21.1
De Beque	508	36.5
Fruita	13,567	37.7
Grand Junction	64,941	36.7
Palisade	2,787	39.4
Unincorporated Areas	72,419	39.1

<sup>1</sup>Colorado Department of Local Affairs, 2019

<sup>2</sup>Data Commons, Timelines, 2018

Between 1970 and 2018, the population in Mesa County increased by 181.2% due to the diversity of employment opportunities within the county. Mesa County had the largest percent change in population in the U.S. during this time period. (Economic Profile System, 2020)

The county seat is Grand Junction, the largest city between Denver and Salt Lake City, which serves as a hub for commerce, health services, higher education, transportation, and recreation for western Colorado and eastern Utah. The next largest communities are the city of Fruita and the incorporated towns of Palisade, Collbran and De Beque. The most densely populated urban area outside of Grand Junction includes unincorporated Clifton, the Redlands, and Orchard Mesa. The rest of unincorporated Mesa County is sparsely populated with residents concentrated within the rural communities of Gateway, Whitewater, Molina, Glade Park, Mesa, Loma, and Mack.



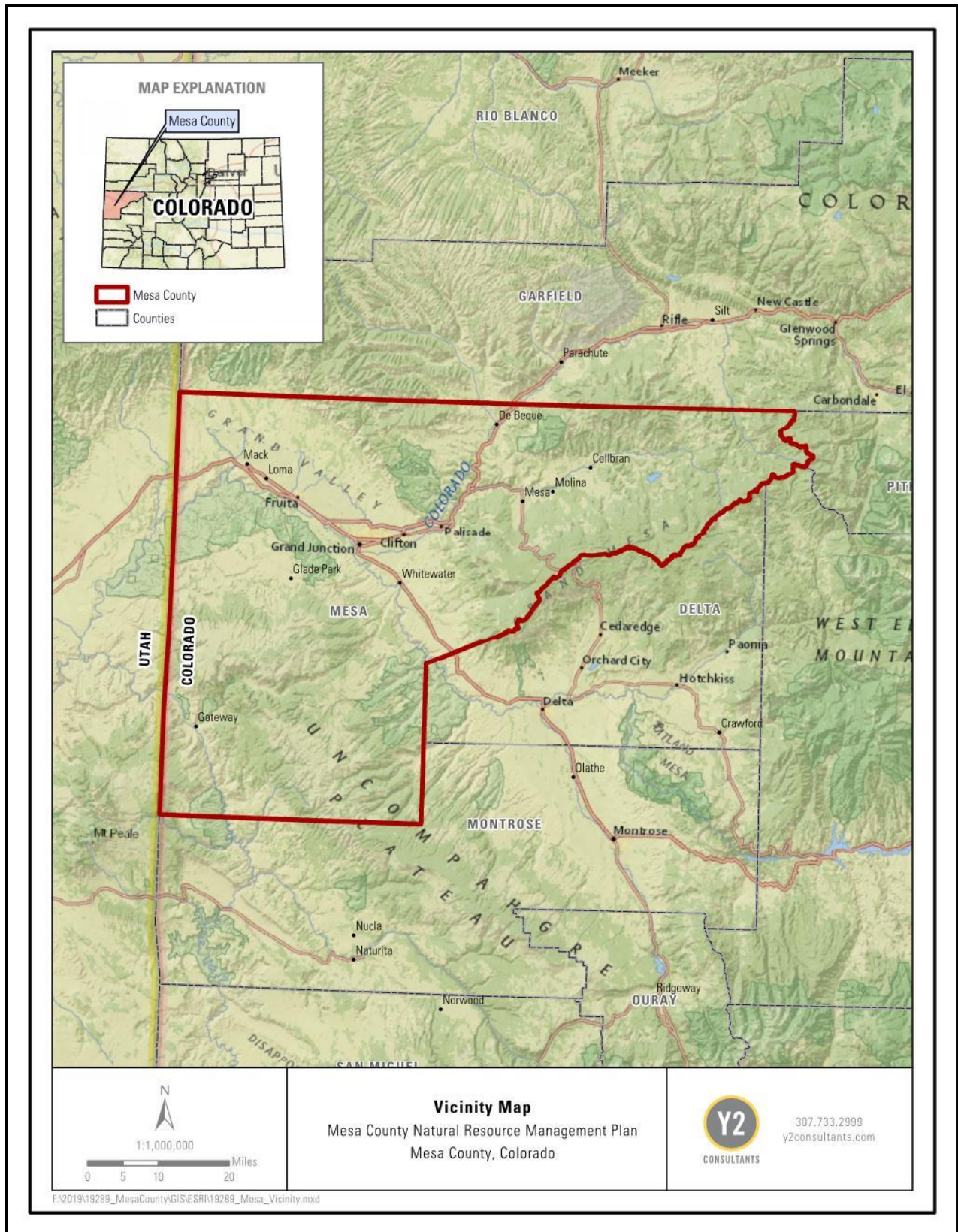


Figure 1. Mesa County vicinity map (USGS, 2020).

## 2.1.C Socioeconomic and Economic Viability

In January 2020, the unemployment rate in Mesa County was 4.1%. However, due to the novel coronavirus (COVID-19), the April 2020 unemployment rate rose to 12.6%. The median household income in Mesa County was \$51,970, and 16% of the population lives below the poverty line. (US Census Bureau, n.d.); 90% of the County has a high school degree or higher. Prior to January 2020, Mesa County had seen a relatively low unemployment rate.

The major economic sectors in Mesa County include: Agriculture, Food and Beverage, Aviation and Aerospace, Energy and Renewables, Information and Technology, Healthcare, and Outdoor Recreation. For several decades, Mesa County relied heavily on the boom and bust cycle of the uranium, oil shale, and natural gas industries, which made for a volatile economy. When these resources were in demand and prices were up, the increased production boosted income and populations within the County. When prices would bust, the populations and incomes would reduce.

Mesa County has seen significant changes in the economic structure over the past decade. The economy has diversified and has decreased reliance on the oil and gas industry and diversified to include outdoor recreation, higher education, technology, and manufacturing as components of the economy. The job centers in Mesa County are clustered along the Interstate 70 corridor and in the county seat of Grand Junction. The largest employers in the County are health care and social services organizations with over 10,000 employees, accommodation and food services with 5,300 employees, and retail with approximately 4,900 employees (Grand Junction Economic Partnership, 2016b). Mesa County has become a very attractive location for remote workers who choose to live within Mesa County for the quality of life, which is strongly linked to public land access, recreational opportunities, and scenery in addition to the availability of healthcare and schools in the area.

## 2.2 CULTURAL RESOURCES

### 2.2.A History

#### *History and Archeology*

The region that is now known as Mesa County has a rich Native American history. According to the Museum of Western Colorado

*“Traces of Paleo Indians in Mesa County date to 11,000 B.C., and Archaic Indians to 8,000 B.C. Fremont Indians were here about 700 to 1200 A.D. Additionally, the Ute people occupied territory in Colorado and Utah well before Spanish padres, mountain men, and surveyors came to explore and record the region. Colorado became the Centennial State in 1876. Three years later, an Indian uprising near Meeker led to the removal of Ute Indians from the northern two-thirds of Western Colorado to reservations in Utah. White settlers arrived in Mesa County in 1881.”* (Museums of Western Colorado - History, n.d.)

During the 1600s, Spanish exploration developed what is now the Old Spanish National Historic Trail from Native American hunting trails. In 1776, the Northern Branch of this trail was traveled by the Spanish priests Escalante and Dominguez. From Santa Fe, the Northern Branch moved north through Taos, New Mexico into southern Colorado, traveling through Grand Junction and reconnecting with the main trail near Green River, Utah. While the rugged terrain was not suitable for wagons, the trail became more

frequently used through the mid-1800s for packing goods by horse and mule to the rendezvous areas and trading posts across northeastern Utah and southern Wyoming.

In the 1800s, the discovery of gold and silver brought prospectors and miners to the area. Formed by combining several neighboring counties, Mesa County was designated a county in 1883 with Grand Junction as the county seat. Mesa County began to thrive in 1887 with the construction of the Denver and Rio Grande railroads. Soon after irrigation infrastructure expanded, perpetuating the growth of the agricultural sector in the Grand Valley. (Mesa County, CO, n.d.-b)

Natural resources have always shaped Mesa County from agriculture, to energy development, to irrigation water development, to outdoor recreation. Boom and bust cycles in the energy and mining industries have occurred and shaped Mesa County into what it is today and continue to have an impact on its economy and natural resources.

The history of Mesa County has created a diverse suite of cultural resources that are valuable to Native Americans, the County's residents, and as part of the broader cultural heritage of the state and region. An extensive timeline of Mesa County history can be found [here](#).

### ***Paleontology***

A variety of fossils have been discovered in Mesa County. In prehistoric times, western Colorado was a large flood plain which supported a variety of prehistoric life (Mesa County, CO, n.d.-b). Many significant discoveries have occurred, specifically from the late Jurassic Morrison formation on Dinosaur Hill and Riggs Hill (Chenoweth, 1987). Among the more significant fossil finds are a mostly intact Apatosaurus and the earliest Brachiosaurus. Prehistoric mammal fossils have also been found in the county. The paleontological resources of Mesa County are important to tourism, recreation, and research. The Grand Valley is a hot spot for scientific discovery, and the Dinosaur Journey Museum in Fruita is a major attraction for tourists and scientists from around the world. (*Museums of Western Colorado - History*, n.d.)

## **2.2.B Resource Assessment**

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

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

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

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

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

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

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

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

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

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

Currently Mesa County has 35 sites listed in the National Register. A searchable database of National Register sites can be found [here](#).

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

### ***Paleontology***

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

- USFS – [Fossils and Paleontology](#)



- Reclamation – [Fossil Resources](#)
- USFWS – [Historic Preservation](#)
- BLM – [Paleontology](#)
- NPS – [Fossils and Paleontology](#)

### 2.2.C Resource Management Objective

- A. Cultural, historical, archeological, and paleontological resources are preserved and protected for current and future public education and enjoyment.

### 2.2.D Policy Statements

1. Cooperate with state, federal, and tribal authorities in identifying significant cultural resources (historical structures, archeological, and/or paleontological resources) in the County, make such sites known where allowed appropriately by law, and evaluate the significance of proposed land use actions and their impact on cultural resources.
2. Encourage meaningful consultation between federal agencies and the appropriate tribes to evaluate, where appropriate, the economic and cultural impacts associated with cultural resource identification and protection and weigh one against the other in a cost/benefit context based on the County's interests while considering the interests of consulted tribes and federal law.
3. Support making significant local cultural resources (historical structures, archaeological, and/or paleontological resources) available for research and education, and strongly urge the protection of those cultural resources. If necessary, the County supports tailored buffer zones determined on a case-by-case basis, in consultation with the appropriate tribes, and SHPO and should not exceed one-quarter mile in width in most circumstances.

## CHAPTER 3: RESOURCE POLICIES

### 3.1 LAND

#### 3.1.A Land Use Overview

##### *Background*

Mesa County is the fourth largest county in Colorado covering 2,138,288 acres, of which, 1,556,246 acres or 72.7% of lands are federally owned/ managed, and 3,729 acres are state lands (Economic Profile System, 2020). Table 2 below provides the acreages and percentages of land ownership/management within Mesa County and Figure 2 depicts the land ownership/management.

Table 2. Ownership/ management of lands within Mesa County (Economic Profile System, 2020).

<b>Ownership/Management</b>	<b>Acres</b>	<b>Percent (of all county acres)</b>
BLM	980,382	46%
Private Lands	577,497	27%
USFS	551,309	26%
NPS	20,486	1%
Reclamation	4,069	<1%
State	3,729	<1%
City, County, Other	816	<1%
<b>Total</b>	<b>2,138,288</b>	<b>100%</b>

There are approximately 935,000 acres of federal mineral estates identified in the BLM’s Grand Junction Field Office (GJFO) RMP open to fluid mineral leasing and geophysical exploration; 790,000 acres are BLM surface/federal minerals and 144,900 acres are private and state surface/federal fluid mineral estates (Bureau of Land Management, 2015d).

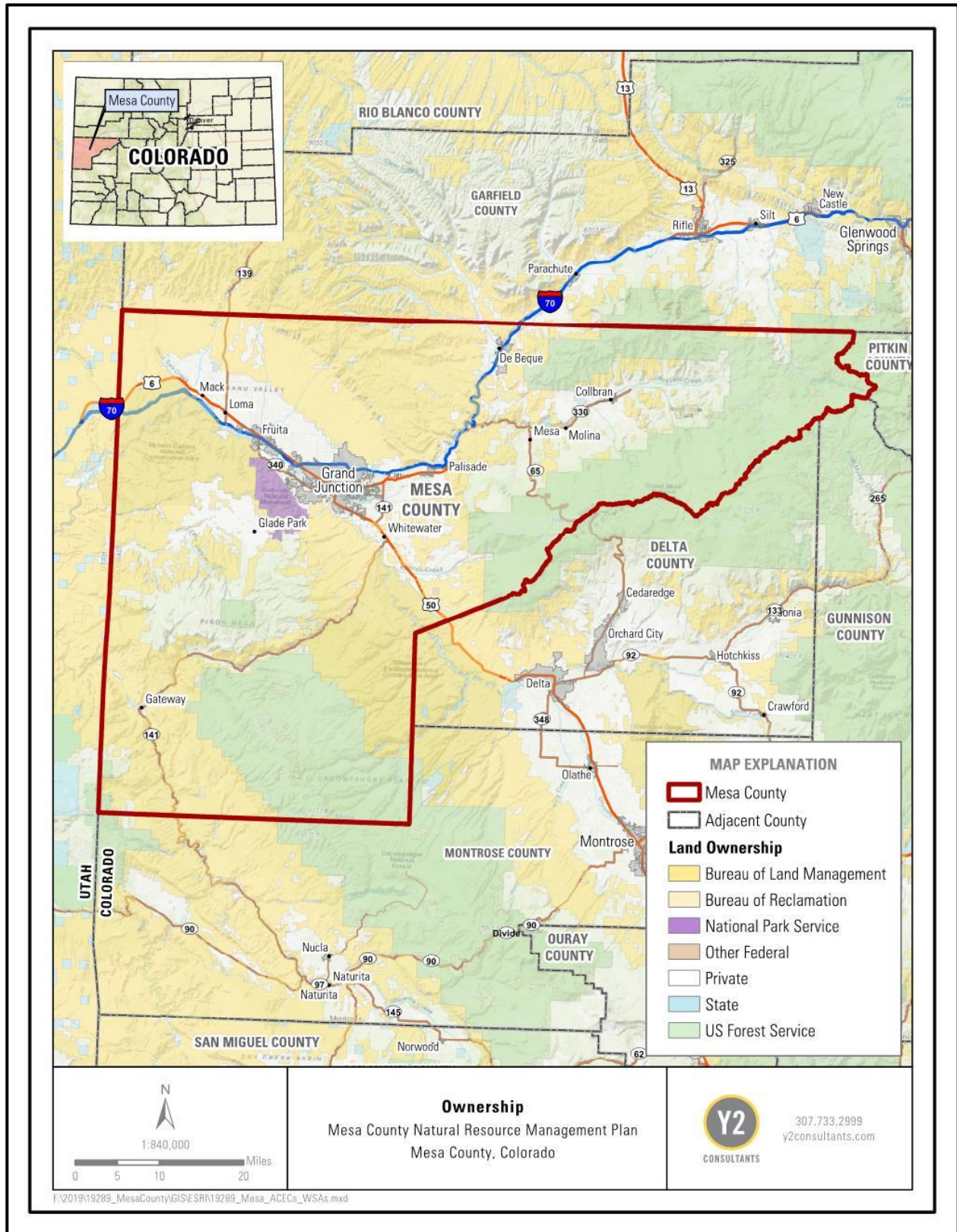


Figure 1. Mesa County land ownership and management (BLM, 2020).

## ***Bureau of Land Management (BLM)***

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

FLPMA is the BLM's governing document outlining the management responsibilities of the BLM to balance public access and multiple-uses with the protection and preservation of the quality of the lands and its resources (43 USC § 1732) (FLPMA, 1976). FLPMA requires the BLM to administer federal lands "on the basis of multiple use and sustained yield" of all resources (FLPMA, 1976).

BLM lands within Mesa County are split within the BLM's Southwest District and Upper Colorado River District and managed by the Grand Junction Field Office and the Uncompahgre Field Office. These lands include several special management areas that are further discussed below in [Section 3.1.D Special Management Areas](#). The BLM lands within Mesa County also hold the Little Book Cliffs Wild Horse Area. More information on wild horses within the County can be found in [Section 3.3.E Wild Horses, Burros, and Estray Livestock](#).

The Mesa County BOCC has had a Cooperative Planning MOU with the Grand Junction BLM Field Office since the 1980s and the 1997 MOU remains valid (Mesa County, 1997). The original MOU was instrumental in ensuring cooperative permitting for the Department of Energy's Uranium Mill Tailings Remedial Action Program (UMTRA) to move tailings from along the Colorado River in Grand Junction to the Cheney Disposal Cell on BLM land south of Whitewater. Mesa County required a Conditional Use Permit from the DOE through the MOU with the BLM for one of the largest industrial projects in Mesa County history. The old Climax Mill site has been reclaimed and is the current home of the City of Grand Junction's Las Colonias Park, a combined industrial and recreation park along the Colorado River.

## ***United States Forest Service (USFS)***

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

Responsibility for forest reserves was transferred to the Department of Agriculture with the Transfer Act of 1905 and the establishment of the USFS. The Multiple-Use Sustained-Yield Act of 1960 (MUSY) requires that forests be managed for multiple-use and sustained-yield uses including, but not limited to agriculture (farming, irrigation, and livestock grazing); recreation (motorized and non-motorized transport and other

activities such as hunting, fishing, water and land sports, hiking, etc.); industry (mining, power production, oil and gas production/exploration, and timbering); intangible values (historical and cultural sites, access to open space, aesthetic values, conservation); and invasive species control. (Multiple-Use Sustained-Yield Act of 1960, 1960). This idea was further codified in the NFMA (16 USC § 1601(d)). The Mesa County BOCC has a five-year MOU with the USFS (Mesa County, 2018).

### [National Forests in Mesa County](#)

#### ***Manti-La Sal National Forest***

The Manti-La Sal National Forest was designated in 1903 and spans approximately 1.4 million acres in southeastern Utah and approximately 5,000 acres in Mesa County. The Manti-La Sal National Forest located in Mesa County is managed by the Moab Ranger District. The current Forest Plan is from 1986 but a new plan is currently under revision. (USFS, n.d.-c)

#### ***White River National Forest***

The White River National Forest (WRNF) covers nearly 2.3 million acres and is the most visited national forest in the nation. Approximately 5,000 acres are within Mesa County. The WRNF was designated as a forest reserve in 1891, the second designation in the nation. The WRNF is managed for multiple use and has oil and gas leasing. The WRNF is managed by the Rifle Ranger District and the current Forest Plan is from 2002.

#### ***Grand Mesa, Uncompahgre, and Gunnison National Forests***

The majority of the USFS lands in Mesa County are comprised of the Grand Mesa, Uncompahgre, and Gunnison (GMUG) National Forests, managed together under the Grand Valley Ranger District in Grand Junction. The GMUG National Forests cover almost three million acres across the western slope of the Colorado Rockies, making it the largest national forest administrative unit in the Rocky Mountain Region. The most recent GMUG National Forest Land Management Plan Draft update was released in 2019.

The Grand Mesa National Forest was originally known as the Battlement Mesa Forest Reserve and was the third Forest Reserve established in the U.S., as a result of petitions from Mesa County and the State of Colorado in an effort to better manage timber harvest, livestock grazing, and water development for surrounding communities.

Designated in 1905, the Uncompahgre National Forest covers almost one million acres of western Colorado. The northern portion of the forest is located south of Grand Junction and east of Gateway along the Dominguez-Escalante National Conservation Area. (USDA Forest Service, 2019)

The Gunnison National Forest does not have lands within Mesa County but was added to the combined Grand Mesa and Uncompahgre National Forests in 1973, creating the GMUG administrative unit. Today, the GMUG is a vast and diverse landscape that supports habitat and sustains biodiversity in the region. These forests also provide important water, timber, and grazing resources. These areas are also known for the year-round recreation opportunities they provide. (USDA Forest Service, n.d., 2019)

### ***Bureau of Reclamation (RECLAMATION)***

The United States Reclamation Service (USRS) was established in accordance with the Reclamation Act to manage U.S. water resources as part of the United States Geological Survey (USGS) in 1902. In 1907, the USRS was separated from the USGS and designated as a separate agency within the Department of the

Interior, the Bureau of Reclamation (Reclamation) (Bureau of Reclamation, 2018). Reclamation is responsible for oversight and operation of irrigation, water supply, water storage, and hydroelectric power plant generation. Reclamation was created to manage water projects and promote homesteading and economic development in the West. The mission of Reclamation is “to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public,” (Bureau of Reclamation - About Us, 2019).

Reclamation administers two projects (the Grand Valley Project and the Collbran Project and one salinity unit (Grand Valley Unit, Colorado River Basin Salinity Control Project) within Mesa County.

### [Grand Valley Irrigation Project](#)

The Grand Valley Irrigation Project was approved by the President on January 5, 1911, pursuant to the Reclamation Act of 1902, as amended. The purpose of the project was to provide additional water to the Grand Valley for agricultural irrigation, municipal and industrial purposes, and hydropower. This project is located near Grand Junction on both sides of the Colorado River. There are approximately 3,540 acres of land (225 acquired and 3,315 withdrawn) plus rights-of-way for project facilities. Water for the project comes from the Colorado River via the Grand Valley Canal. The project provides a full supply of irrigation water to about 33,368 acres and supplemental water to about 8,600 acres. Water for the Palisade Irrigation and Mesa County Irrigation Districts are delivered to their systems through the Government Highline Canal between Interstate 70 and Palisade.

There are two divisions to the project: the Gravity Division (Government Highline System) on the north side of the Colorado River and the Orchard Mesa Division on the south side of the Colorado River. Features for the Gravity Division include the Grand Valley Diversion Dam in De Beque Canyon, the 55-mile long Government Highline Canal, a pumping plant, and over 160 miles of lateral ditches. The Grand Valley Water Users Association manages the Gravity Division under contract with Reclamation. Features for the Orchard Mesa system include the Colorado River siphon, the 3.7-mile long Orchard Mesa Power Canal, a pumping station, a power plant, Orchard Mesa Canal No. 1 (15.5 miles long) and Canal No. 2 (16.1 miles long) on the south side of the river. The pumping station pumps water from the Redlands Power Canal to the two Orchard Mesa canals. The Orchard Mesa Irrigation District manages the Orchard Mesa Division under contract with Reclamation. The power plant, located about one mile south of Palisade with a capacity of 3,000 kW is currently operated by the Orchard Mesa Irrigation District.

### [Collbran Project](#)

The Collbran Project was authorized by Congress on July 3, 1952, but construction did not begin until 1957 and was finished in 1963. This project is located within north-central Mesa County. Its purpose was to provide irrigation water for farms in the Plateau Valley and hydropower for industrial and domestic purposes. There are approximately 3,460 acres of land (1,868 acquired and 1,592 withdrawn), plus additional rights-of-way for project facilities associated with this project.

The Collbran irrigation system consists of Vega Dam and Reservoir, the Southside Canal, the Park and Leon Creek feeder canals, and other associated features. The project provides full and supplemental irrigation water to 22,210 acres of farmland within the Plateau Valley. The irrigation system is managed and operated by the Collbran Conservancy District under contract with Reclamation.

Recreation at Vega Reservoir is managed by Colorado Parks and Wildlife (CPW) as Vega State Park, under a Lease Agreement with Reclamation. Recreation opportunities at Vega include fishing, boating, camping, hiking, picnicking, wildlife watching, and general sightseeing.

The Collbran hydropower generation system consists of the Upper and Lower Molina power plants, Bonham Reservoir, 15 private Grand Mesa reservoirs, and the associated pipelines, penstocks, and power lines. The power plants have a combined capacity of 13,500 kW. Water for power generation is supplied to the power plants from the 15 private reservoirs through a system of pipelines and penstocks. Bonham Reservoir acts as a forebay to the Upper Molina power plant. The owners of the private reservoirs receive replacement water through the Collbran Project's irrigation system. The power plants are operated by Reclamation's Curecanti Field Division (Montrose), while the Western Colorado Area Office (Grand Junction) operates and maintains the reservoirs, pipelines and penstocks, and manages the associated lands interests. The Western Area Power Administration manages the distribution of the power generated.

Five wildlife areas along the Colorado River were established as mitigation for the Grand Valley Unit: Horsethief Canyon State Wildlife Area, Grand Junction Wildlife Area, Orchard Mesa Wildlife Area, Colorado River Wildlife Area, and DeBeque Wildlife Area. Approximately 2,317 acres of land were acquired (1,640) or withdrawn (497) for these wildlife areas. These wildlife areas were developed and are managed to replace wildlife habitat, such as cottonwood stands, shallow wetlands, and riparian vegetation, lost due to construction of the Unit. CPW manages the Horsethief Canyon State Wildlife Area, and approximately 9 acres of the Colorado River Wildlife Area under contract with Reclamation. Reclamation manages the remainder.

### ***National Park Service (NPS)***

The National Park Service (NPS) was established by the Organic Act in 1916. At the time, there were fourteen national parks and twenty-one national monuments the NPS was developed to manage. The Preservation of Historic Sites Act of 1935, the Wilderness Act of 1964, and the Wild and Scenic Rivers Act of 1968 all contributed to the evolution of the NPS and how the agency managed park land. NEPA and the Endangered Species Act (ESA) of 1969 and 1973 increased the complexity and prevalence of science in park management. Throughout this time span, the NPS had grown to solely oversee all of the nation's parklands, this included parks previously held by the War Department, the national monuments previously managed by the USFS, and the parks which resided in Washington D.C. The National Park Omnibus Management Act of 1998 increased accountability and improved management for multiple NPS programs. This legislation required that the NPS receive authorization from Congress prior to studying potential areas for addition the National Park System (NPS, n.d.).

The Colorado National Monument (CNM) located in Mesa County was established on May 24, 1911, as a presidential proclamation by President Taft under the Antiquities Act (National Park Service, 2019b). John Otto, a prominent conservationist, built the first trails through what is now the CNM. Otto surveyed the first road, the Trail of the Serpent, which is only four miles but has fifty-two switchbacks (National Park Service, 2015). The CNM was designated for stunning scenery and geologic formations and is home to over 400 species of plants and nearly 250 animal species.

Artifacts found within the CNM suggest that there has been human activity in the area for 10,000 years. Clovis and Folsom spear points from the Paleo Indians have been found, in addition to artifacts from the Ute Indians and Fremont Indians (National Park Service, 2019a).

The CNM is 20,500 acres with over 46 miles of trails and was the second national monument established in the state of Colorado and the 17th national monument unit (National Park Service, 2019a). Since 1919, the CNM has seen almost 24 million visitors with 397,032 visitors in 2019 alone (National Park Service, 2020a). The Monument contains approximately 15,000 acres that have been proposed and recommended for wilderness protection. Mesa County has had a Cooperative Planning MOU with the NPS for many years but the latest MOU has expired and is under review to be updated. (Mesa County, 2014)

Over the years, several studies have been conducted to assess the potential of expanding the CNM boundaries and/or to change its name or status to a National Park. Management of the Monument would be unchanged as a National Park, but name recognition has been a driving consideration. A name change or status change requires Congressional action.

### ***Department of Energy (DOE)***

The Department of Energy Organization Act of 1977 created the Department of Energy (DOE). The DOE brought together two programmatic traditions (1) defense responsibilities that included the design, construction, and testing of nuclear weapons dating from the Manhattan Project effort to build the atomic bomb and (2) a loosely knit amalgamation of energy-related programs scattered throughout the Federal government. (Department of Energy, n.d.)

The DOE office in Mesa County is in Grand Junction and was located here because of its proximity to vanadium mines and their uranium-rich mill tailings, and for the area's available labor pool and employee housing. The DOE's main responsibility is regulating residual radioactive material created by the uranium mines under Title 40 CFR, Part 192, or regulated as 11(e)(2) by-product material under the Atomic Energy Act of 1989 (Public Law 83-703). Radioactive materials removed from the Grand Junction site were accepted for co-disposal with Uranium Mill Tailings Radiation Control Act residual radioactive materials. The DOE's Grand Junction Office is responsible for long-term surveillance and management at the Cheney Disposal Cell. The Cheney Disposal Cell is a dedicated disposal cell that contains all of the uranium mill tailings and other residual radioactive materials from the former Grand Junction uranium mill site. (DOE, 2020) The Mesa County BOCC has had an MOU with DOE since 1996 that provides meaningful consultation and participation of the County in the DOE's utilization of the Cheney Repository.

### ***Conservation Districts***

Mesa County has four soil conservation districts and two water conservancy districts. The four soil conservation districts are the Bookcliff Conservation District, the De Beque- Plateau Valley Conservation District, the Mesa Conservation District, and the Southside Conservation District. The two water conservancy districts are the Ute Water Conservancy District and the Collbran Water Conservancy District.

## **3.1.B Transportation**

### ***History and Culture***

The County itself relies on access to federally managed lands to fulfill its statutory mandate to protect the health, safety, and general welfare of the people within its jurisdiction; including but not limited to fire protection, search and rescue, flood control, law enforcement, economic development, and the maintenance of County improvements. Most roads on public lands were originally developed by and for the ranching and mining industries. Many of these routes are part of vast networks of roads and trails used for multiple uses and modes of transportation from hikers, bicycles, equestrians, OHVs, and motorcycles. Congress has made it clear through the natural resource statutes that the general public



must have use of and access to the federally managed lands. It is vital to the County's interests and performance of duties that reasonable and appropriate access to the federally managed lands continue.

Mesa County's transportation corridors have long serviced diverse industries. Tourists constantly travel through the County to the CNM, BLM lands, the Grand Mesa, and Uncompahgre Plateau (both located within GMUG National Forests). Interstate 70 runs across the northern portion of Mesa County from the west to the north-eastern edge of the County. US Highway 6 runs east-west parallel to Interstate 70 and US Highway 50 connects Grand Junction with Montrose, Gunnison, Pueblo, and Utah. These major highways pass through and provide access to large expanses of BLM and USFS managed lands.

## ***Resource Assessment***

### ***Agriculture***

The Taylor Grazing Act provides for the establishment, maintenance, and use of stock driveways within established grazing districts (43 U.S.C. § 316). It is vital to the sustainability of the livestock industry in Mesa County that grazing areas, and the stock trails that connect them, be open and accessible. Livestock that are trailed from one grazing area to another must have access to grazing areas in between those areas. Historical use of stock trails and grazing areas has fluctuated over the years depending on market prices and weather conditions, but the need for access availability has remained constant. [Mesa County's Master Plan](#) includes policies recognizing the importance of public lands for ranching in the successful operation of the ranching industry on private lands.

### ***Utility Corridors***

"[Section 368](#) of the [Energy Policy Act of 2005](#), Public Law 109-58 (H.R. 6), enacted August 8, 2005, directed the Secretaries of Agriculture, Commerce, Defense, Energy, and the Interior to designate under their respective authorities corridors on federal land in 11 Western States (Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming) for oil, gas, hydrogen pipelines, and electricity transmission and distribution facilities (energy corridors). The majority of Mesa County resides in Region 3, with the southeast corner falling in Region 2, of the 368 Energy Corridor. Bisecting the Grand Mesa, the corridor varies in width. (West Wide Energy Corridor, n.d.)

Section 132-133 (De Beque to Mayfield Corridor) varies in width from 2,250 feet to 10,500 feet and is designated for underground utility only. Section 32-136 (De Beque to Montrose) is 3,500 feet in Region 2 and ranges from 21,200 feet to 26,400 feet. Region 3 is designated as multi-modal for electric transmission and pipelines. Section 132-276 (De Beque- Rifle- Craig Corridor) is 3,500 feet wide and is primarily designated for electric only with the exception of multi-modal electric transmission and pipelines in a portion of the Colorado River Valley Field Office. (BLM et al., n.d.)

### ***Other Transportation***

Pipeline infrastructure plays a crucial role in the development and transmission of hydrocarbons at the national, state, and county levels. It is crucial that these avenues for transmission are allowed to thrive and develop within Mesa County and the western U.S. Pipelines offer a safe and effective means for delivering large amounts of hydrocarbons across extended distances with minimal risk for spills (Global Energy Institute, 2013). Additional information on pipelines in Mesa County can be found below in [Section 3.2.D Energy Resources](#).

Other transportation within the county includes communication towers, rights-of-way, water, power transmission, and renewable energy sites.

### [Federal Highway Administration \(FHWA\)](#)

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

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

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

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

- Federal Lands Access Program (FLAP): “...established in 23 U.S.C. 204 to improve transportation facilities that provide access to, are adjacent to, or are located within, Federal lands. The Access Program supplements state and local resources for public roads, transit systems, and other transportation facilities, with an emphasis on high-use recreation sites and economic generators.” (Office of Federal Lands Highway, 2018)
- Federal Lands Transportation Program (FLTP): “...established in 23 U.S.C. 203 to improve the transportation infrastructure owned and maintained by federal land management agencies including NPS, USFWS, USFS, BLM, U.S. Army Corps of Engineers (USACE), Reclamation, and independent Federal agencies with land and natural resource management responsibilities.” (Office of Federal Lands Highway, 2018)
- Nationally Significant Federal Lands and Tribal Projects Program (NSFLTP): “...provides funding for the construction, reconstruction, and rehabilitation of nationally significant projects within, adjacent to, or accessing Federal and tribal lands. This program provides an opportunity to address significant challenges across the nation for transportation facilities that serve Federal and tribal lands.” (Office of Federal Lands Highway, 2018)
- Emergency Relief for Federally Owned Roads (ERFO): “...established to assist Federal agencies with the repair or reconstruction of tribal transportation facilities, federal lands transportation facilities, and other federally owned roads that are open to public travel, which are found to have suffered serious damage by a natural disaster over a wide area or by a catastrophic failure.” (Office of Federal Lands Highway, 2018)

Colorado Department of Transportation (CDOT) works directly with the above programs annually to help secure funding.

### R.S. 2477

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

The grant is self-executing and an R.S. 2477 right-of-way comes into existence “automatically” when the requisite elements are met (See, *Shultz v. Dep’t of Army*, 10 F.3d 649, 655 (9<sup>th</sup> Cir. 1993)). One hundred and ten years after its enactment, R.S. 2477 was repealed with the passage FLPMA (43 U.S.C. § 1701 et seq. See, 43 U.S.C. § 932, repealed by Pub. L. No. 94-579, § 706(a), 90 STAT. 2743, 2793 (1976)). Even though FLPMA repealed R.S. 2477, FLPMA explicitly preserved any rights-of-way that existed before October 21, 1976, the date of FLPMA’s enactment (See, 43 U.S.C. § 1769(a) (stating that nothing “in this subchapter shall have the effect of terminating any right-of-way or right-of-use heretofore issued, granted, or permitted.”); see also, 43 U.S.C. § 1701, Savings Provision (a) and (h)). Therefore, R.S. 2477 rights-of-way which were perfected prior to October 21, 1976 are valid even after the repeal of R.S. 2477.

The courts have clearly established that the states have the proprietary jurisdiction over rights-of-way within their state (*Colorado v. Toll*, 268 US 228, 231 (1925)). This jurisdiction and control over rights-of-way through public lands must be actively ceded by the state (or counties as arms of the state) to the federal government or curtailed by Congress (*US v. Garfield County*, 122 F. Supp.2d 1201, 1235 (D. Utah 2000) citing *Kleppe v. New Mexico*, 426 US 529, 541-46 (1976)). Congress has yet to overturn R.S. 2477 or wrest control over the determination of what is a valid R.S. 2477 right-of-way. Thus, the question of whether an R.S. 2477 is established and the scope of the right-of-way is a matter of state law (See *U.S. v. Garfield County*, 122 F.Supp.2d at 1255; *Sierra Club v. Hodel*, 848 F.2d 1068, 1080 (10<sup>th</sup> Cir. 1988)).

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

R.S. 2477 does not give the holder a fee ownership, but an easement. However, unless otherwise specified when created, an easement is a permanent property right with a right to use and maintain until it is abandoned by the holder. In order to establish abandonment of an easement, the party asserting that the easement was abandoned must show affirmative acts manifesting an intention on the part of the owner of the dominant estate to abandon the easement. *Westland Nursing Home Inc. v. Benson*, 517 P.2d 862, 866 (Colo App. 1974). Mere nonuse of an easement, even for a long time does not constitute an abandonment. *Id.* Thus, in Colorado, an R.S. 2477 right-of-way is a property right that exists until the

holder of the right-of-way (typically the County, but sometimes a private user) manifests an intent to abandon the right.

The repeal of R.S. 2477 “froze” the scope of the R.S. 2477 right-of-way. Thus, the scope of the R.S. 2477 right-of-way is limited by the established usage of the route as of the date the repeal of the statute (*Southern Utah Wilderness Alliance v. Bureau of Land Management*, 425 F.3d 735, 746 (10<sup>th</sup> Cir. 2005, as amended 2006)). In relation to the roads at issue here, this scope would be access to, and between private land sections.

As discussed earlier, an R.S. 2477 grant is self-executing and the right-of-way comes into existence “automatically” when the requisite state law elements are met (See *Shultz v. Dep’t of Army*, 10 F.3d 649, 655 (9<sup>th</sup> Cir. 1993)). Generally, in Colorado there are two elements for a valid R.S. 2477 right-of-way. First, the road must be established by public use by those for whom it was necessary and convenient, even very limited public use (See *Leach v. Manhart*, 77 P.2d 652, 653 (Colo 1938) (stating “if the use be by only one, still it suffices”); see also Colo. Stat. § 43-2-201(e) (all roads over the public domain, whether agricultural or mineral are considered public highways)). Second, the road must have been established before the government land is withdrawn from the public domain (*Korf v. Itten*, 169 P.148 (Colo 1917)). Thus, adjudication of R.S. 2477 rights is not a prerequisite to their existence unless the agency contests the existence of the grant. In cases where the federal agency contests the existence of an R.S. 2477 right-of-way, a claim against the United States would need to be made under the Quiet Title Act (28 U.S.C.A. § 2409a). The Quiet Title Act provides that the United States may be named as a party defendant in a civil action to adjudicate a disputed title to real property in which the United States claims an interest, other than a security interest or water right (28 U.S.C.A. § 2409a(a)). In such an action, a plaintiff must demonstrate with particularity the nature of the right, title, or interest which the plaintiff claims in the real property, the circumstances under which it was acquired, and the right, title, or interest claimed by the United States (28 U.S.C.A. § 2409a(d)).

### Federal Agencies

The BLM and USFS both have specific provisions they must follow when considering the management of roads and trails, including designation of new routes or temporary or permanent closure. A requirement of these provisions, as well as general NEPA requirements, is that such activity be conducted in coordination with the County prior to such action being taken. Other Federal agencies within the county do not manage public roads within the county nor do they have travel management plans.

### ***Bureau of Land Management (BLM)***

BLM land is enjoyed by the public for numerous recreational activities, grazing, and energy development. The BLM must follow various federal laws regarding the management of transportation and travel on federally managed lands. FLPMA outlines the overarching management responsibilities of the BLM to balance public access and multiple use with the protection and preservation of the quality of the lands and its resources (FLPMA, 1976). Due to the importance of transportation when making the balance of preservation with multiple use management, the BLM must incorporate travel and transportation management decisions into all new and revised RMPs to address needs with regard to resource management and resource use goals and objectives (BLM M-1626 Travel and Transportation Management Manual, 3-1 (09/27/2016)). Travel Management Plans (TMPs) are the primary implementation-level decision documents laying out the management of BLM’s travel network and

transportation systems. All decisions made in TMPs are implementation-level decisions and should be tied to the goals, objectives, and management actions contained within the RMP.

The National Trails Systems Act defines the standards and methods by which additional trails may be added to the system including scenic, historic, and recreational trails. NEPA requires federal projects and land use decisions, including opening and closing of roads, to go through an environmental review process. The Old Spanish National Historic Trail runs through portions of Mesa County (more information on this trail can be found in [Section 3.5 Public Land Recreation](#)). The BLM is required to coordinate “resource inventory” with the County (43 USC § 1712) (Congressional Research Service, 2015; FLPMA, 1976).

The Wilderness Act of 1964 prohibits motor vehicles in wilderness areas except in emergency situations or when there is a possible management need.

Within the Mesa County portion of the GJFO there are a total of 245 miles out of 245 miles of maintained roads open to the public, there are 162 out of 167 miles of vested interest routes open, and 1,091 miles of 1,484 miles of recreational routes open to motorized use. (GJFO, 2016) The Uncompahgre Field Office 2018 RMP discusses travel management.

### ***United States Forest Service (USFS)***

It is understood that the federal definition of “roadless” means there are no road improvements present. An “improved road” is not limited to mechanically improved but includes roads made passable by regular use. The term “maintained road” is not limited to roads that are maintained annually. Rather, it refers to roads that are maintained as needed to continue their use. (U.S. Forest Service, n.d.)

The USFS is directed to coordinate the preparation of TMPs the County (36 CFR 212). “The responsible official shall coordinate with appropriate federal, state, county and other local governmental entities, and tribal governments when designating National Forest System roads, National Forest System trails, and areas on National Forest System lands pursuant to this subpart.” (36 CFR 212.53) “Designations of National Forest System roads, National Forest System trails, and areas on National Forest System lands pursuant to §212.51 may be revised as needed to meet changing conditions. Revisions of designations shall be made in accordance with the requirements for public involvement in §212.52, the requirements for coordination with governmental entities in §212.53, and the criteria in §212.55.” (36 CFR 212.54)

In 1994, the Grand Mesa National Forest issued the Grand Mesa Travel Management Plan which changed travel management on the forest from a policy of ‘travel anywhere’ to ‘travel on designated routes only’. This plan was amended in 2003 by the Grand Mesa Travel Decision that included additional routes made available to OHV motorized use. In 2010, the Grand Mesa National Forest Mechanized (Mountain Bike) Travel Restriction Environmental Assessment was completed which restricted non-motorized mechanized travel to designated routes on the Grand Mesa National Forest.

The Uncompahgre Travel Management Plan was completed in 2000. The 1986 Manti-La Sal National Forest Land and Resource Management Plan discussed travel management and this plan is currently undergoing revision. In 2015, the White River National Forest completed a travel analysis report, their current travel management plan is from 2011.

### ***United States Fish and Wildlife Service (USFWS)***

The USFWS has produced both National Long-Range Transportation (LRTs) Plans and Regional LRTs including roadway design guidelines and other guidelines when developing infrastructure through conservation lands (US Fish and Wildlife Service, 2018).

### ***National Park Service (NPS)***

The NPS created national and regional guidance for developing infrastructure on or servicing park lands. Mesa County is a part of the Intermountain Region (IMR), development in surrounding areas should take the IMR Long-Range Transportations Plan into consideration. NPS LRTs provide a planning framework, designating priority areas, and funding allocations. LRTs are updated every five years. The Intermountain Region LRT Plan was last updated in 2014. (National Park Service, 2014; NPS, 2018)

A public right-of-way exists on what is known as the East Hill of Rimrock Drive through the CNM. This is the only stretch where commercial traffic is allowed and also serves as an alternative route for residents to travel from Grand Junction to Glade Park. This right-of-way has been in conflict for many years. Local property owners and residents in Glade Park felt they had a right to use the road without paying fees, whereas the NPS was trying to impose stricter regulations on how the road was used.

### ***Resource Management Objective***

- A. Maintain and expand access, where possible, sustainable, and appropriate to federally managed lands in Mesa County for multiple use and purposes such as safety, health, welfare, commercial, and recreational opportunities.

### ***Policy Statements***

1. Support designation of all currently open trails, rights-of-ways, and roads as per adopted in the most recent Travel Management Plan as open. No road, trail, or RS 2477 right-of-way should be closed unless public safety or health demands its closing and the appropriate analysis and disclosure, in consultation with the County, is completed prior to closure. A road on federally managed lands should be closed without a full NEPA analysis.
2. Request that any planning process or activity that restricts or eliminates access to federally managed lands to notify and allow the County to initiate coordination and cooperation to resolve any potential conflicts with the County's objectives, principles, and policies, early in the process prior to taking action.
3. Designate historic stock trails as valid access routes for the purpose of trailing livestock between grazing areas in coordination with grazing permittees, the County and appropriate federal agency.
4. Roads on federally managed lands should remain open to provide for the economic benefit, use, and safety of the public. Where road closures are proposed, specific justification for the proposal should be given on a case-by-case basis, and the proposal should be discussed in coordination with Mesa County.
5. The network of roads within the boundaries of the County are necessary and essential for the health, safety, welfare, and commercial opportunities of all people within the County (BOCC 2014-75).
6. The free use of public roads and rights-of-way, which are essentially tied to the access of these resources, and for other uses set forth above, should not be encumbered or impeded by obstructions which create an unauthorized and potentially dangerous impediment to the free use

of our roadways, routes of travel, and rights-of-way and pose a clear threat to the health, safety, welfare, and economic well-being of our citizens (BOCC 2014-75).

7. The County reserves its right and responsibility to manage the public ownership of highway rights-of-way accepted pursuant to the grant offered under R.S. 2477 and under the Colorado revised Statutes (BOCC 2014-75).
8. The County supports the use of OHVs for recreational use on public roads as adopted in travel management plans through cooperation with the County. (Ordinance 12)
9. Federal land managers should properly manage water under, around, and above mapped landslides, when safe to do so, to prevent/ minimize new movement, especially where landslides could disrupt public transportation. In the event of a geologic hazard, rockfall and debris flow should also be mitigated to prevent loss of life, future damage, and transportation disruptions.

### 3.1.C Land Acquisition and Disposal

#### *History and Culture*

The extent to which the BLM, USFS, USFWS, Reclamation, and NPS have authority to acquire and dispose of land varies. The BLM has relatively broad authority for both acquiring and disposing of land under Section 205 of FLPMA. Specifically, the Secretary of the Interior is authorized to acquire, by purchase, exchange, donation, or use of eminent domain, lands or interests therein (43 U.S.C. §1715(a)). The NPS has no general authority to acquire land to create new park units or to dispose of park lands without Congressional action. The USFS authority to acquire lands is mostly limited to lands within or contiguous to the boundaries of a national forest. The USFWS has various authorities to acquire lands but no general authority to dispose of its lands. The agency frequently uses acquisition authority under the Migratory Bird Conservation Act of 1929 because of the availability of funding through the Migratory Bird Conservation Fund (Vincent et al., 2019). The acquisition and disposal authorities of these four agencies varies. In general, the acquisition authorities are designed to allow the agencies to bring into federal ownership lands that many contend could benefit from federal management. Disposal authorities generally are designed to allow agencies to convey land that is no longer needed for a federal purpose or that might be chiefly valuable for another purpose. (Vincent et al., 2019)

Reclamation's lands are "project lands." They are not "public lands" in the same sense as BLM or USFS lands. Reclamation may acquire land or land interests for a project or program as authorized by law. It is supposed to keep only the minimum amount of land necessary for the operation and maintenance of a project or program.

#### *Resource Assessment*

The Grand Junction Field Office 2015 RMP identifies acquisition of private properties or easements through purchase or exchange within or adjacent to recreation management zones, extensive recreation management areas, special recreation management areas, trails and travel management, and land tenure to enhance public access and recreation opportunities consistent with these area objectives. The RMP also identifies working with partners including Mesa County, private landowners, the Old Spanish Trail Association, and the City of Grand Junction to improve public access through acquisition of private properties or easements. Lastly it considers acquisition of stream-side and river-side parcels that contain wetland areas and/or are located in floodplain areas (100-year) as defined in Executive Order 11990, dated May 24, 1977 from willing sellers that are contained within or adjacent to federally managed land (Bureau of Land Management, 2015d). The 2015 Colorado River Valley RMP and 2020 Uncompahgre RMP

also identify acquisition of lands to enhance recreational opportunities. (Bureau of Land Management - Colorado River Valley Field Office, 2015; Bureau of Land Management- Uncompahgre Field Office, 2020)

The Grand Junction RMP also discusses disposal of federally managed land. The plan identified 10,200 acres as available for disposal through exchanges, state selections, boundary adjustments, Recreation and Public Purposes (R&PP) Act leases and patents, leases under Section 302 of FLPMA, sales under Sections 203 and 209 of FLPMA, and sales authorized by other Congressional Acts and special legislation. Lands identified for disposal must meet the criteria listed in the RMP. (Bureau of Land Management, 2015d; Bureau of Land Management - Colorado River Valley Field Office, 2015; Bureau of Land Management- Uncompahgre Field Office, 2020) The USFS, USFWS, and NPS in Mesa County do not have any lands identified for acquisition or disposal at the time this document was written.

Reclamation conducts reviews of its lands on a 5-year rotating schedule. The Grand Valley Project and the Grand Valley Salinity Unit are due for review in 2023 and the Collbran Project is due for review in 2024. If land or a land interest is determined no longer needed for project or program purposes, Reclamation is supposed to dispose of it or return it to the public domain.

### ***Resource Management Objective***

- A. Acquisition and disposal of federally managed lands are coordinated with Mesa County to ensure consistency with the Mesa County RMP.

### ***Policy Statements***

- 1. Acquisition and disposal of federal lands should be coordinated with Mesa County to ensure efficient management of federal lands.

## **3.1.D Special Management Areas**

### ***History and Culture***

The Mesa County BOCC has been involved in the designation of multiple special management areas within the County. Examples of this include BOCC's support of legislation to designate Dominguez Canyon and Sewemup Mesa as National Conservation/Wilderness areas (MCM 2001-017). The BOCC also supported the designation of the Dominguez-Escalante National Conservation Area and Dominguez Canyon Wilderness Area (MCM 2008-049). In 2009, the BOCC opposed the Hidden Gem Wilderness Proposal and has consistently, if not annually, since at least 2009 adopted resolutions opposing each successive Colorado Wilderness Act as proposed (MCM 2009-175).

Special management areas are important for the conservation and preservation of important wilderness areas and locations. Different designations can limit and may attract access to uses of these areas. For these reasons it is important that Mesa County continue to be involved in future designations that may affect the County.

### ***Resource Assessment***

There are many special management areas within Mesa County. Table 3 below lists the names of all special management lands within the County. Refer to Figures 4,5,6 and 7 for maps of the special management areas within the County. These areas are discussed in detail below.



Table 3. Special management lands in Mesa County.

<u>ACECs</u>	<u>Special Recreation Management Area</u>	<u>Extensive Recreation Management Areas</u>
<ul style="list-style-type: none"> <li>• The Palisade</li> <li>• Unaweep Seep</li> <li>• Roan and Carr Creeks</li> <li>• Juanita Arch</li> <li>• Sinbad Valley</li> <li>• Rough Canyon</li> <li>• Indian Creek</li> <li>• Atwell Gulch</li> <li>• Pyramid Rock</li> <li>• Badger Wash</li> <li>• Dolores River Riparian</li> <li>• Mt. Garfield</li> <li>• South Shale Ridge</li> </ul>	<ul style="list-style-type: none"> <li>• Bangs Canyon</li> <li>• North Fruita Desert</li> <li>• Palisade Rim</li> <li>• Grand Valley OHV</li> </ul>	<ul style="list-style-type: none"> <li>• Grand Valley Ranges</li> <li>• Gunnison River Bluffs</li> <li>• Horse Mountain</li> <li>• North Desert</li> <li>• Gateway Area</li> </ul>
<u>Scenic and Historic Byways</u>	<u>National Conservation Areas</u>	<u>Roadless Areas</u>
<ul style="list-style-type: none"> <li>• Unaweep-Tabeguache Byway</li> <li>• Dinosaur Diamond Prehistoric Highway National Scenic Byway</li> <li>• Grand Mesa Byway</li> </ul>	<ul style="list-style-type: none"> <li>• McInnis NCA</li> <li>• Dominguez-Escalante NCA</li> </ul>	<ul style="list-style-type: none"> <li>• Ute Creek</li> <li>• Campbell Point</li> <li>• Kelso Point</li> <li>• Black Point</li> <li>• Johnson Creek</li> <li>• Kannah Creek</li> <li>• Nick Mountain</li> <li>• Salt Creek</li> <li>• Priest Mountain</li> <li>• Clear Creek</li> <li>• Hightower</li> <li>• East Willow</li> <li>• Thompson Creek</li> <li>• Reno Mountain</li> <li>• Baldy Mountain</li> <li>• East Divide/Four Mile Park</li> <li>• Mamm Peak</li> <li>• Battlement Mesa</li> <li>• Housetop Mountain</li> </ul>
<u>Wilderness Study Areas</u>	<u>Wilderness Areas</u>	<u>Lands with Wilderness Characteristics</u>
<ul style="list-style-type: none"> <li>• Little Book Cliffs</li> <li>• The Palisade</li> <li>• Sewemup Mesa</li> <li>• Black Ridge Canyons</li> <li>• Black Ridge Canyons West</li> <li>• Dominguez Canyon</li> </ul>	<ul style="list-style-type: none"> <li>• Black Ridge Canyons</li> <li>• Dominguez Canyon</li> </ul>	<ul style="list-style-type: none"> <li>• Bangs Area</li> <li>• Maverick Area</li> <li>• Unaweep Area</li> </ul>

### Areas of Critical Environmental Concern

Areas of Critical Environmental Concern (ACEC) designations are BLM-managed areas “where special management attention is needed to protect important historical, cultural, and scenic values, or fish and wildlife or other natural resources” (Bureau of Land Management, 2016b). An ACEC may also be designated to protect human life and safety from natural hazards (Bureau of Land Management, 2016b). An ACEC designation must go through the NEPA land use planning process. An ACEC designation may be revisited through subsequent land use planning, revision, or amendment. ACECs may be less restrictive than other management tools such as wilderness, but they also may compete with the natural resource-based businesses that are important to the County’s economy, like tourism, grazing, and mining. There are several ACECs within Mesa County. These areas and their respective acreages are listed below in Table 4 and are depicted on Figure 4.

Table 4. Acreages of ACECs in Mesa County.

<b>Areas of Critical Environmental Concern</b>	<b>Total Acreage</b>
The Palisade	32,200 acres
Unaweeep Seep	85 acres
Roan and Carr Creeks	33,600 acres
Juanita Arch	1,600 acres
Sinbad Valley	2,400 acres
Rough Canyon	2,800 acres
Indian Creek	2,300 acres
Atwell Gulch	2,900 acres
Pyramid Rock	1,300 acres
Badger Wash	2,200 acres
Dolores River Riparian	7,400 acres
Mt. Garfield	2,400 acres
South Shale Ridge	27,800 acres

### Wilderness and Wilderness Study Areas

The Wilderness Act of 1964 established the National Wilderness Preservation System to be managed by the USFS, NPS, and the USFWS. The passage of FLPMA in 1976 added the BLM as a wilderness management authority to the Wilderness Act, which is described with four qualities. Wilderness Study Areas (WSAs) are places that have wilderness characteristics; (i.e.: untrammeled, natural, undeveloped, and outstanding opportunities for recreation) which make them eligible for future designation as wilderness (Bureau of Land Management, 2016c).

Wilderness areas must have “wilderness characteristics” as described in Section 2(c) of the Wilderness Act of 1964 (16 U.S.C.1131):

“A wilderness, in contrast with those areas where man and his works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural

conditions and which (1) generally appear to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.” (Cited directly from the 1964 Wilderness Act).

These areas are depicted below in Figure 4 and 5.

### **Wilderness Areas**

#### ***Black Ridge Canyons Wilderness***

The Black Ridge Canyons Wilderness is over 75,000 acres within the McInnis Canyons National Conservation Area. This area is known for distinctive spires and arches, massive alcoves, beautiful desert patina, and seven major red rock canyon systems (Bureau of Land Management, 2017b). The area is also habitat for mule deer, mountain lion, desert bighorn sheep, and golden and bald eagles. Hiking, horseback riding, hunting, backpacking, camping, rafting, canoeing, and kayaking are all permitted activities within this Wilderness Area.

#### ***Dominguez Canyon Wilderness***

The Dominguez Canyon Wilderness, in Mesa and Delta counties, is approximately 66,280 acres and has two major canyon systems, the Big Dominguez and the Little Dominguez (Bureau of Land Management, 2017a). The two canyons function as drainages for the northeastern portion of the Uncompahgre Plateau and join the Gunnison River.

The area is known for its outstanding geological features, scenery, ecological diversity, two mountain streams, and opportunities for solitude. The terrain is characterized by large mesas, deep red slick-rock canyons, and arroyos (Bureau of Land Management, 2017a). The area provides habitat for desert bighorn sheep, deer, elk, mountain lion, black bear, wild turkey, and chukar. The area was also protected for its cultural resources such as petroglyphs and wickiups (Bureau of Land Management, 2017a).

#### ***Colorado National Monument (CNM)***

The CNM encompasses approximately 20,000 acres, of which approximately 15,000 acres have been identified or proposed as wilderness and serve as a refuge for self-discovery, solitude, and natural quiet. The wilderness acreage is still under congressional considerations and is managed under NPS policy as a wilderness until formally designated by Congress. (NPS, 2015)

### **Wilderness Study Areas**

WSAs are established three different ways: they are identified by the wilderness review as required by Section 603 of FLPMA; they are identified during the land use planning process under Section 202 of FLPMA; or they are established by Congress. All WSAs in Mesa County were identified in the Section 603 process of FLPMA and were established in the BLM’s 1980 Colorado Wilderness Act.

Section 603(c) of the FLMPA requires that WSAs are managed to not impair their suitability for preservation as wilderness (this is referred to as the non-impairment standard) and strives to retain their primeval character and influence, without permanent improvements or human habitation (Bureau of

Land Management, 2016c). However, FLPMA also requires that mining, livestock grazing, and mineral leasing that were occurring at the time of enactment of FLPMA (e.g., grandfathered uses) continue in the manner and degree as they were being conducted in 1976. Therefore, to the extent that grazing was allowed in the wilderness study area prior to 1976, its use, specifically including grazing as existed in 1976, should be continued. Grandfathered uses are protected and may be maintained in the same manner and degree as they were being conducted on October 21, 1976, even if they impair wilderness characteristics according to *Rocky Mountain Oil and Gas Association v. Watt*, 696 F.2d 734, 749 (10th Cir. 1982). This requirement includes the authority to develop livestock related improvements (*Utah v. Andrus*, 486 F. Supp. 995 [D. Utah 1979]).

#### ***Little Book Cliffs WSA***

The Little Book Cliffs WSA is located approximately ten miles northeast of Grand Junction and encompasses approximately 29,298 acres. This WSA was designated in 1980 for scenic beauty and outstanding geological features, including natural bridges, hoodoos, and the four major canyons: Main Canyon, Coal Canyon, Cottonwood Canyon, and Spring Canyon. Most of the WSA is characterized by gently-sloping plateaus, except for the southern edge, which is dominated by the Book Cliffs (Bureau of Land Management, 2018c). Remnants of Fremont culture are also present in this WSA. This WSA generally overlaps with the Little Book Cliffs Wild Horse Area.

#### ***The Palisade WSA***

The Palisade WSA is 26,766 acres of steep cliffs and canyons located 60 miles south of Grand Junction, immediately north of Gateway. The area was designated in 1980 for The Palisade, which is a towering red-rock buttress which stands 1,700 feet above the confluence of the Dolores River and West Creek (Bureau of Land Management, 2018e). The area also contains many hoodoos, sharp cliffs, and a series of waterfalls.

#### ***Sewemup Mesa WSA***

The Sewemup Mesa WSA is located in Mesa and Montrose counties, approximately 11 miles south of Gateway. Designated in 1980, this WSA is comprised of 19,656 acres of sandstone cliffs surrounding the Sewemup Mesa. The name "Sewemup" comes from "the days of cattle rustling when the McCarty Gang burnt off and "sewed up" the cattle's rightful brands and replaced them with their own," (Bureau of Land Management, 2018d). Access to this WSA is difficult due to the steep cliffs surrounding the mesa, making this WSA one of the most pristine ecological areas in Colorado. Mesa County found this area appropriate for Wilderness designation per Resolution 2001-17.

#### ***Black Ridge Canyons WSA***

The Black Ridge Canyon WSA is adjacent to the Black Ridge Canyons Wilderness and was retained as a WSA when the Black Ridge Canyons Wilderness was designated.

#### ***Black Ridge Canyons West WSA***

The Blackridge Canyons West WSA is composed of tiny slivers of land between the 100-year high water mark of the Colorado River and the southern edge of the Colorado River. (Bureau of Land Management, 2018a). Approximately fifty of the Black Ridge Canyons West acres is in Utah.

#### ***Dominguez Canyon WSA***

The Dominguez Canyon WSA is a 3,033 acre area within the Dominguez-Escalante National Conservation Area adjacent to the Dominguez Canyon Wilderness (Bureau of Land Management, 2018b). This WSA is

primarily on Steamboat Mesa. Similar to the Black Ridge Canyons WSA, the majority of the original WSA was designated as Wilderness, with the remainder (the current WSA) retaining its WSA status.

### [Lands with Wilderness Characteristics](#)

There are three areas managed for wilderness characteristics within the GJFO. These areas include the Bangs Area (19,600 acres), the Maverick Area (17,800 acres), and the Unaweep Area (6,700 acres).

### [Scenic and Historic Byways](#)

Scenic and historic byways within Mesa County include the Grand Mesa Byway, the Unaweep-Tebequache Byway, and the Dinosaur Diamond Prehistoric Highway National Scenic Byway.

#### ***Grand Mesa Byway***

The Grand Mesa Scenic Byway (Highway 65) winds through Delta and Mesa counties and the Grand Mesa National Forest (Colorado.com, 2019). Grand Mesa Scenic Byway runs from Delta northwest through Cedaredge, past the Powderhorn Mountain Resort, Grand Mesa, and Mesa to Interstate 70 east of Palisade. The Grand Mesa Scenic Byway also extends from HWY 65 to the Lands End Observatory.

#### ***Unaweep-Tabeguache Byway***

The Unaweep-Tabeguache Byway extends from Whitewater, CO to Placerville, CO passing through the communities of Gateway, Naturita, Redvale, and Norwood. Highlights along the byway include ancient lands with dinosaur bones and minerals, the Hanging Flume, and the Driggs Mansion. (Unaweep Tabeguache Scenic & Historic Byway, 2013)

#### ***Dinosaur Diamond Prehistoric Highway National Scenic Byway***

The Dinosaur Diamond Prehistoric Highway National Scenic Byway is a 512-mile loop located in eastern Utah and western Colorado. The 154-mile segment within Colorado extends from Dinosaur, CO south to Fruita, CO and was designated the Dinosaur Diamond Scenic and Historic Byway by the Colorado Transportation Commission in 1997. The byway intersects with Interstate 70 near Grand Junction. (Prism Interpretive Services, 2016) The National Scenic Byway was designated in 2002 (Colorado Department of Transportation, n.d.).

### [Roadless Areas](#)

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

Approximately 4.2 million acres of land located within the State of Colorado are in Roadless Areas on USFS lands and 285,916 acres of roadless are in Mesa County (Figure 5). (USFS, 2016)

## ***Colorado Roadless Rule***

The Colorado Roadless Rule is a State specific rule that establishes management direction for the conservation of roadless area values and characteristics across approximately 4.2 million acres of lands located within the State of Colorado in Roadless Areas on National Forest System lands. The rule was finalized in 2012 and replaced the 2001 Roadless Rule authority over roadless areas in Colorado. (USFS, 2016) The rule prohibits tree cutting, road construction and reconstruction, and the use of linear construction zones within roadless areas, with some exceptions to the prohibitions. The exceptions address limited state-specific situations. (USFS, n.d.-b) More information on the Colorado Roadless Rule can be found in the [Key Elements of the Colorado Roadless Rule](#).

## ***Research Natural Areas (RNA)***

Research Natural Areas (RNAs) are permanently established areas on USFS lands that maintain areas of natural ecosystems and areas of special ecological significance. RNAs serve as benchmarks for monitoring and evaluating the impacts of land management practices on lands with similar ecosystems, these areas provide sites for research into how ecosystems function, particularly in areas where ecological and evolutionary processes are functioning in a relatively natural state. RNAs provide protection for biological diversity. (USFS, n.d.-a)

The 61-acre Dry Fork of Escalante RNA was established on the Uncompahgre Plateau in 1981.

## ***Wild and Scenic Rivers***

The National Wild and Scenic Rivers Systems was created in 1968 to preserve naturally, culturally, and recreationally valued rivers. Rivers are designated for the National Wild and Scenic River System by Congress or, in certain situations, the Secretary of the Interior. There are currently no rivers in Mesa County designated as wild, scenic, or recreational within the National Wild and Scenic Rivers System (National Wild and Scenic Rivers System, n.d.)

The GJFO identified 18 segments as eligible for wild and scenic in their 2009 Wild and Scenic River Eligibility Report. An eligible segment must be free flowing and possess one or more outstandingly remarkable values. Segments declared as eligible are located in the following areas: Colorado River (3 segments); Dolores River (Delores River, North Fork Mesa, Blue Creek), Dominguez Canyons and Little Dominguez (4 segments), Gunnison River (2 segments); Little Dolores River, Roan Creek and Carr Creek, Rough Canyon, Unaweep Canyon (East Creek, West Creek, North Fork West Creek, and Ute Creek) (GJFO, 2009). As of 2020, none of these segments had been classified as wild and scenic but are managed as such.

## ***Special Recreation Management Areas (SRMAs)***

Special Recreation Management Area (SRMAs) are designated to recognize unique and distinctive recreation values and are managed to promote and protect a specific set of activities, experiences, benefits, and recreation setting characteristics, which becomes the primary management focus. (Bureau of Land Management, 2015b)

SRMAs in Mesa County include Bangs Canyon (47,800 acres), North Fruita Desert (11,600 acres), Palisade Rim (2,000 acres), and Grand Valley Off-Highway Vehicle (OHV) (9,700 acres). (Bureau of Land Management, n.d.-b) These can be found in Figure 6 below.

### [Extensive Recreation Management Areas \(ERMAs\)](#)

Extensive Recreation Management Areas (ERMAs) are designated to protect existing recreation activities, recreation or visitor service programs, or demand. ERMAs are managed to sustain principal recreation activities and associated qualities and conditions, commensurate with other resource and resource uses (Bureau of Land Management, 2015b).

ERMAs in Mesa County include Grand Valley Ranges (750 acres); Gunnison River Bluffs (810 acres), adjacent to the Mesa County lands for solid waste management and provides a buffer around the landfill; Horse Mountain (5,100 acres), North Desert (107,900 acres), and Gateway (78,100 acres). The Gateway area is known for its red canyons which line the Dolores River (Bureau of Land Management, 2015c). The area is also home to two Wilderness Study Areas, historic uranium mines as well as a wide variety of recreational activities (Bureau of Land Management, n.d.-a). These ERMAs can be found on Figure 7 below.

### [National Conservation Areas \(NCA\)](#)

#### ***McInnis Canyons National Conservation Area***

McInnis Canyons National Conservation Area (NCA) is comprised of approximately 123,430 acres outside of Grand Junction (Bureau of Land Management, 2015c). The area was originally established in 2000 as Colorado Canyons NCA, but was renamed on January 1, 2005 in honor of Representative Scott McInnis by Public Law 108-400 (Bureau of Land Management, 2017b). The McInnis Canyons NCA includes the Black Ridge Canyons Wilderness, a significant portion of internationally important fossils, pictographs, petroglyphs, a portion of the Old Spanish Trail, and over 25 miles of the Colorado River (Bureau of Land Management, 2017b). This area (outside the Wilderness Area) is also known for its world-class mountain biking. Traditional land uses such as grazing continue and are guided by management to protect the values for which the NCA was established (Bureau of Land Management, 2017b). There are both motorized and non-motorized recreation zones within the McInnis Canyons National Conservation Area.

#### ***Dominguez-Escalante National Conservation Area***

Dominguez-Escalante NCA was designated in 2009 and is approximately 210,172 acres including the Dominguez Canyon Wilderness (Bureau of Land Management, 2017a). The area was protected for significant geological and paleontological resources spanning 600 million years, as well as its many cultural and historic sites, including The Old Spanish National Historic Trail. The Ute Tribe today considers much of the land within the Dominguez-Escalante NCA important to their ancestral history. The Escalante, Cottonwood, Little Dominguez, and Big Dominguez Creeks flow through the eastern Uncompahgre Plateau within the Dominguez-Escalante NCA (Bureau of Land Management, 2017a). The Gunnison River also flows through the area, supporting a myriad of recreational and wildlife resources. Unaweep Canyon, on the northern boundary of the NCA, contains globally significant geological resources. This NCA provides habitat for fifty-two protected species of animals and plants (Bureau of Land Management, 2017a).

### [Historic Trails](#)

#### **Tabeguache**

The Tabeguache Trail crosses public land for 142 miles, connecting Montrose and Grand Junction, CO. The trail begins in the Shavano Valley and weaves through the canyons, mesas, and highlands of the

Uncompahgre Plateau before ending in No Thoroughfare Canyon, a few miles west of Grand Junction. Most of the trail is on remote lands administered by BLM and USFS. (BLM, n.d.)

### Old Spanish Trail National Historic Trail

The Old Spanish National Historic Trail was designated as the 15<sup>th</sup> national trail in December 2002 and is co-administered by the BLM and NPS. It is known as the longest, most arduous, and crookedest pack mule route in America. From 1829 to 1848, traders used the trail as the most feasible path between Los Angeles and Santa Fe for traveling caravans. The trail was a trade route for woolen goods produced in New Mexico which were traded for surplus supplies of horses and mules raised in California. The northern branch of the trail ran through Mesa County (Figure 3). More information on the Old Spanish National Historic Trail can be found in the 2018 [Old Spanish National Historic Trail Recreation and Development Strategy, Mesa and Delta Counties, Colorado](#) that was put together by the BLM and NPS.

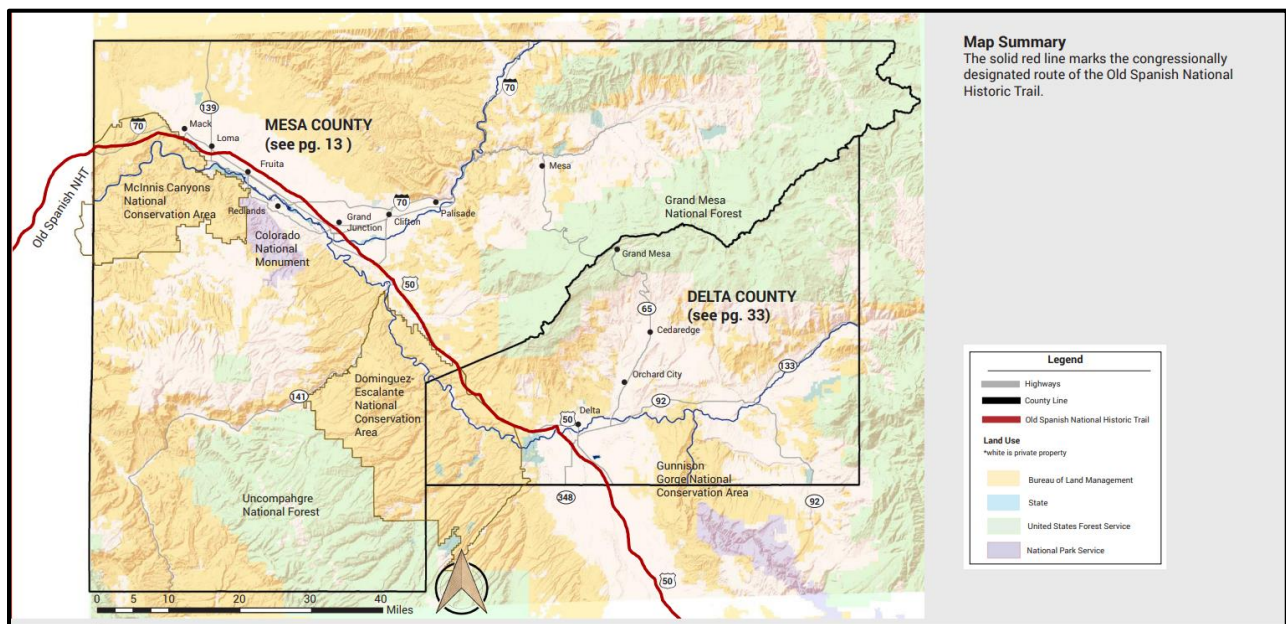


Figure 2. Map of Old Spanish National Historic Trail through Mesa County (map taken from the 2018 document *The Old Spanish National Historic Trail Recreation and Development Strategy, Mesa and Delta Counties, Colorado* by the BLM and NPS).



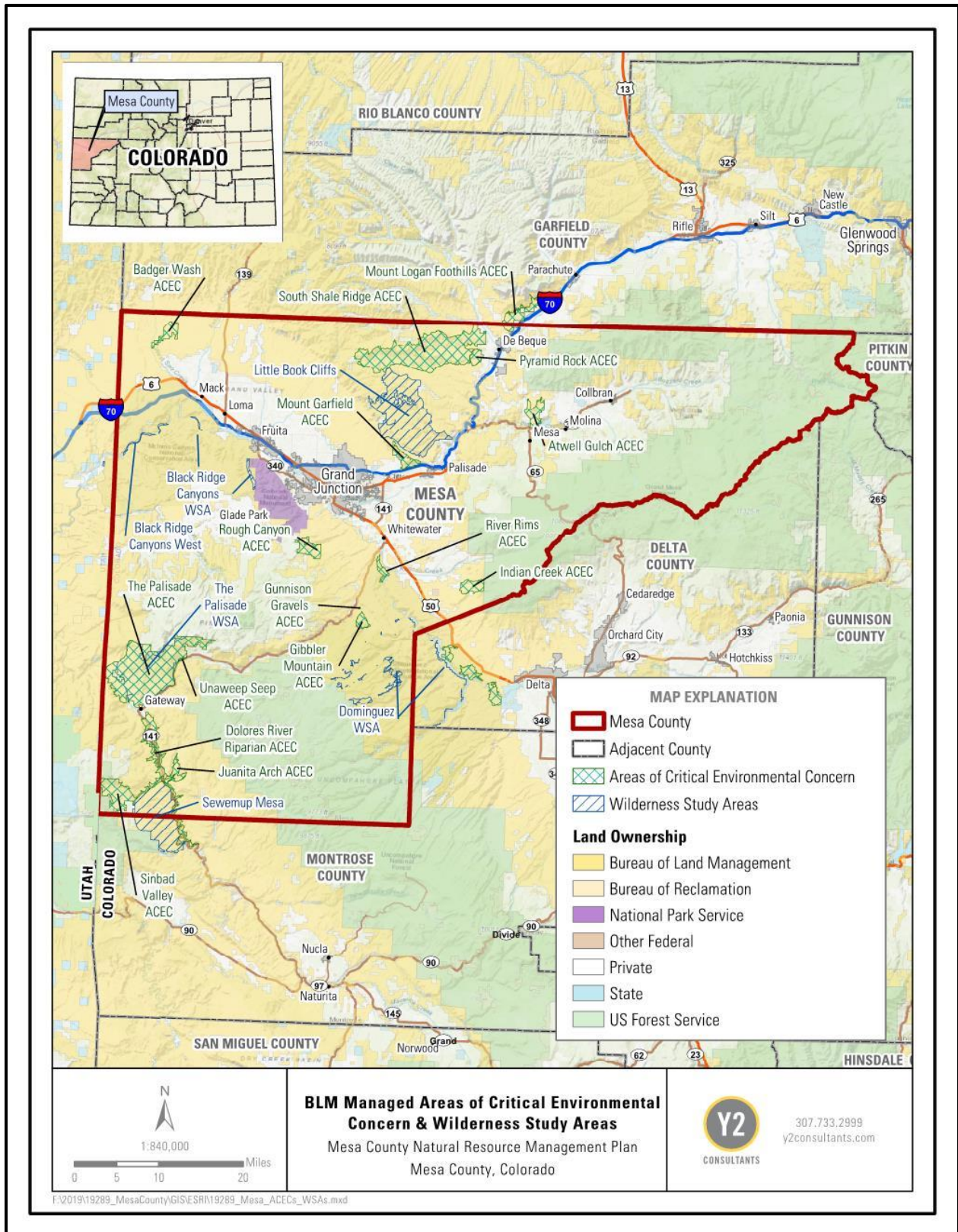


Figure 3. Map of ACECs and WSAs within Mesa County (BLM, 2020).

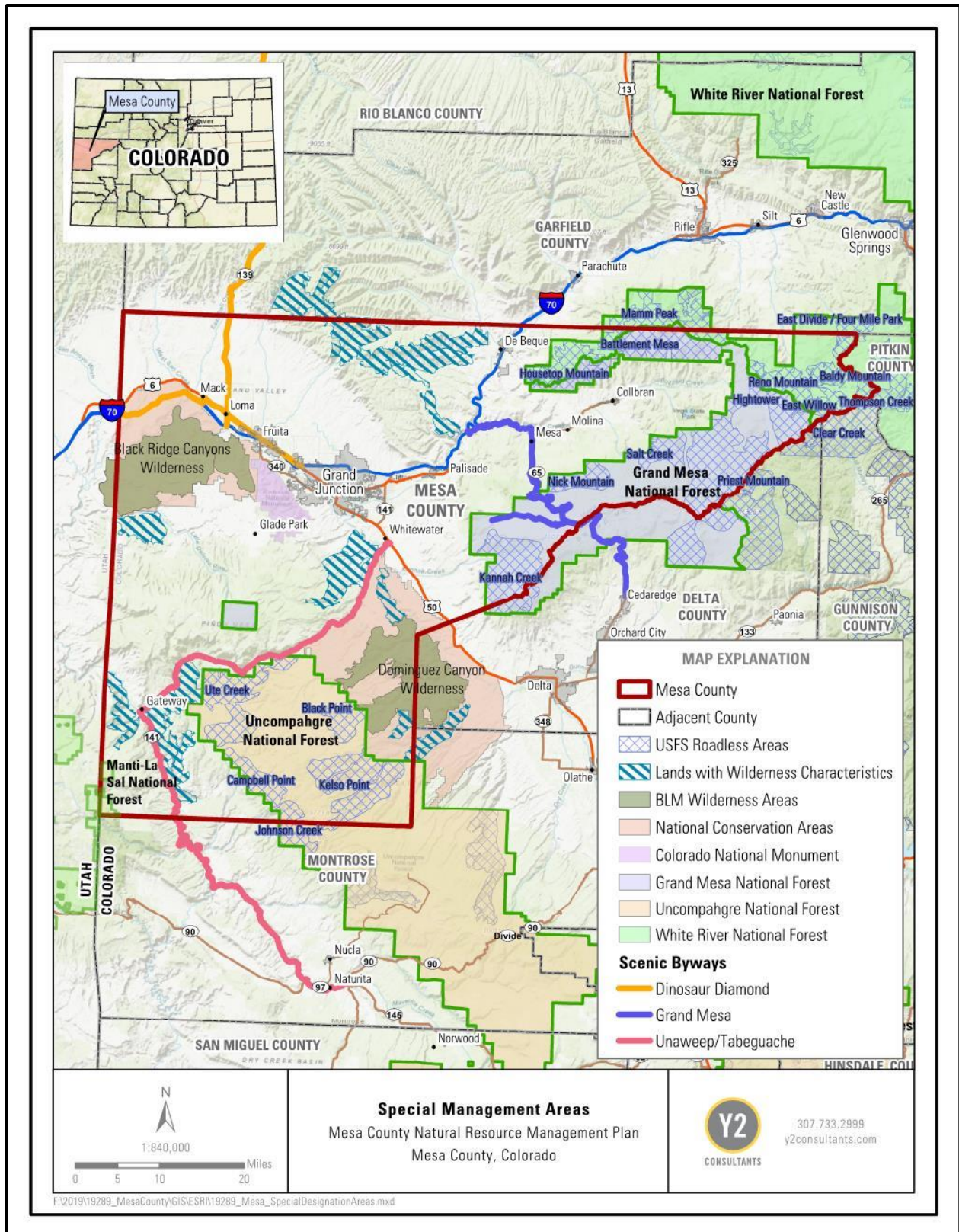


Figure 4. Special Management Areas within Mesa County (BLM, 2020; MapView, n.d.).

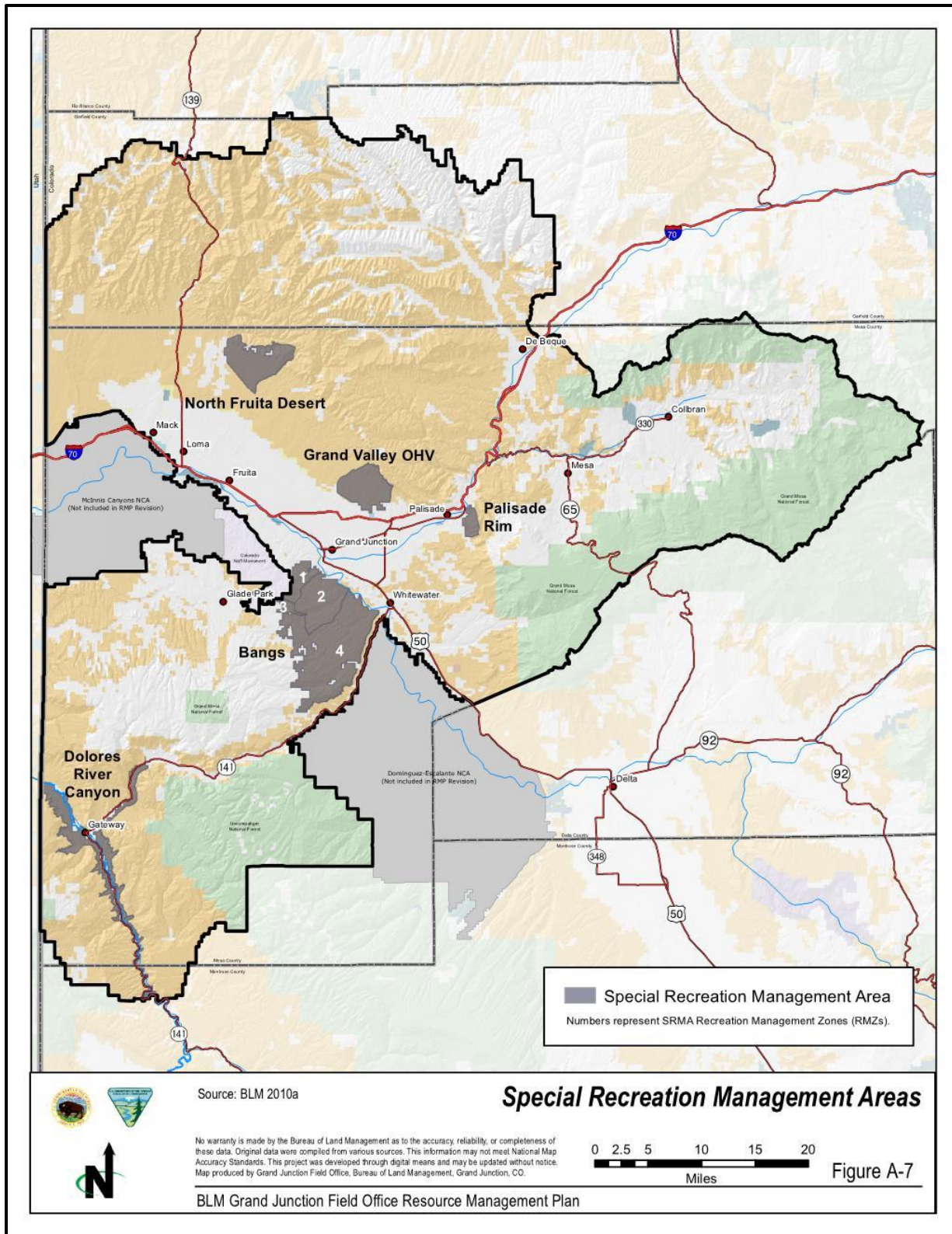


Figure 5. Special Recreation Management Areas within Mesa County (map taken from Grand Junction Field Office RMP).

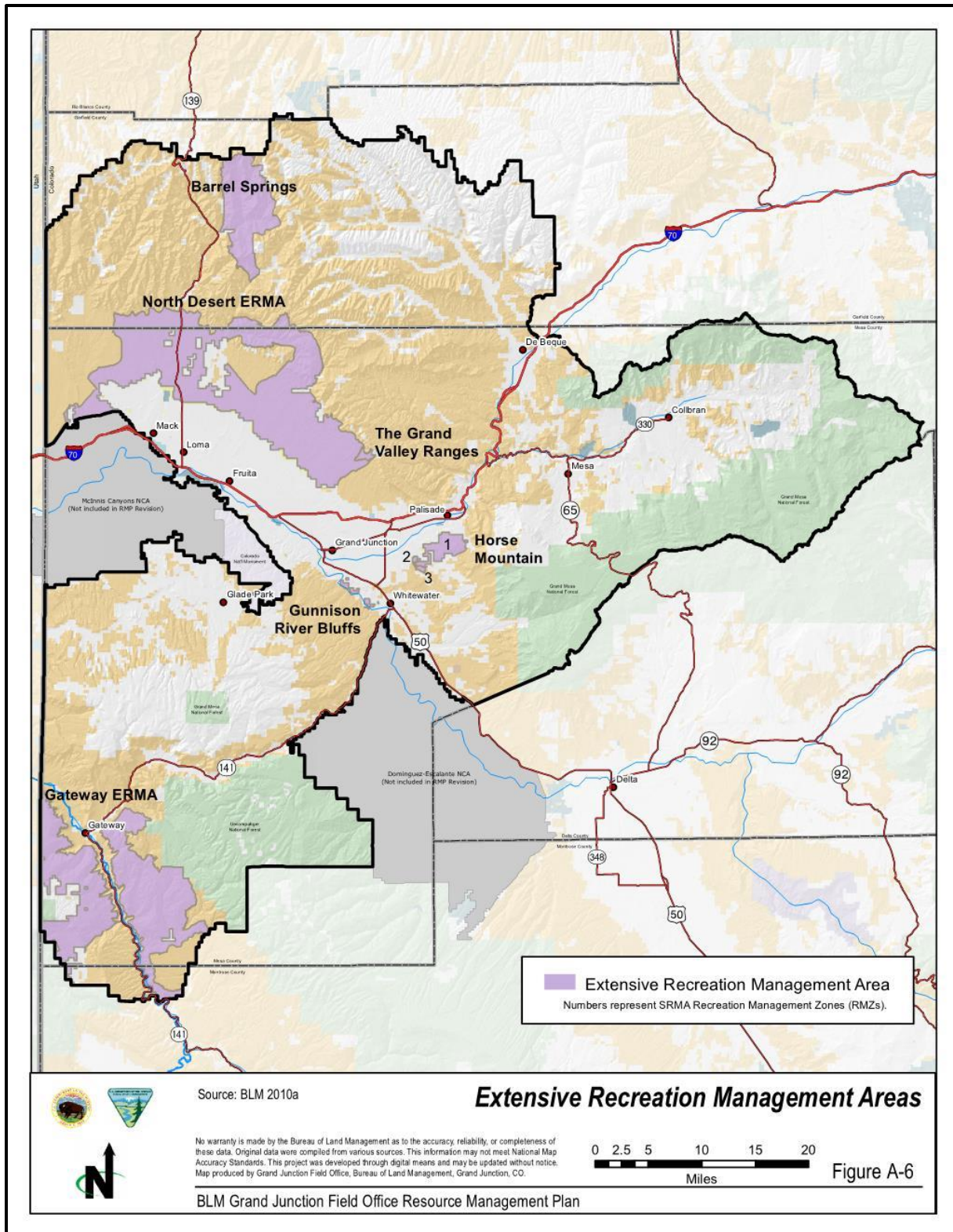


Figure 6. Extensive Recreation Management Areas in Mesa County (map taken from Grand Junction Field Office RMP).

## **Resource Management Objective**

- A. Management and designation of lands including but not limited to, ACECs, SRMAs, ERMA, Scenic and Historic Byways, NCAs, Roadless Areas, WSAs, Wilderness Areas, and LWCs are coordinated with Mesa County to provide consistency with the Mesa County RMP.

## **Policy Statements**

1. Encourage the protection and stewardship of our special management lands.
2. Management of special management areas should be coordinated with the County and consistent to the maximum degree with the Mesa County RMP.
3. Ensure that Federal agencies responsible for making wilderness recommendations to Congress comply with their respective coordination mandates when making wilderness determinations and developing wilderness inventories.
4. Fully exercise the County's rights to coordination and cooperating agency status with the proposal of any ACEC on land managed by the BLM, in accordance with FLPMA.
5. Wilderness Study Area designation by Congress should be expedited to achieve a decision. Wilderness Study Areas not designated by Congress as "wilderness" should be promptly returned to "multiple-use sustained yield" status as identified through a thorough, collaborative evaluation of appropriate management level and the underlying prescriptions from RMP.
6. Proposals for ACEC designations should strictly adhere to the relevance and importance criteria, and use credible data, in determining the need for an ACEC designation to protect the area in question and prevent irreparable damage to resources or natural systems.
7. Support the use of herbicides to control noxious weeds in wilderness areas if no alternative means for control are available.

## **3.1.E Forest Management**

### **History and Culture**

The beneficial use of forest natural resources has long been a part of Mesa County's history and economy. Early citizens relied on forest resources for timber for buildings, corrals, fences, and fuel. Logging occurred through the years on both federally managed and private lands. Mesa County recognizes that logging took place within the County as part of a historic stable timber-harvesting program. The sustainable and practical management of forest resources is important for the future health and viability of forest stands. This is especially true when managing disease or insect outbreaks. A healthy forest ecosystem provides employment and economic benefit for individuals and businesses in the County. Forest products within the county include fuel, building materials, and Christmas trees. Many of these areas are accessible by open roads that have been approved through travel management plans by the BLM and USFS.

### **Resource Assessment**

Forest types within Mesa County include conifers, aspens, pinon juniper, and gamble oak.

Over-mature, over stocked, and stagnant conifer forests with extensive ladder fuels can become problems in forests that are untreated. These stressed trees are subject to insects, disease, and fire, and may have a negative impact on carbon sequestration. Within Mesa County there have been two insect outbreaks that have affected forest health. The pinon Ips beetle (also known as the engraver beetle) has been the cause of most current pinon mortality within the county, particularly in the Glade Park and Unaweep Canyon areas. These beetles are native to forests and attack damaged or stressed trees. The outbreak is

likely caused from the ongoing drought in the area that has significantly stressed trees. (Colorado State Forest Service, n.d.) All four forests in Mesa County have been impacted by the spruce beetle outbreak and sudden aspen decline. The Colorado State Forest Service (CSFS) developed an interactive 2019 Forest Health Map that tracks outbreaks of pine beetle and other insects such as spruce beetle, Douglas-fir beetle, bark beetle, and western spruce budworm. This map can be found [here](#).

Proper forest management practices are imperative to slow down disease and insect outbreaks. In conjunction with proper management ahead of outbreaks, mitigation actions after an outbreak are necessary to reduce fuel loads, manage wildfire, and improve stand health. Forest management can have significant effects on Mesa County's economy and residents. Additional information on the national forests present in Mesa County can be found in section [3.1.A Land Use Overview](#).

### ***Resource Management Objective***

- A. Manage forests sustainably under multiple use, balancing tourism, grazing, fuels management, outdoor recreation, water development/ management, and fire rehabilitation and other uses in coordination with Mesa County.
- B. Actively manage forest to provide a sustainable timber base, reduce hazardous fuels and sustain or improve watershed values, wildlife habitat, and visual resources.

### ***Policy Statements***

- 1. Forest management should support a coordinated timber harvesting and thinning method to promote forest health, reduce disease and insect infestation, reduce wildfire impacts, and prevent waste of forest products while supporting the economy of Mesa County for future generations.
- 2. Utilize livestock grazing and fuels management (e.g., dead tree/snag removal) programs to promote forest health and reduce wildfire risk. Said management programs should be used as deemed appropriate in consultation with the County.
- 3. Promote the prompt rehabilitation of harvested areas and areas affected by wildfire.
- 4. Support salvage logging operations, when not in conflict with federal law.
- 5. Support firewood collection as a customary and an acceptable practice.
- 6. The County supports federal Payments in Lieu of Taxes (PILT) to Mesa County.
- 7. Access to forest products such as fuel, building materials, and Christmas trees should be ongoing. Access to these sites should be through open roads per approved travel management plans adopted in cooperation with the County.
- 8. Support and participate in improving rangeland health to accomplish the sustainable rangeland health consistent with appropriate RMP.
- 9. Promote the management of forest resources to enhance visual resources.

## 3.1.F Wildfire Management

### *History and Culture*

Proactive planning for response to a wildland fire event is critical to the protection of Mesa County citizen's health, safety, welfare, and private property; and forest and rangeland health. Wildfire also poses a potential loss of boundary markers of private parcels, section corners and county boundaries. A high degree of coordination between federal, state, and local agencies is necessary for maximal prevention and suppression of wildfire. However, wildfire used appropriately can be used as a tool to help manage vegetation and forest health.

### *Resource Assessment*

The Mesa County Community Wildfire Protection Plan (MCCWPP) is the designated wildfire plan for the County. Established in 2012, the plan's purpose is to "assist in protecting human life and reducing property loss due to wildfire throughout Mesa County", and to provide "recommendations to abate catastrophic wildfire and minimize its impacts to communities." The MCCWPP sets out recommendations for fuels reduction, public education, structure ignitibility reduction, and the improvement of fire response capabilities. A copy of the 2012 MCCWPP can be found [here](#).

On July 31, 2020, the Pine Gulch Fire was started by a lightning strike approximately 18 miles north of Grand Junction. The Pine Gulch Fire burned 139,007 acres and is the third largest fire in Colorado history. Refer to Figure 8 for a map of the fire history in Mesa County over the last 12 years.

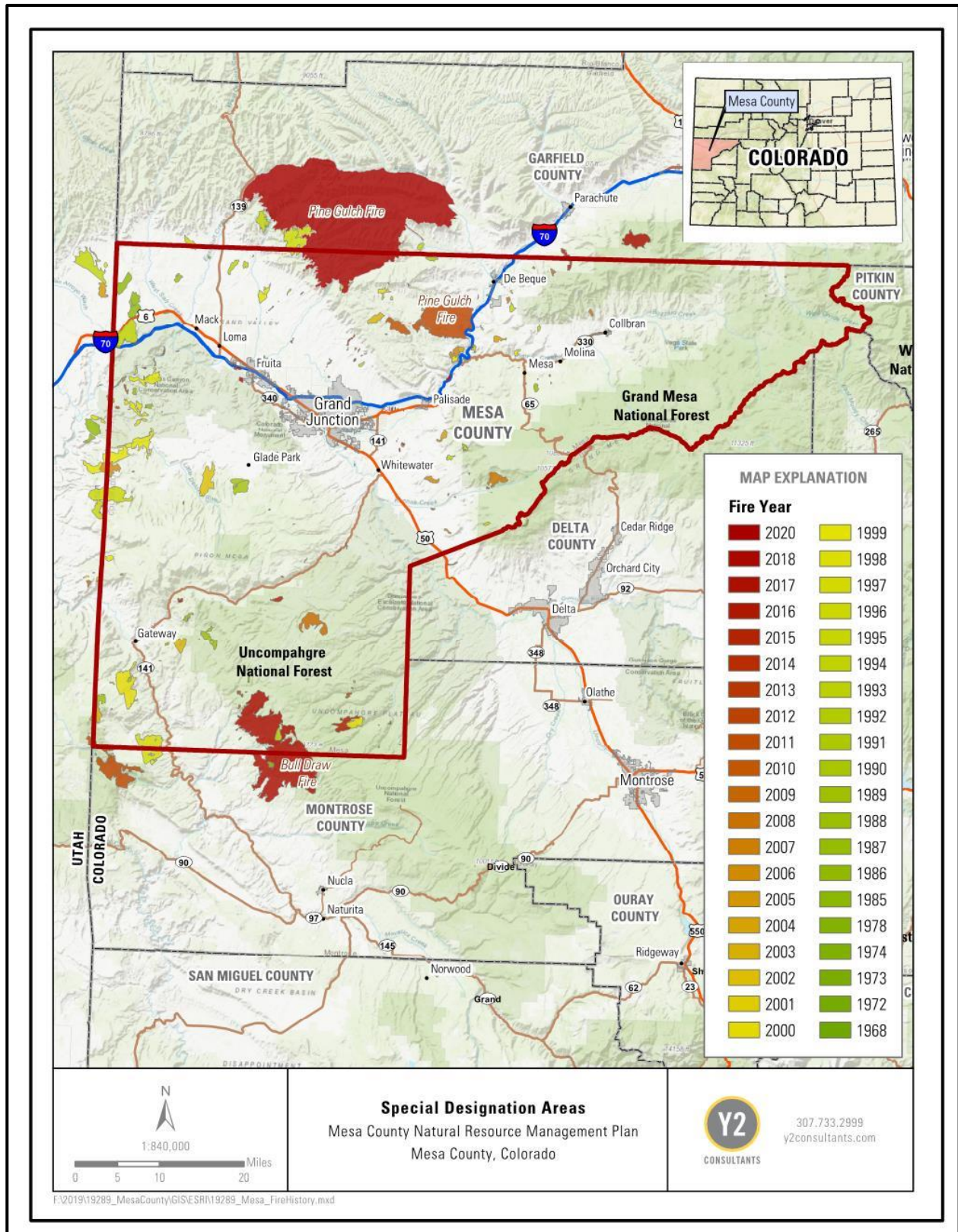


Figure 7. Mesa County fire history (Mesa County GIS, 2020).



## Resource Management Objective

- A. Wildfire, fuels, and fire rehabilitation are managed promptly and effectively using credible data, as defined above, in coordination with the County.

## Policy Statements

1. Federal agencies should coordinate with local fire agencies. The USFS should adhere to all requirements set forth in the Cooperative Forestry Assistance Act *16 USC §2106*, including:
  - i. The effective cooperative relationships between the Secretary of Agriculture and the states regarding fire prevention and control on rural lands and in rural communities shall be retained and improved;
  - ii. Efforts in fire prevention and control in rural areas shall be coordinated among federal, state and local agencies;
  - iii. In addition to providing assistance to state and local rural fire prevention and control programs, the Secretary of Interior and Agriculture should provide prompt and adequate assistance whenever a rural fire emergency overwhelms or threatens to overwhelm the firefighting capability of the affected state and rural area.
2. Federal agencies should incorporate local MCCWPP policies into their fire suppression and control plans and will support efforts of local fire departments in wildfire suppression activities.
3. Fire suppression efforts should be maximized through full coordination, communication, and cooperation between federal, state, and local fire-suppression units.
4. In the event that grazing on federally managed lands is temporarily suspended due to fire, recommence grazing on the basis of monitoring and site-specific objectives rather than solely on fixed timelines. Return livestock grazing to pre-fire levels when post-fire monitoring data shows established objectives have been met or have been achieved to an extent allowed by the site potential. Credible data as previously defined should be used to make these determinations.
5. Coordinate with other agencies to implement herbicide treatments, livestock grazing, biomass fuel removal, slash pile burning, and prescribed burning as fire control tools.
6. Support and encourage temporary fire restrictions based on fire hazard criteria to minimize the potential for human caused wildfires. Support and declare fire restrictions as appropriate in consultation with the USFS, BLM, and appropriate emergency service providers and agencies. Restrictions should be removed as soon as it is safe for work and recreation on federal lands to resume.
7. Rehabilitate forests, rangelands, and riparian areas damaged by wildfires, including reseeding, planting, and salvage logging operations as soon as possible for wildlife habitat, to reduce the potential for erosion, watershed contamination, and introduction of invasive or noxious weeds.
8. 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, collaboration processes and project implementation to economically and efficiently treat and protect the resources of Mesa County.
9. Support the Department of Interior's Secretarial Order 3336-Rangeland Fire Prevention, Management, and Restoration and require the BLM to comply with the order and all subsequent revisions, reports and instructional memos.
10. Use the BLM document *Earning Bridges: Strategies for Effective Community Relations Before, During and After Fire* to improve coordination between the BLM, state, Mesa County local fire associations and local stakeholders.

11. Support the management of invasive and noxious weeds after wildland fire events using tools including (but not limited to) livestock grazing; chemical, and other mechanical control that promote ecosystem health and as a management tool for vegetation manipulation; and fuels reduction for all federally managed lands. Prioritize the control of newly discovered populations of noxious weeds.
12. Support the use of ongoing research and experimental options for developing new and alternative treatments for the management of non-native noxious weeds after wildland fire events.
13. Conduct surveys of lands affected by fire in a timely manner following a fire to identify noxious weed presence.
14. Consultation and coordination with Mesa County is expected on proposed changes and updates to the Fire Management Plans on federally managed lands.
15. Allow for adaptive grazing management practices and include them in term permits to allow for flexible management practices that will decrease fuel loads on the landscape particularly in areas with heavy grass understory (CFR §4190.1).
16. Post-fire objectives should be consistent with site potential as defined in approved Desired Future Conditions or Ecological Site Descriptions.
17. Commit fire suppression resources only when important values are actually at risk, and when there is a reasonable chance of success.
18. Recognize that some naturally ignited wildfires can be used to improve natural resource conditions, and reduce the threat from future wildfires.

## 3.2 NATURAL RESOURCES

### 3.2.A Water

#### *Overview*

Healthy watersheds contain forests that are in good health, have minimal weed infestations, functioning riparian areas, rangelands with a variety of vegetation, and valleys that support agriculture and urban developments. Healthy watersheds also provide recreation opportunities for residents and visitors, serve cultural needs, and provide habitat for native plants, wildlife, and fisheries. The health of Mesa County's watersheds directly affects the current and future availability of quality water resources and water-dependent natural resources, as well as the ability of watersheds to adapt to climate variability, such as periods of drought or high rainfall and rain-on-snow events.

Mesa County's watersheds are diverse and dynamic. They consist of a variety of vegetation and topography, including uplands, floodplains, wetlands, channels, springs, lakes, and reservoirs. These watersheds continue to evolve under the influence of climate, floods, landslides, erosion, and human land use. A successful management strategy for Mesa County's watersheds must consider how the various watershed components and uses interrelate and influence each other from ridgeline to stream, and across adjacent watersheds. Mesa County also holds some of the most senior water rights in the State of Colorado. Refer to Figure 9 for a map of the watersheds of Mesa County and Figure 10 for a map of municipal watersheds and source water protection areas.

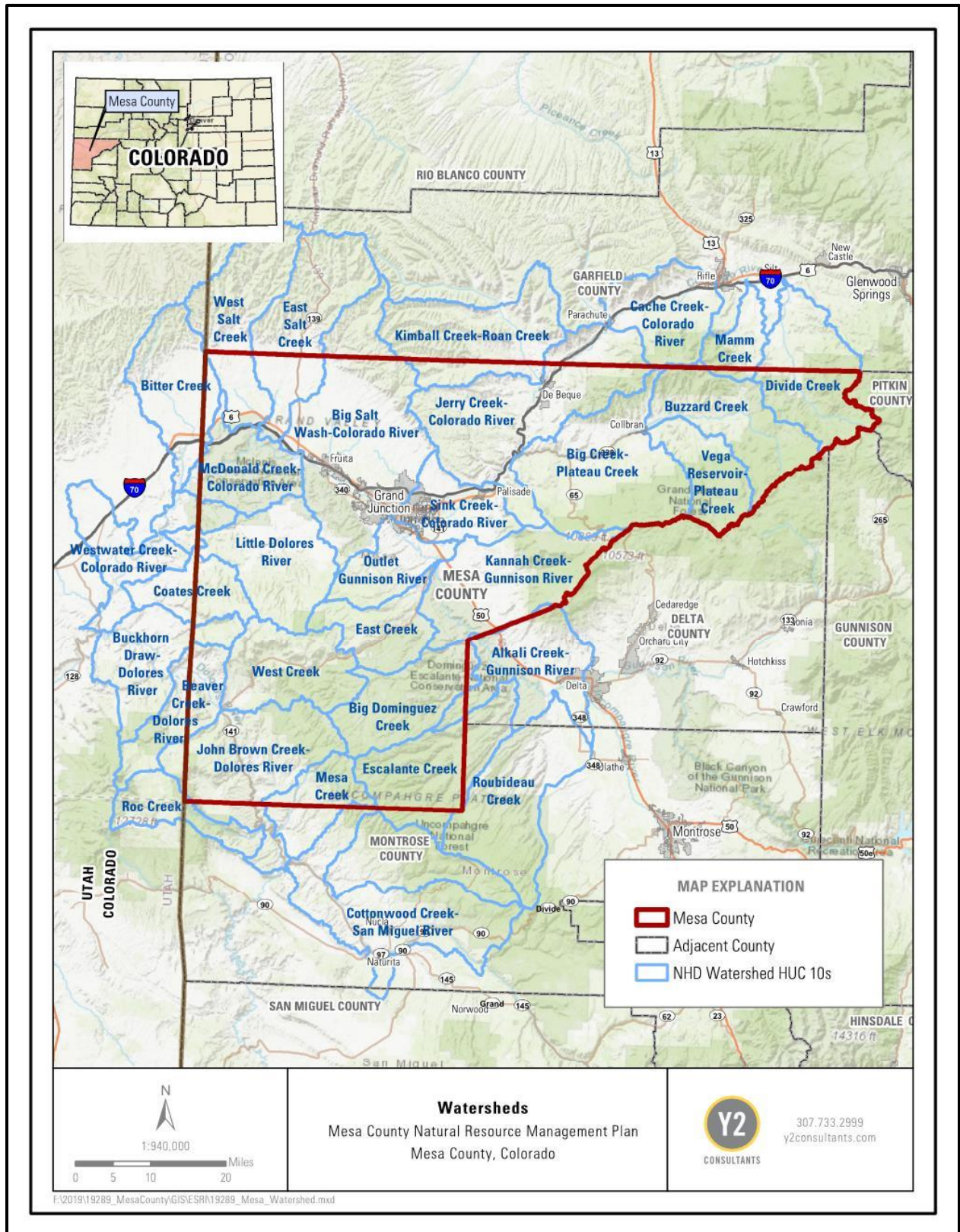


Figure 8. Mesa County watersheds (USGS, 2016).

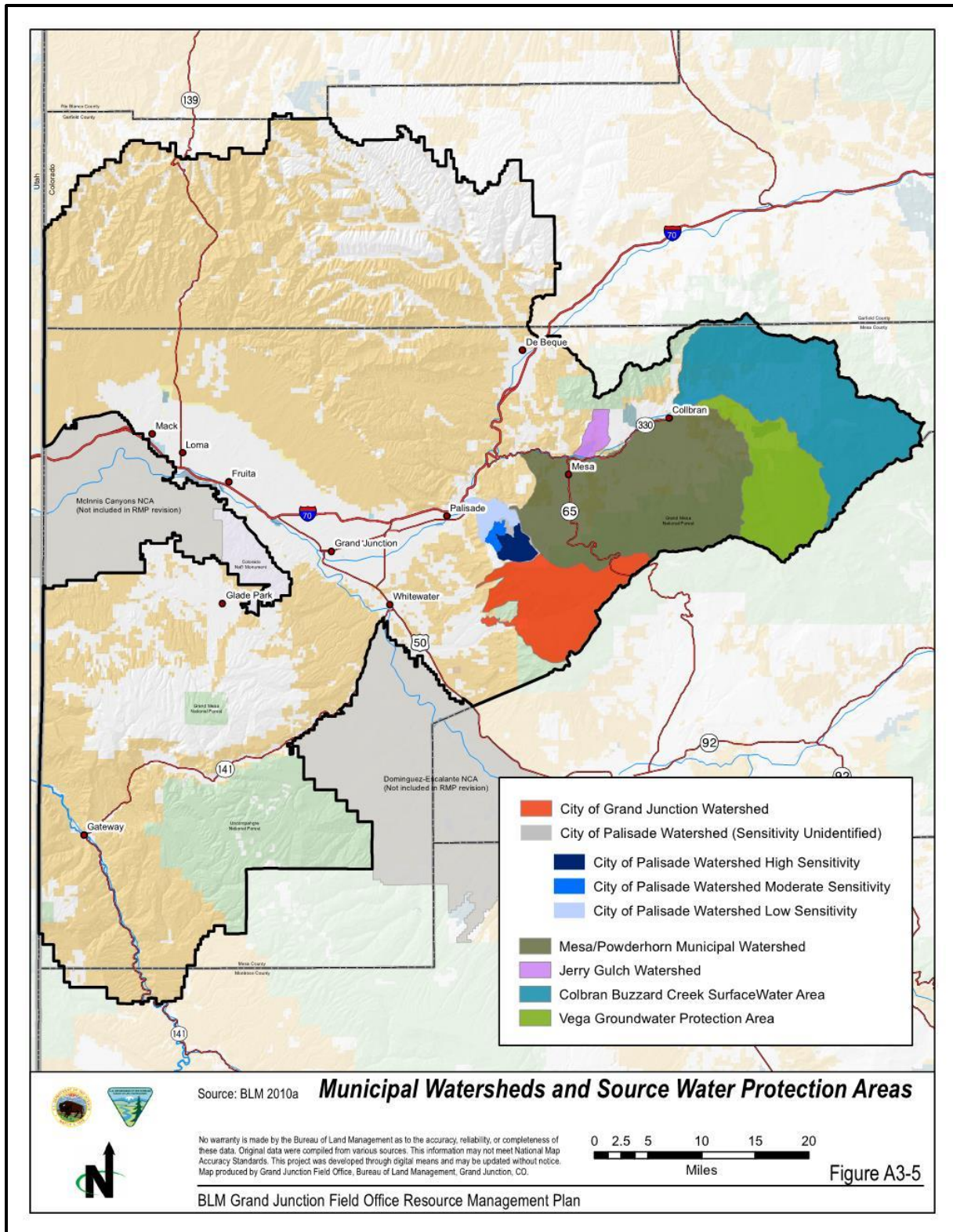


Figure 9. Municipal watersheds and source water protection areas (map taken from Grand Junction Field Office RMP).

## Storm Water

### History and Culture

Stormwater management is important to the safety and health of Mesa County communities. Unmanaged stormwater flowing from federally managed lands can cause damage to adjacent private lands.

A hazardous material dumping incident occurred in 2001 in Mesa County that involved a facility illegally discharging ethylene glycol into the Colorado River through the conveyance of a stormwater system pumping directly into the river, which resulted in a substantial killing to native aquatic life (Martsof, 2020). In 2018, Mesa County worked with the BLM to build the Bosley Wash Detention Basin north of Interstate 70 Utilizing the FEMA Hazard Mitigation Grant Program, the detention basin alleviates stormwater flooding of adjacent properties and eliminates the potential for accidents on Interstate 70 due to runoff of the road.

Mesa County was a partner in developing a Watershed Plan for the Town of Palisade and the City of Grand Junction in 2007 as a collaborative document created between many stakeholders in the area. The purpose of this plan was to identify risks, develop possible solutions, and to open a dialogue between the stakeholders for future collaboration on watershed issues. Refer to the Watershed Plan for the [Storm Water Management Plan](#) for the area and for more information. (Mesa County, Colorado et al., 2007)

In April 2020, the Mesa County Stormwater Division, through intergovernmental agreements with the City of Grand Junction, City of Fruita, and the Town of Palisade, accepted transfer of the MS4 Permit and will be responsible for implementation, administration, and enforcement of all aspects of the MS4 Stormwater Program. The Stormwater Division manages the Stormwater Program to improve the quality of runoff entering the storm sewer system and receiving streams. The program is regulated by the Clean Water Act under the National Pollutant Discharge Elimination System (NPDES) and is administered by the Colorado Department of Public Health and Environment. (Mesa County, 2020)

### Resource Assessment

Current stormwater regulations for Mesa County include Resolution BOCC 2014-14, which outlines the responsibilities of federal land managers to manage storm water flows from federally managed lands. Under the resolution, Federal agencies are directed to identify priorities for construction and repairs and provide timely financial assistance and reimbursement to local governments for the establishment of flood retention facilities and for monitoring and analysis of storm water flooding as is required under Section 313 of the Clean Water Act (CWA).

### Resource Management Objective

- A. Stormwater is managed to ensure the health, safety, and welfare of all residents within Mesa County.

### Policy Statements

1. Federal land managers should coordinate with the County regarding stormwater management.
2. In accordance with the Clean Water Act (CWA), federal land managers should provide timely financial assistance and reimbursement for stormwater management structures developed by the County.
3. Coordinate with the municipalities to develop, implement, and manage stormwater related aspects of the respective watershed plans and permit requirements.

## ***Dams and Reservoirs***

### ***History and Culture***

Dams and reservoirs are located across Mesa County and are used for various functions, including water storage for irrigation, energy generation, recreation, industrial, municipal, and flood control.

The 1956 Colorado River Storage Project Act (CRSPA) impacted the Upper Colorado River Basin by allowing for long term development and storage of water for beneficial use. The CRSPA allowed the Upper Basin States to utilize the Colorado River hydroelectric power, flood control, and increased production of arid lands (irrigation). The initial unit spanning Colorado is the Wayne N. Aspinall Unit. Subsequent regulations including NEPA in 1969, the ESA in 1973, and the 1992 Grand Canyon Protection Act (GCPA) created more restrictions regarding the dam development. Dams in Colorado that were a result of the CRSPA program include the Blue Mesa, Crystal, Morrow Point, Dallas Creek, Paonia, and Crawford Dams. (Reclamation, n.d.)

### ***Resource Assessment***

Colorado's Division of Water Resources (CDWR) maintains a dam and reservoir database. There are two active gages on reservoirs in Mesa County. (CDWR, n.d.)

#### ***Alsbury Reservoir***

The Alsbury Reservoir is located in the northeast corner of Mesa County, 2.5 miles from the northern border. The reservoir is on USFS managed land on East Divide Creek. There are two gage stations on this reservoir, one is a storage gage on the reservoir itself and the second is a discharge gage monitoring the reservoir outflow. (CDWR, n.d.)

#### ***Vega Reservoir***

The Vega Reservoir is located approximately 8 miles east of Collbran. The Vega Reservoir gage monitors the reservoir's storage. This reservoir, located on federal land, is managed by Reclamation and the recreation activities are managed by CPW. (CDWR, n.d.)

While reservoirs are scattered across the County, the highest concentration of dam safety data has been collected along the southeastern border of the County in the Grand Mesa National Forest. Mesa County Emergency Management has identified 23 dams Class I high hazard dams and 28 Class II significant hazard dams. Of the 51 dams in Mesa County, two are on BLM lands, thirty-four are on USFS land, two on Reclamation land, while the rest are on private lands. (Martsolf, 2020)

### ***Resource Management Objective***

- A. Dams and reservoirs are well maintained, accessible, and functional.
- B. Quality of all dams and reservoirs is preserved to protect life and property and developed responsibly in coordination with Mesa County.

### ***Policy Statements***

1. Mesa County should be consulted regarding federal land management decisions for their potential impact on water quality, yields, and timing of those yields; impacts on facilities such as dams, reservoirs, delivery systems, or monitoring facilities; and any other water-related concerns.
2. Support the construction of water storage.

3. Maintain the primary use of all reservoirs within the County for the purpose for which they were originally intended with the understanding that reservoirs may be repurposed for municipal use to fit the County's continued growth.

## ***Interstate Water Compacts***

### *History and Culture*

An interstate water compact is an agreement between two or more states that is approved by those states' legislators and by the U.S. Congress. An interstate compact that receives the approval of Congress counts as federal law (*Kansas v. Nebraska*, 574 U.S. 445, 455 (2015)). Colorado is party to more interstate water compacts than any other state with a total of nine interstate water compacts. Perhaps the most important interstate water compact, and one that directly affects Mesa County is the Colorado River Compact of 1922 and its subsequent agreements.

The Colorado River Compact of 1922 is an agreement among the states whose boundaries lie within the Colorado River Basin. The purpose of the agreement was to provide for the equitable division and apportionment of the use of the waters of the Colorado River System; to establish the relative importance of different beneficial uses of water, to promote interstate comity; to remove causes of present and future controversies; and to secure the expeditious agricultural and industrial development of the Colorado River Basin, the storage of its waters, and the protection of life and property from floods. Under the compact, the water of the Colorado River was divided in half; with half going to the upper basin states of Colorado, Utah, Wyoming, New Mexico, and parts of Arizona, and half to the lower basin states of California, Arizona, and Nevada. (Colorado, 2015)

The Colorado River Compact specifically protects water rights predating the compact, stating, "Present perfected rights to the beneficial use of waters of the Colorado River System are unimpaired by this compact" (Colorado River Compact Article VIII). Thus, any perfected water rights in the Colorado River system that predate November 24, 1922 are not obligated to the Colorado River Compact and cannot be required to supply any shortage if a Lower Basin makes a call on the river. In Colorado there is approximately 2.5 million-acre feet of annual consumptive use on the Colorado River System. Of the 2.5 million-acre feet of consumptive use, approximately 1.6 million-acre feet are attributable to pre-compact rights, leaving approximately 900,000 acre-feet of consumptive use subject to the Colorado River Compact. (Falen Law Office, 2020)

### *Resource Assessment*

Mesa County is highly impacted by water decisions made outside of Mesa County as much of the water allocated in the Colorado River Compact is designated to the southwestern U.S. However, there are several water rights within the county that are senior in the state.

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



In 2015, Colorado completed a statewide water plan to address an increasing population and to discuss the many uses that compete for limited water. The Gunnison Basin Roundtable was developed from a group of water managers and stakeholders charged by Colorado’s legislature with identifying and addressing local water needs. The Gunnison Basin plan reflects that agriculture is the largest use of water in the basin, and that many agricultural water uses currently experience shortages on a regular basis. (Colorado and Gunnison Basin Roundtable Education Projects | Colorado Mesa Univ., n.d.)

### Resource Management Objective

- A. To the fullest extent possible prepare the state for a potential Compact Call.
- B. Protect and improve the health and water quality of our river basins.
- C. Preserve and promote local control of planning for community development and the associated water needs.
- D. To the fullest extent possible, ensure that Federal agencies operate within existing state water law.
- E. Ensure that any future upstream water diversions protect and maintain water quality for downstream.

### Policy Statements

1. Work with other Colorado Compact states and Federal agencies on developing, funding, and implementing a long-term water augmentation program.
2. Respect existing local water supply plans, land use plans, water quality plans, and other related documents adopted by local governments.
3. Local government regulatory tools adopted to mitigate impacts of water projects should be recognized and protected.
4. Promote the use of alternative means to limit the practices of “buy and dry” of agricultural lands.
5. Promote viable storage or enlargement of in-basin water storage projects.
6. Encourage agricultural water conservation efforts by allowing net water savings to be marketed independently.
7. Protect the important role that senior agricultural water rights play in maintaining a healthy environment, endangered fish flows, and in meeting the flows of a 1922 Compact Call (i.e. Grand Valley senior irrigation water rights).

## **Water Rights**

### History and Culture

Primary provisions detailing water use, rights, and management in Colorado are found in the 1969 Water Rights and Administration Act and the 1965 Ground Water Management Act. Several of the water rights in Mesa County are some of the most senior water rights in the state. By Colorado law, all surface and groundwater belong to the public, dedicated to the use of the people of the state, subject to appropriation and use in accordance with the Colorado State Constitution (Colo. Rev. Stat. § 37-92-102). Under the state’s prior appropriation doctrine, a water right is a usufructuary right that affords its owner the right to use and enjoy a portion of the waters of the state; one does not “own” water but owns the right to use water within the limitations of this doctrine (*Grand Valley Water Users Ass’n v. Busk-Ivanhoe, Inc.*, 386 P.3d 452, 461 (Colo. 2016)). CDWR is responsible for management of these waters and protecting existing water rights and resources. (Colorado DNR, n.d.; Colorado State University, n.d.)

## Resource Assessment

Colorado is a Prior Appropriation Doctrine state, meaning that water rights are established on a “first in time, first in right” basis. Generally, to establish a water right, a water user must apply for a specified quantity of unappropriated water for a “beneficial use” (*Empire Lodge Homeowners’ Ass’n v. Moyer*, 39 P.3d 1139, 1147 (Colo. 2001)). “Beneficial use” is defined as “that amount of water that is reasonable and appropriate under reasonably efficient practices to accomplish without waste the purpose for which the appropriation is lawfully made” (Colorado Revised Statutes (C.R.S.) § 37-92-103(4)). Generally, unless agreed to in a water district or ditch agreement, water rights are separate and independent of land ownership (Colorado State University, n.d.).

## Resource Management Objective

- A. State water law and policy is supported for all waters on federally managed lands within Mesa County.

## Policy Statements

1. Placing water rights in the name of any state or federal agency when the water right is applied for and proved upon by a private individual or corporation, or as the condition of any permit, is not supported.
2. Support recognition of water rights as a private property right that may be owned separately from land.
3. Support the state of Colorado’s prior appropriation principle for water right allocation.
4. Water rights should not be acquired through exactions, including claims of beneficial use by a federal agency.
5. The reduction of water districts and senior water right holders’ allocations below historic levels is not supported.
6. Support protection of senior water right holders’ allocations.
7. Support the prohibition of water right exactions for right-of-way and ditch permits. It is the position of the County that in stream flow requirements are exactions.
8. Mesa County opposes over-reaching federal regulations on Colorado Waters; we support Colorado control of Colorado waters.
9. Federal actions impacting water quality and quantity should consider the impact to downstream water users and should not interfere with senior water rights.

## **Water Quality & Quantity**

### History and Culture

Under the federal Clean Water Act (CWA) every state must adopt water quality standards to maintain, protect, and improve the surface waters of the United States. Water quality is governed by the Colorado Water Quality Control Commission (WQCC) in the Colorado Department of Public Health and Environment (CDPHE) and the Environmental Protection Agency (EPA). The WQCC regulates both ground water and surface water following the Colorado Water Quality Control Act of 1974. Water courts may play a role in water quality when it concerns replacement water for exchanges and augmentation plans. The WQCC has a classification system for all of Colorado’s aquifers, streams, and designated uses (recreation, drinking water, agriculture, etc.). Standards and regulations are written for each designated use. (Colorado DNR, 2014a; WQCD, 2016)

Currently CDPHE has written a 10- year roadmap to occur from 2017 to 2027 for the development and revision of water quality standards across the state. (CDPHE, 2018)

There are several watershed protection plans that guide the protection of water quality within the county. These plans include:

- [Palisade and City of Grand Junction Watershed Plan](#)

There are several water districts throughout Mesa County that service water to residents in the county. The Clifton Water District was established in 1951 and encompasses approximately 10,720 acres and is bounded by 30 Road on the West, Interstate 70 to the North, 34 ½ Road on the East, and the Colorado River on the South (Clifton Water District, n.d.). The Collbran Water Conservancy District services Collbran. The Ute Water Conservancy District was established in 1956 by a decree of Mesa County Court system to supply domestic water service to the rural areas of the Grand Valley under the “Water Conservancy Act” of Colorado. The Ute Water Conservancy District encompasses approximately 260 square miles within Mesa County starting in Cameo, CO and ending near the Colorado-Utah stateline. The district supplies domestic water through nearly 900 miles of distribution lines through the areas in and around City of Grand Junction, Town of Fruita, Town of Palisade, and the unincorporated areas of Clifton, Loma, and Mack. (Ute Water Conservancy District, n.d.)

The BLM and USFS also have watershed management plans in their respective RMPs that promote healthy water quality within all watershed and water resources on the federally managed lands.

## [Resource Assessment](#)

### ***Surface Water Quality***

The Clean Water Act (CWA) is the federal regulatory mechanism that regulates surface water quality. The CWA gives the EPA and Army Corps of Engineers regulatory jurisdiction over all “navigable waters” also known as “Waters of the United States.” The CWA makes it illegal to discharge a pollutant from a point source into a navigable water unless a permit is obtained. The definitions surrounding what a “navigable water” or “Water of the United States” has been of controversy in the past several years and there is still some uncertainty as to what bodies of water constitute as Waters of the United States and what qualifies as a “point source.” From the earliest rulemaking efforts following adoption of the CWA in 1972 to the agencies’ most recent attempts to define “Waters of the United States” in 2015, the lack of a tangible statutory definition has generated hundreds of cases spanning dozens of courts to ascertain the span of the EPA’s jurisdiction (See Federal Register Vol. 85, No. 77 22255 (April 21, 2020)). On June 22, 2020, the EPA published revised CWA regulations that are intended to clarify some of the definitions and clearly set forth the jurisdictional limits of the CWA. The goal of the final regulations is to (1) include four simple categories of jurisdictional waters; (2) provide clear exclusions for many water features that traditionally have not been regulated; and (3) define terms in the regulatory text that have never been defined before. Plainly, under the new CWA regulations, (1) territorial seas and navigable waters, (2) tributaries of jurisdictional waters, (3) lakes ponds and impoundments that contribute surface water flow to a jurisdictional water in a typical year, and (4) wetlands adjacent to non-wetland jurisdictional waters all fall under the jurisdiction of the CWA. *Id.* at 2281. As of June 22, 2020, the new CWA rules are effective in all states, except for Colorado. The new rule is currently being challenged in federal court in Colorado and there is a preliminary injunction, pending resolution of the case. See *Colorado v. EPA*, Civil 20-cv-1461-WJM-NRN.

Surface waters are monitored by the Water Quality Control Division of CDPHE. The Clean Water Program (CWP) manages nonpoint source pollution, and monitors rivers, lakes, and streams. The CWP maintains a list of impaired waters per the federal CWA requirements and reports impairments to the EPA. The 303(d) listings are generally updated every two years. The most recent monitoring report was published in 2016 spanning 2012 to 2016. Monitoring reports are structured by the seven basins present in the state. Mesa County spans three basins, the Colorado, the Gunnison, and Lower Dolores River Basin and the Lower Colorado Basin. Almost 44% of the water leaving the state exits Colorado via the Colorado River Basin. (CDPHE, 2020)

In addition to the CDPHE monitoring, the USGS maintains monitoring sites across the Colorado River Basin. These sites collect data concerning climate, surface and groundwater quality, and water quantity data. This data is viewable by the public on the USGS Colorado Water Science Center [website](#). (USGS, n.d.)

### ***Groundwater Quality***

Groundwater quality depends on several factors including distance from recharge source, type of rock and soil at recharge, and distance traveled. Generally, shallow groundwater has better quality than deeper aquifers. Alluvial aquifers can clean and filter groundwater that pass through the accumulated sand and gravel. There is abundant groundwater in bedrock aquifers that underly most of the County and flow paths may or may not conform to surface watershed boundaries.

The WQCC Groundwater Program regulates groundwater quality and standards. Regulation 41 sets the basic groundwater standards and Regulation 42 sets the site-specific water quality classifications and standards for groundwater. There are multiple other groundwater programs and standards implemented through other agencies such as the Colorado Department of Agriculture, Division of Oil and Public Safety (DOPS), Division of Reclamation, Mining Safety (DRMS), Colorado Oil and Gas Conservation Commission (COGCC), and others. (Colorado DNR, 2014a)

### **Resource Management Objective**

- A. Sufficient water resources are available for future community growth, while protecting natural functions and ecosystems.
- B. Downstream water quality is considered and protected from upstream uses, including water conservation practices.
- C. Management practices to improve water quality are developed and implemented in coordination with the County.

### **Policy Statements**

1. Prioritize locally led efforts to monitor and improve water quality, and where feasible complete in conjunction with existing state and Federal agencies with the same mandate.
2. Federal agencies should conduct baseline water quality sampling and cataloguing of all collected data for wells (including injection wells) drilled on federally managed lands.
3. Consult with Federal agencies, area municipal water providers, and conservation districts regarding federal land management decisions for their potential impact on water quality, yields and timing of those yields; impacts on facilities such as dams, reservoirs, delivery systems, or monitoring facilities; and any other water-related proposal.
4. Any action, or lack of action or permitted use that results in a significant or long- term decrease in water quality or quantity is not supported.

5. Support implementation of land management actions and practices that contribute to or maintain healthy drainages and watersheds.
6. Encourage good management and maintenance of watersheds to retain and slowly release water for desired plant, animal, and human uses, and to reduce the risk of flash floods.
7. Encourage coordination with the USFS, BLM, Reclamation, EPA, DEQ, and other relevant public agencies to ensure that management of watersheds, including municipal watersheds, meets the multiple needs of residents and promotes healthy forests and rangelands.
8. Support decisions and actions that comply with Colorado water laws and statutes.
9. Encourage and allow consumptive water right owners to improve water quality and water-use efficiency to provide additional water for economic development and agriculture.
10. 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 economic and socioeconomic needs and is consistent with Colorado water laws.
11. Support reclamation activities on mined lands that improve soil productivity and water quality and the function of streams channels, floodplains and wetlands for better productivity.
12. Support construction and management of roads, bridges, culverts, cut slopes, fill slopes, and artificial surfaces to minimize water concentration, erosion, and delivery of polluted water and sediment to streams.
13. Implement land use improvements and practices, which promote healthy drainages and watersheds.
14. Request Federal agencies to create and/or implement watershed Best Management Practices (BMPs) to mitigate water pollution caused by heavy erosion and sedimentation from federal lands under their management, and to work with local conservation districts in accomplishing these BMPs.
15. When considering water conservation practices, all Federal agencies should consider the negative impacts to downstream water quality and if the negative downstream quality impacts outweigh the upstream conservation benefit, the agency should either forego those conservation practices or develop alternative conservation practices that will lessen the harm to downstream water quality.

## ***Flood Plains***

### ***History and Culture***

Floodplains play an important ecological role in the quality of watersheds throughout Mesa County. Floodplains naturally recharge groundwater, maintain stream bank stability, and filter sediments and nutrients from rivers and streams. Floodplains can also create deep nutrient rich soils over time. However, the development of these floodplains for agriculture and infrastructure can result in significant flood risk to the residents of Mesa County.

### ***Federal Emergency Management Agency (FEMA)***

Multiple communities within Mesa County participate in the National Flood Insurance Program (NFIP). At the time this document was written these include Collbran, De Beque, Fruita, Grand Junction, and Palisade. Communities that participate in NFIP, and implement the floodplain management regulations, are eligible for the FEMA Community Assistance Program- State Support Services (CAP-SSE) (FEMA, n.d.-a). The CAP-SSE provides support and funding for strategic planning, ordinance assistance, technical assistance, mapping coordination, state program, agency coordination assistance, and general outreach

and training (FEMA, n.d.-a). Where CAP-SSE provides general preparedness funding, planning, and management, the Risk Mapping and Assessment Planning (Risk MAP) projects develop high quality maps and data to assess the factors contributing to increased risk of flooding in an area, and then develops plans to reduce risk (FEMA, n.d.-d). There are currently active and completed Risk MAP projects within Mesa County (FEMA, n.d.-c). For more information on flood hazard mapping within Mesa County refer to FEMA’s National Flood Hazard Layer (NFHL) [viewer](#) (FEMA, n.d.-b).

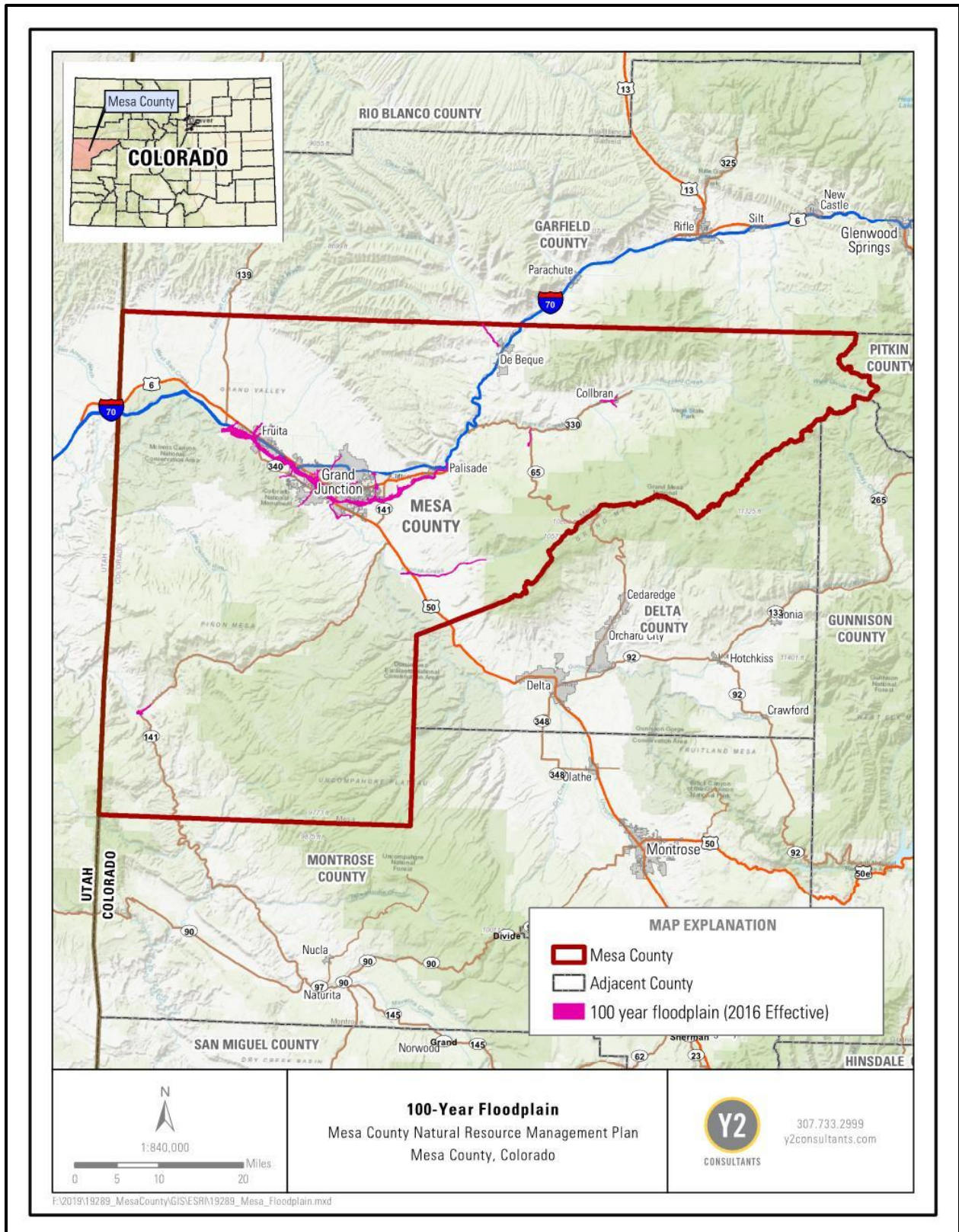


Figure 10. One hundred year floodplains within Mesa County (Colorado Information Marketplace, 2016).

### Resource Assessment

There are 10,460 acres of floodplains in Mesa County. Flood and floodplain management are important to the safety, economy, and ecological health of Mesa County. Flooding is a significant natural hazard within the County and can cause extensive damage. The Colorado River, Plateau Creek, and Buzzard Creek all pose flood risks to multiple communities within Mesa County. Additional information and FEMA floodplain maps for Mesa County can be found on the Mesa County Floodplain Maps (Figure 11). (Mesa County, n.d.-a, n.d.-b)

### Resource Management Objective

- A. Floodplains are managed to ensure the health, safety, and welfare of all residents within the County and to promote ecological health of watersheds.

### Policy Statements

1. Support projects and encourage policies which manage storm water, run-off, and flooding on federally managed lands.
2. The County should be consulted where flooding and stormwater run-off could impact the County.

## **Rivers and Streams**

### History and Culture

Surface water resources are ecologically and economically important to multiple industries in Mesa County, including agriculture, oil and gas production, tourism, and recreation. There are approximately 105,344 miles of rivers within Colorado, the majority of which originate as alpine streams in the Rocky Mountains. The state of Colorado maintains a system of monitoring sites on rivers and streams that record water quality, physical, and biological data. (Colorado DNR, 2014b, 2014c)

The Grand Valley Salinity Unit of the Colorado River Basin Salinity Control Project was authorized for construction by Title II of the Colorado River Basin Salinity Control Act of June 24, 1974 (Public Law 93-320, 88 Stat. 266), as amended by the Public Law 98-589. It is partly a modification to the Grand Valley Project to reduce salinity input to the Colorado River by piping laterals and lining canals. The purpose of the Unit was to reduce the estimated 580,000 tons of salt added to the Colorado River annually from irrigation seepage in the Grand Valley. Approximately 16 miles of the Government Highline Canal has been lined to date, and 34 miles of unlined laterals have been consolidated into 30 miles of piped laterals. Approximately 115,700 tons of salt annually from the Grand Valley Irrigation systems are kept from entering the Colorado River through the Unit.

### Resource Assessment

There are three major perennial rivers and several creeks present within the County. Major waterways include the Colorado, Gunnison, and Dolores Rivers, and Plateau and Roan Creeks. Perennial streams originating from high mountain aquifers and snowpack's are fed throughout the year and experience maximum discharge during the spring and early summer snowmelt.

#### **Colorado River**

The Colorado River enters Mesa County from the north near De Beque and flows south to Palisade, where the river turns west and flows through the center of the County and into Utah. Plateau Creek and the Gunnison River converge with the Colorado from the east and south consecutively, while the Roan Creek meets from the north at De Beque.



### ***Gunnison River***

The Gunnison River enters Mesa County from the southeast in the Dominguez-Escalante National Conservation Area. The river flows northwest to Grand Junction where it connects with the Colorado River.

### ***Dolores River***

The Dolores River is located in the southwest corner of Mesa County. The Dolores enters the county from the south and flows northwest until it crosses into Utah. The Dolores River feeds into the Colorado River approximately ten miles past the Mesa County border.

### **Resource Management Objective**

- A. Rivers, streams, and watersheds are managed to maintain water quality, protect native and recreational fisheries, and provide for recreational, agricultural and municipal needs while meeting in-stream flow requirements, and maintaining proper ecologic function.

### **Policy Statements**

1. Support management of rivers and streams to meet “in-stream” flow requirements, when adequately considering local existing and anticipated future water uses, local economic and socioeconomic needs and is consistent with Colorado water laws.
2. Support continued use of rivers and streams by all users.
3. The County should be consulted when impacts to rivers and streams are a potential outcome of a federal action or decision.
4. Support projects and policies which improve or maintain the current ecological function of rivers and streams within Mesa County.

## ***Wetlands and Riparian Areas***

### **History and Culture**

Riparian and wetland areas only make up 2% of the state, however they support a multitude of ecological services. These areas are very important to the health and quality of watersheds and their ecological function. Riparian areas are characterized by vegetation that is adapted to the wetter environments along bodies of water. These areas provide a buffer between open water and upland sites, protecting stream banks from erosion, maintaining stream channel morphology and water table access, filtering runoff sediment and nutrients, and improving stream habitat through lowering stream temperatures and increasing oxygen levels. Functional wetland areas filter sediment and nutrients, improve water quality, and play an important role in maintaining habitat. Riparian and wetland areas play large roles in a streams ability to release energy from floods onto surrounding floodplain areas, greatly reducing flood damage downstream. (CHNP, n.d.)

### **Resource Assessment**

Riparian and wetland areas are an integral part of the health and resilience of water resources within Mesa County. The Colorado Natural Heritage Program (CNHP) maintains the Colorado Wetland Information Center and the Colorado Wetland Inventory Mapping Tool tracking and wetlands across the state. In 2010, the CNHP developed the [Colorado Wetland Program Plan](#) in accordance with EPA recommendations. This plan guides the development of technical tools, data, and educational resources regarding wetlands. (CHNP, n.d.)

The Association of State Wetland Managers maintain resources regarding voluntary wetland restoration work, wetland programs, and law and policy. Federally, some wetlands are considered “Waters of the United States” and are protected under the CWA. The definition of wetlands protected under CWA have been specified further through the Supreme Court rulings in 1985 Riverside Bayview, 2003 SWANCC and 2008 Rapanos (ASWM, n.d.-a, n.d.-b). As of the writing of this plan, the EPA and Army Corps of Engineers recently published new CWA regulations that attempt to clarify what wetlands fall within the jurisdiction of the CWA. Under these newly published rules, only those wetlands adjacent to non-wetland jurisdictional waters fall under the CWA. As discussed above, the finalized rule is currently being challenged in federal court in Colorado.

The BLM and USFS are required to manage riparian and wetland areas in Proper Functioning Condition (PFC). PFC is the minimum state of resilience needed to withstand moderate flooding and make progress toward a desired condition that supports fish habitat, water quality, and wildlife needs. Riparian and wetland areas may be categorized as Non-Functioning (NF), Functioning At Risk (FAR), or PFC with upward or downward trend within a PFC assessment. (BLM, 2016b)

### Resource Management Objective

- A. Wetlands and riparian areas within Mesa County are healthy and function properly.

### Policy Statements

1. Support the management, maintenance, protection, and restoration of wetland areas to proper functioning condition.
2. Support the use of responsible grazing and vegetation management as a tool to maintain wetlands/riparian areas.
3. Manage riparian areas damaged by non-native species (i.e. salt cedar) to decrease the impact of these species on the watershed, including water quality.
4. Use appropriate methods and practices to maintain and restore riparian areas to proper functioning condition.
5. Support the use of credible data and scientific standards for wetland designation.
6. Support the agricultural, municipal, industrial, recreational, and consumptive use of water to support the local economy.

## 3.2.B Air

### *History and Culture*

Clean air in Mesa County is important to citizens and visitors. Several factors can cause air quality issues including wildfires, dust from roads and rangelands and can negatively impact air quality, mostly during drought conditions. Emissions from oil and gas development can also negatively impact air quality.

The state of Colorado has been monitoring visible air pollution statewide since the mid-1960s. Monitoring of gaseous pollutants (carbon monoxide, sulfur dioxide, oxides of nitrogen, and ozone) began in 1965 in Denver.

Passage of the Federal Clean Air Act of 1970 created National Ambient Air Quality Standards (NAAQS) as established by the EPA. Standards were established for total suspended particulate matter (TSP), carbon monoxide (CO), ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), and sulfur dioxide (SO<sub>2</sub>). Colorado submitted its first State Implementation Plan (SIP) to the EPA in 1972. The Clean Air Act amendments (1977) required submission of revised SIPs; Colorado's was submitted in 1979 after review and approval by the Colorado Air Quality Control Commission. Amendments in 1990 adjusted due dates for attainment of NAAQS.

There are several resolutions and policies established by the BOCC regarding air quality in Mesa County. These include the creation of the Grand Valley Air Quality Committee, now the Mesa County Air Quality Advisory Committee, air quality control measures, open burning control, and dust free road construction, among other policies. For additional information refer to the Mesa County BOCC resolutions and ordinances on the County website.

### *Resource Assessment*

Various factors impact the air quality and the viewshed in Mesa County including wildfire, emissions from oil and gas extraction, agricultural and residential burning including wood burning stoves, and dust from dust storms in neighboring states.

Air quality standards are met for Mesa County; ozone and fine particulates (PM 2.5) are the closest to reaching current non-attainment levels. The EPA may adjust non-attainment levels, particularly ozone, as needed. Mesa County Public Health (MCPH) recently established an open burning nuisance rule (2018-01-03) and built a robust online burn permitting system, which will help to identify the contribution of agricultural and residential seasonal burning to PM 2.5, as well as the larger PM 10. These levels are tracked through EPA standard monitoring equipment in Grand Junction by contract with CDPHE, as well as the community-sourced Purple Air Monitors at many locations throughout the County. Currently, the majority of these monitors are placed within the populated areas of the valley. MCPH should consider strategic placement of these monitors to best represent the particulate levels throughout the county and at different altitudes, in order to shape policies around burning in the county.

Regulations regarding wood stoves and wood-burning devices were established by Mesa County, the Cities of Grand Junction and Fruita, and the Town of Palisade in the mid-1990s, based on their PM 10 output.

CDPHE has conducted air toxin inventories, which should be used to identify areas of improvement and establish benchmarks to improve or maintain clean air in the county, but toxics are not our highest priority

pollutants. The potential for air polluting industries in the lower air sheds subject to inversions that can concentrate that pollution at ground level should be taken into account. CDPHE has also set some lofty greenhouse gas reduction goals that should be incorporated into the plans of local jurisdictions.

### ***Resource Management Objective***

- A. Support the promotion of clean air practices and limiting air pollution within Mesa County.

### ***Policy Statements***

1. Work with the federal, state, and local agencies to educate all stakeholders involved to develop Best Management Practices (BMP) concepts and plans to protect the air quality in the County.
2. Support the development and implementation of educational programs to provide best management practices on burning to improve air quality in the County.
3. Encourage Federal agencies to implement best management practices for forest and range management to decrease the number of wildfires.
4. Implementation of the Clean Air Act Amendments of 1990 must be balanced with policies that allow for economically viable and sustainable communities.
5. Support quantitative analysis of any reasonably foreseeable significant impacts to air quality for proposed rules, regulations and projects, including economic impacts.
6. Support consultation and coordination with the County in the development of mitigation strategies to reduce air quality impacts, particularly where National Ambient Air Quality Standards (NAAQS) are being exceeded.
7. Support consultation, coordination, and cooperation with the County when Federal agencies are developing permitting or leasing stipulations (including enforcement protocols and exceedance levels) for proposed activities that may impact air quality.
8. Federal agencies should take into consideration sources of ozone, natural and industrial or residential, and implement measures to reduce or hold ozone production to a minimum.
9. As with the open burning rule and local fire protection districts, the various governing agencies should revisit their resolutions and ordinances to bring them into alignment and take into account the higher impact of PM 2.5 pollution on health.

## 3.2.C Geology and Mineral Resources

### *Geology*

Mesa County has a rich geologic history. There are many locations throughout the county where geologic formations exist and display the history of the area. These basin, canyon, and plateau formations contain cultural, mineral, and recreational value. Figure 12 displays the geologic formations across Mesa County.

During the Paleozoic Era inland seas covered large portions of Colorado. As the Era ended and the seas receded sands were deposited over limestones. These sediment deposits formed the sandstones that make up many of the formations and canyons seen across western Colorado. Approximately 60-70 million years ago, tectonic plate collisions formed the Rocky Mountains. Following the formation of the Rocky Mountains, volcanic activity in the region forced super-heated, mineral rich water through fissures in the rock, depositing ore veins that would later become important to the development of mining in the area. The volcanic lava flows deposited basalt, creating weather-resistant caps over areas of sandstone. As time eroded the softer sandstones, these harder rock deposits maintained areas forming what are now mesas across western Colorado, including the Grand Mesa.(Benson, 2016)

### *Landslides and Unstable Slopes*

Landslides are a common landform in Mesa County because of poorly consolidated shales and mudstones that underly ridge and mesa forming sandstone and volcanic rocks. This combination can create slopes that are unstable. Management of slide areas require best management practices to mitigate damage to life and property and to minimize initiating new movement. Steep slopes within Mesa County are depicted below in Figure 13.

Landslide maps and information can be found at:

- [Colorado Geological Survey](#)
- [Geologic Mapping Program](#)

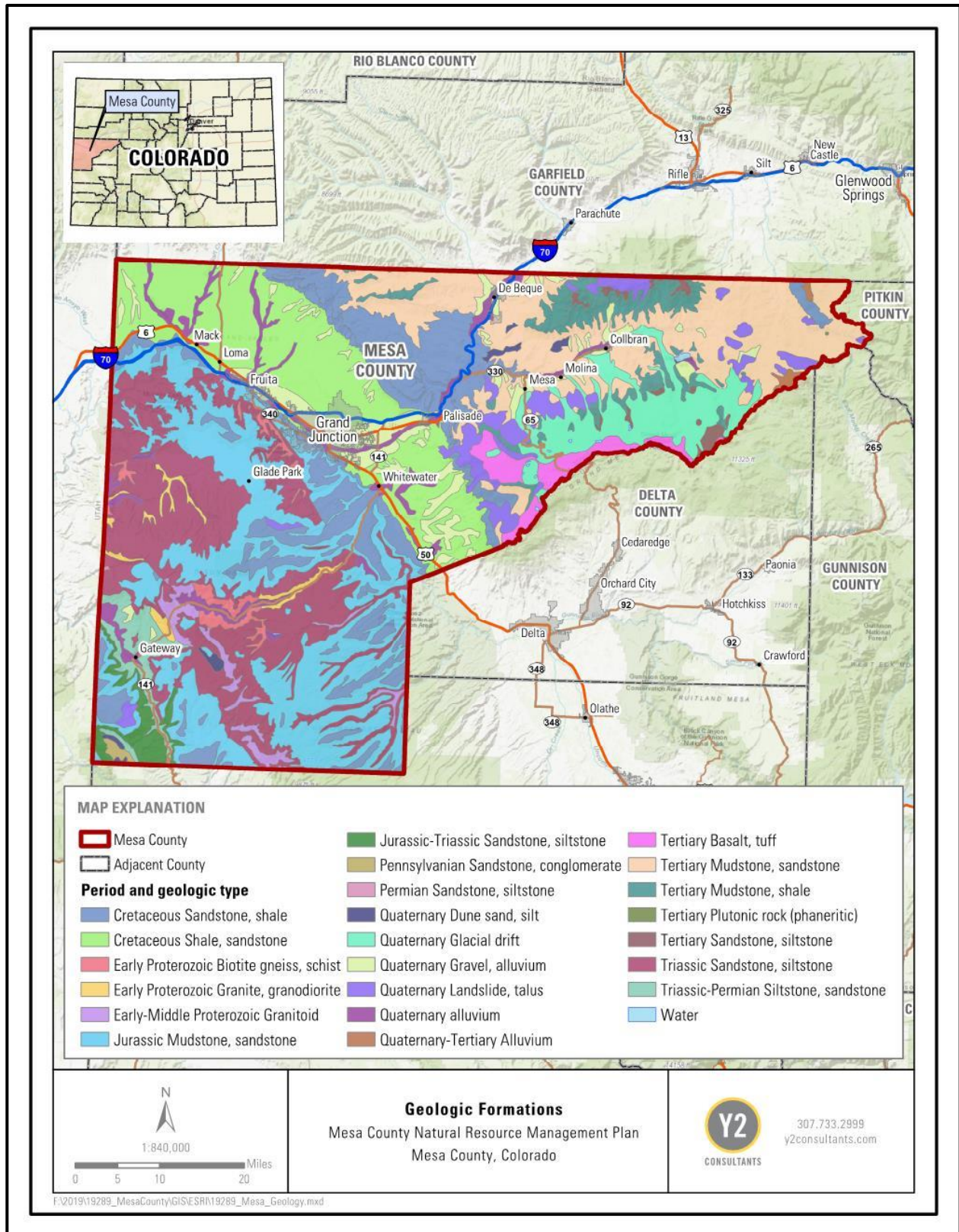


Figure 11. Mesa County geologic formations (USGS, 2005).

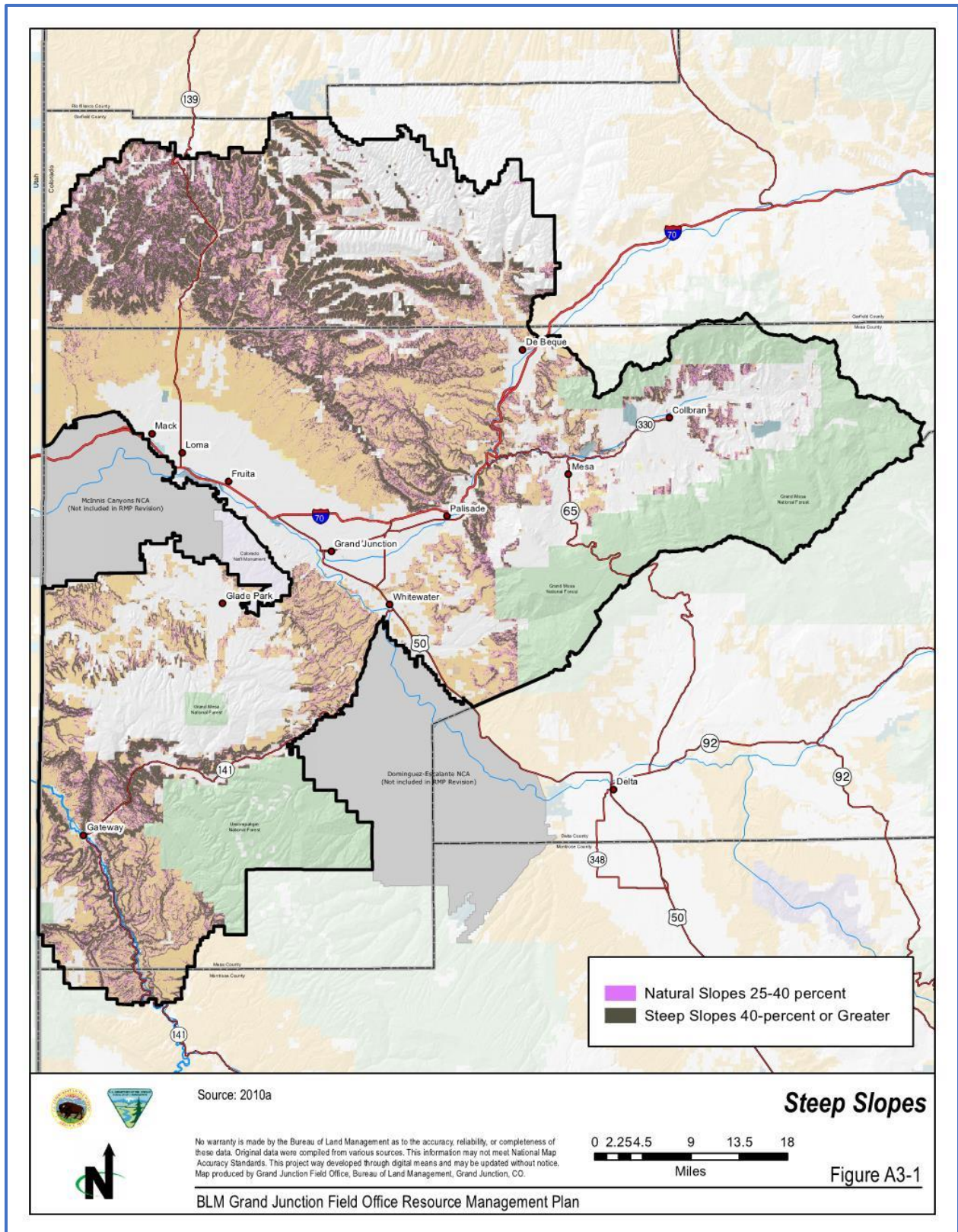


Figure 12. Steep slopes within Mesa County (map taken from Grand Junction Field Office RMP).

## ***Mineral Resources***

### ***History and Culture***

Mining in Mesa County is a substantial source of income for the county and has had a boom and bust historical cycle since the mid-1800s. Commercial coal mining began in the county in 1888; several recent commercial coal mining operations have mined in the Book Cliffs. Coal, copper, radium, vanadium, and uranium have been mined for decades throughout the County. Radium mining in the Gateway area began in 1914, evolving into uranium and vanadium mining. Uranium mining expanded throughout southwestern Mesa County. Among the hundreds of mines that operated, the most famous uranium mines were the Calamity Mesa, Outlaw Mesa, and the Blue Mesa. In the 1940s the uranium mining industry began to slow, but a domestic uranium production program was initiated by the Atomic Energy Commission in the 1950s resulting in a uranium boom in western Colorado. The local industry took a downturn after the incentives ended in 1957. Mining continued in the area at a much lower level. (Ike, 2016)

Due to the widespread presence of federally managed land, access to many of the mining lands historically has been dictated by the federal government in the awarding of leases and claims for mineral resource development. FLPMA, as amended, provides the framework for BLM regulation of those federal lands within Mesa County (FLPMA, 1976). The Congressional Act of July 26, 1866 and the General Mining Act of 1872 granted all American citizens the right to go into the public domain to prospect for and develop minerals. Every mining law or act enacted since then has contained a “savings clause” that guarantees that the originally granted rights will not be rescinded.

### ***Resource Assessment***

There are 8,139 records of mining claims on public land managed by the BLM and 347 records of mines listed by the USGS (Mining In Mesa County, Colorado, n.d.). The development and production of extractable resources are vital to the economic stability of Mesa County. Mineral resources support a multitude of local jobs, industries, and activities. Development of these resources occurs on private, state, and federally managed land. Because of the split-estate nature of mineral and land ownership within the county, many stakeholders have an interest in these developments.

The Mineral Leasing Act of 1920, as amended, and the Mineral Leasing Act for Acquired Lands of 1947, as amended, give the BLM responsibility for oil and gas leasing on BLM, USFS, and other federally managed lands, as well as private lands where mineral rights have been retained by the federal government. The BLM is a multiple use agency and therefore must balance the development of mineral resources in the best interests of the country as well as managing for uses like livestock grazing, recreation, and development and conservation of wildlife habitat. The USFS regulates all surface-disturbing activities on USFS land, (30 U.S. Code § 226 (g)) and is the lead agency to apply stipulations on a lease and conduct environmental analysis of leasing and permitting on USFS lands.

### ***Locatable Minerals***

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



manages the mining law program on the federal mineral estate including authorizing and permitting mineral exploration, mining, and reclamation actions.

### ***Salable Minerals***

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

### ***Withdrawal***

Federal lands can be withdrawn from mineral eligibility of development under the mining laws (30 U.S.C. Ch. 2). Mineral withdrawal prohibits the location of new mining claims. Withdrawal also may require that any preexisting mining claims in the area demonstrate that valuable minerals have been found before the withdrawal before any activities can commence on those preexisting claims. Withdrawal of minerals cannot prohibit the use of a valid existing right. A valid existing right exists when the mining claim contains the discovery of a valuable mineral deposit that satisfies the “Prudent Person” test, as defined in *Castle v. Womble* (US v. Cole, 390 U.S. 599, 602 (1968)). To pass the “Prudent Person” test a person must demonstrate that “the discovered deposits must be of such a character that ‘a person of ordinary prudence would be justified in the further expenditure of his labor and means, with a reasonable prospect of success, in developing a valuable mine.’” *Id.* However, these minerals cannot be considered “of common variety” to be a considered a valuable mineral under the mining laws (*See id.*; 30 U.S.C. § 611).

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

### **Resource Management Objective**

- A. The extraction of mineral resources within Mesa County are continued in a sustainable, economical, and ecologically healthy way.
- B. Mesa County asserts its right to be part of any regulatory process which impacts its economic and/ or socioeconomic stability.

### **Policy Statements**

1. Support streamlining the permitting process for new activities within Mesa County to allow for more exploratory drilling and mining and improved access to reserves. Updates should be provided on permit status for current and proposed projects within the County’s jurisdiction.
2. Consistent with the Mesa County Mineral and Energy Resource Master Plan, support consideration of appropriate lands within the political jurisdiction of Mesa County open to mineral exploration and extraction unless specifically precluded by federal, state, or local policy/ law.

3. Decisions to close lands to mineral exploration or extraction should be coordinated with the County prior to closure to consider the impact such closure will have on the County’s economic viability and resolve potential conflicts with County plans and policies, as required by federal and state law.
4. Federal agencies should support management that follows that “federal lands will be managed in a manner which recognizes the United States’ need for domestic sources of minerals, food, timber, and fiber from the federal lands, including implementation of the Mining and Minerals Policy Act of 1970,” as stated in FLPMA.
5. Local, state, and federal land use and management plans should contain a thorough discussion and evaluation of energy and mineral development, including the implications such development may have on surface land uses and the County’s economy. Additionally, all plans must demonstrate an understanding of the County’s plans and policies and resolve any conflicts with the County’s plans.
6. All lands not lawfully withdrawn from mineral exploration and development should remain available for their designated use. These lands should be developed in an orderly manner to accommodate exploration, development, and production. These activities will be performed in a manner consistent with the Mining and Mineral Policy Act of 1970.
7. State, federal, and County agencies should protect the rights of access, occupation, and property of anyone prospecting and/or developing minerals within Mesa County as required by federal and state law.
8. Any closures of access for prospecting, development, processing, and mining of mineral resources should be coordinated with the County.
9. Integrate mineral resources programs and activities with the planning and management of renewable resources through the Land and Resource Management planning process to ensure efficient policies are implemented.
10. In accordance with federal law and multiple use management principles encourage simultaneous or sequential mineral development with other resource uses in Mesa County.
11. Encourage mining reclamation to use best management practices to reclaim sites to realistic conditions based on site potential. Non-native seeding should be considered where appropriate.
12. Encourage justification in deferring lease and/ or permit applications.

## Soils

### History and Culture

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

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

The four Conservation Districts within Mesa County work to promote the conservation of soil and water resources within the County. See [Section 3.1 Land Use Overview](#) for more information about conservation districts.

## Resource Assessment

### **Soil Surveys**

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

Soil survey reports, which include the soil survey maps and the names and descriptions of the soils in a report area, are published by the USDA NRCS and are available online through Web Soil Survey (NRCS, n.d.-b). The soil survey mapping of Mesa County is current and published to Web Soil Survey (NRCS, n.d.-a). The major soil map units for Mesa County are depicted in Figure 14 below, additional and more detailed soil information for the county can be found on [Web Soil Survey](#).

### **Ecological Site Descriptions**

Ecological Sites provide a consistent framework for classifying and describing rangeland and forestland soils and vegetation. Ecological Site Descriptions (ESDs) are reports that provide detailed information about a particular type of land. ESDs are used for assessing vegetation states and often used in reclamation and rehabilitation of an area to know how the site reacts to disturbances and potential vegetation that could be reclaimed on the site. ESD reports can be found on the [Ecosystem Dynamics Interpretive Tool](#) (EDIT).

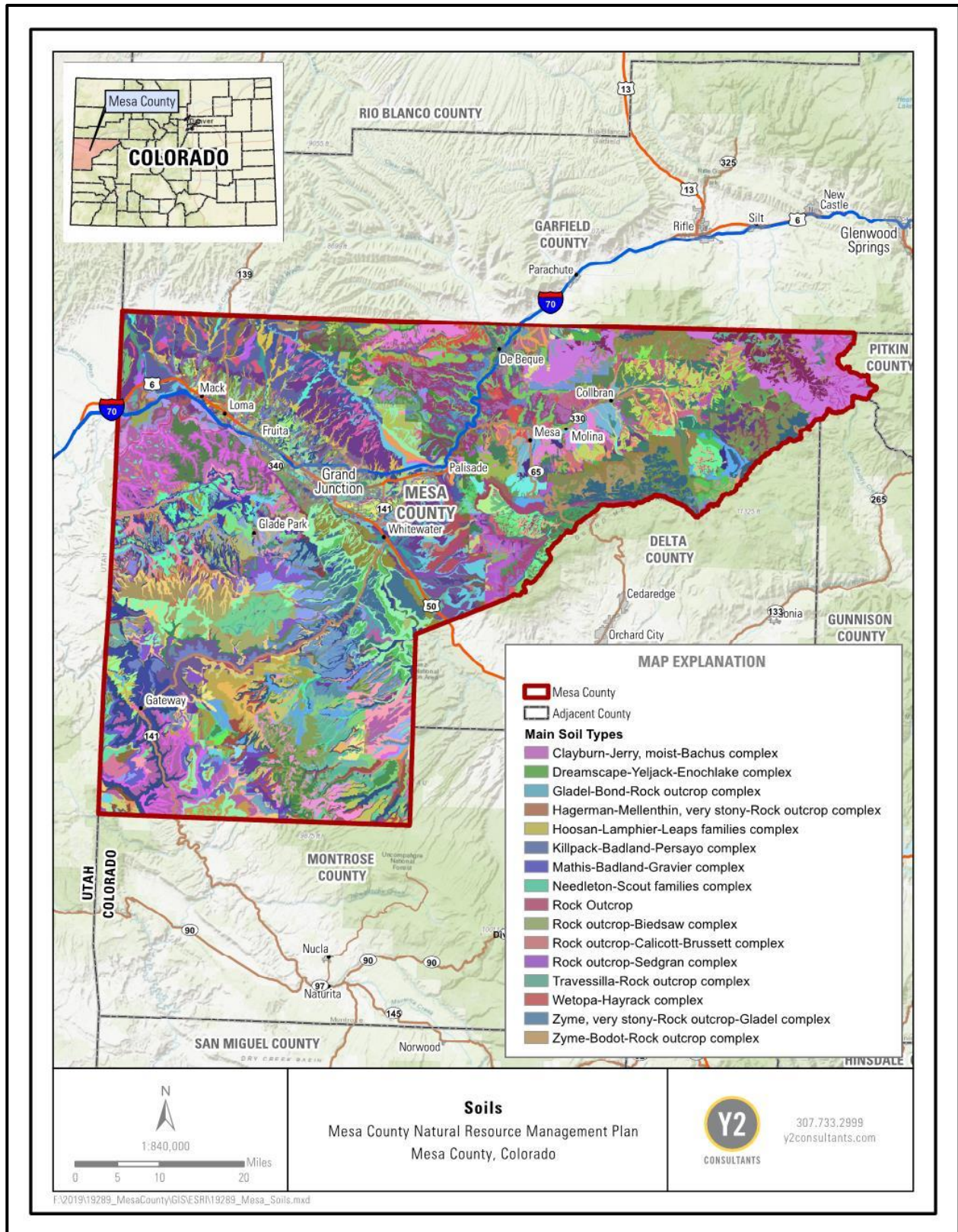


Figure 13. Major soil types within Mesa County (Web Soil Survey, n.d.).

### Resource Management Objective

- A. Soil quality and health is maintained and conserved through best management practices.

### Policy Statements

1. Support projects and policies which improve soil quality.
2. Support erosion control as a means of flood control.
3. For new soil disturbing projects, support implementation of BMPs to manage runoff and stabilize soils on site.
4. Support land use designations and practices that can improve soil health.
5. Mesa County supports and encourages the use of natural processes, including managed livestock grazing, as key to site reclamation for soil health and biodiversity.
6. Encourage the implementation of BMPs for watershed management practices.

## **3.2.D Energy Resources**

### ***Oil, Gas, and Coal***

#### History and Culture

Oil and gas production are economic pillars across the state and benefit communities across Colorado. However, the boom and bust cycle of oil, gas, and coal has affected Mesa County's economy with times of good economies and times of large unemployment and decreased populations. Within the state of Colorado, the industry generated nearly \$23.1 billion dollars in wages, contributed nearly \$31.4 billion to the state's economy, and provided more than 232,900 jobs in 2017 (EnergyAPI, 2017). The oil and gas industry also provides \$682 million to school districts, emergency services, libraries, and other public entities throughout the state each year. The continued development of these resources with appropriate environmental considerations and mitigation is important to the economy of Mesa County and the state. (Mesa County Board of Commissioners, 2014)

Mesa County is situated in the Piceance Basin, with direct access to both domestic and international trade routes. The ample supply of energy resources has attracted multiple energy development companies. In 2016, it was estimated that 66 trillion cubic feet of natural gas exist for development in western Colorado's Mancos shale formation within the Piceance Basin. The Jump-Start tax credit program that launched in Mesa County in 2016 provided energy-focused startups the ability to accelerate their business growth by locating themselves in Mesa County. (Grand Junction Economic Partnership, 2016c) In 2016, the energy industry made up 3.5% of Mesa County's total employment, there were approximately 2,159 jobs available in the energy industry and it was expected to increase by 8% in 2017 (Mesa County Workforce Center, 2016).

For additional goals and priorities for oil and gas production refer to the [Mesa County Mineral and Energy Master Plan](#). (Mesa County, 2011)

#### Oil and Gas Regulatory Framework

Oil and natural gas development on federally managed lands and public mineral estates is a significant economic driver for the Colorado economy. Approximately 75% of oil and natural gas development in Colorado occurs on state and private lands. Approximately 46% of federally managed lands in Colorado have oil and natural gas development. In Mesa County, a majority of these energy resources are on

federally managed lands. The Colorado Oil and Gas Conservation Commission (COGCC) promulgates rules regulating oil and gas development in Colorado. COGCC issues drilling permits and enforces applicable oil and gas statutes and regulations on both state and County levels. The mission of the COGCC is to “regulate the development and production of the natural resources of oil and gas in the state of Colorado in a manner that protects public health, safety, welfare, the environment and wildlife resources.” The observance of the COGCC as the governing body for new development of oil and gas in Colorado is key. Mesa County only regulates land use elements as allowed by State law of drilling activities within its bounds and defers to state level agencies such as the COGCC for technical aspects of drilling. (COGCC, 2020)

Many of the lands with high oil, gas, and mineral values in Mesa County are located on land administered by the BLM. BLM management policy decisions are critical to the local economy and revenues in Mesa County. The BLM is responsible for management of 4,712 leases across 3.7 million acres in Colorado. In Mesa County, there are 935,594 acres open to fluid mineral leasing with 513,913 acres currently being leased. Much of the national regulatory framework in place has been developed in conjunction with the state to ensure development of oil and gas resources in an “environmentally responsible manner.” (Programs, 2016)

In 2009, the Colorado BLM, the Rocky Mountain Region of the USFS, and the COGCC entered into a MOU concerning oil and gas permitting on BLM and USFS lands. Under the MOU, operators on federally managed land are told of their responsibility to comply with COGCC rules and regulations as well as all other applicable state and federal laws. Oil and gas operators must follow COGCC spacing requirements between drill sites in addition to securing BLM approval for development. There are USFS lands in Mesa County that contain medium-to-high oil and gas potential. (BLM IM 2010-117)

### Master Lease Program

The Master Lease Program (MLP) concept was introduced in May 2010 via the Oil and Gas Leasing Reform Act. MLPs promote a proactive approach to planning for oil and gas development and recognize that additional planning and analysis may be necessary in some areas prior to new oil and gas leasing because of changing circumstances, updated policies, and new information. Leasing reform allows the BLM to conduct a more in-depth review for areas that are or may be opened to leasing at the planning level through master leasing plans. (Bureau of Land Management, 2017c)

The purpose of a MLP is to plan for oil and gas development at the land-use plan level in a defined area containing a high-level of potential resource concerns. The MLP is not a special designation but rather it delineates a planning area in which there is analysis of decisions related to oil and gas leasing and development within a distinct geographic area. The two main components of MLPs are:

1. Develop goals for maintaining or improving the condition of natural resource values in the area.
2. Identify resource protection measures and best management practices that may be adopted as lease stipulations in an RMP.

The following are examples of planning decisions that may be considered through the MLP process with appropriate supporting NEPA analysis:

- Phased leasing
- Phased development

- Requirements to reduce or capture emissions
- Multiple wells on a single pad
- Additional mitigation stipulations (Bureau of Land Management, 2017c)

### Resource Assessment

Oil and gas production in Mesa County for 2019 totaled 129 thousand barrels (BBL) of oil and 48.7 million-cubic feet (MCF) of gas. These numbers are down from 2018 (142 thousand BBL and 50 million MCF). However, the production of oil and gas in 2018 had more than doubled since 2016, higher than oil and gas production had ever been within Mesa County. (DrillingEdge, n.d.)

#### ***Solid Leasables - Coal***

The U.S. Department of the Interior’s Office of Surface Mining, Reclamation, and Enforcement (OSM) is tasked with implementing and enforcing the Surface Mining Control and Reclamation Act (SMCRA) of 1977. SMCRA was designed to protect the environment from the adverse effects of surface coal mining operations and allows the state to enter into a cooperative agreement with OSM to regulate surface coal mining and reclamation on federal lands. Colorado entered into an agreement in 1980 through the Colorado Division of Reclamation, Mining and Safety. Several divisions were merged in the Colorado Department of Natural Resources in 1992 to create the Division of Minerals and Geology (DMG). Within DMG, the Office of Mined Land Reclamation administers rules and regulations through the Coal and Mineral programs.

#### ***Book Cliffs Coal Field***

The Book Cliff Coal Field was first mapped in 1853 and has been surveyed and mined on multiple occasions since. The Book Cliffs Coal Field spans 500 square miles in northwestern Mesa County and Garfield County, Colorado. The four producing districts are the Carbonera, Grand Junction, Palisade, and Cameo. The average thickness of the coal bearing formation in the Book Cliffs is 412 feet. (Erdmann, 1934)

#### ***Grand Mesa Coal Field***

The Grand Mesa Coal Field is located along the eastern border of Mesa County and through the center of Delta County. Where this coal field lies within Mesa County, it is primarily within the Grand Mesa National Forest. This coal field is estimated to contain 8.6 billion short tons of coal in beds greater than five feet thick. The coal resource is estimated to be at least 6,000 feet beneath the surface. Historically, underground mining occurred on the Grand Mesa coal field in the early 1900s. Colorado Geologic Survey reports two abandoned mines on the western portion of the coal field in the Kannah Creek Basin. (US Forest Service, 2006)

#### ***Solid Leasables - Oil Shale***

The U.S. holds the world’s largest known concentration of oil shale – more than one-half the world’s supply. Oil shales have yet to be economically recoverable and therefore are considered a contingent resource.

More than 70% of American oil shale, including the thickest and richest deposits, are on federally managed land, primarily in Colorado, Utah, and Wyoming. Mesa County is located within the Piceance Basin and the potential production within the Piceance Basin totals approximately 1.0 trillion barrels of oil in place. High-grade oil shale in the area contains more than 25 gallons of oil per ton of shale.

No mining method yet applied has provided a viable method for the commercial extraction of shale oil. However, data and methods derived from the current oil shale Research Development and Demonstration (RD&D) leases taking place could lead to the development of viable commercial operations. A total of seven RD&D leases were issued and two are still moving forward with development. Development of commercial oil shale operations would be dependent on the cost of recovering oil from the oil shale as well as the price of oil and future regulation.

Following the oil embargo of the 1970s, and with Congressional support, a number of commercial-scale oil shale mining projects were initiated in the BLM's White River Field Office (WRFO). Both the federal and commercially backed projects ended in the early 1980s when oil prices declined, which had a dramatic damaging effect on the local economy and the community. The shutdown of Exxon's Colony Project in 1982 on "Black Sunday" resulted in the loss of several thousand jobs in western Colorado. Oil shale is still regarded as a valuable potential resource and interest in commercial development of oil shale increases with higher oil prices.

In 2005, the federal government and Congress expressed renewed interest in oil shale. The Energy Policy Act of 2005 declared oil shale, tar sands, and other unconventional fuels as a strategically important domestic energy resource that should be developed to reduce the nation's growing dependence on oil from politically and economically unstable foreign sources. The Energy Policy Act required that a commercial leasing program be established for these resources.

In 2013, BLM issued a Record of Decision (ROD) that amended ten RMPs to designate certain federal lands in Colorado, Utah, and Wyoming as available for leasing and potential development of oil shale and tar sands resources; this applied even in areas which may have been closed by the local RMP. Essentially the ROD amends, to the extent necessary, applicable local RMPs to ensure that certain specified areas remain open and available for leasing and future exploration and development of oil shale and tar sands resources. The ROD specifically references Congress's policy emphasis on these resources in the Energy Policy Act.

The ROD provides that the areas allocated as open for future oil shale leasing are only open to RD&D leases for now. The BLM will issue a commercial lease only after a lessee satisfies the conditions of its RD&D lease and the regulations for conversion to a commercial lease. Because this energy resource is not presently commercially viable, the BLM determined that it will be necessary to obtain more information about the environmental consequences associated with tar sands/oil shale development prior to committing to broad-scale commercial development – and only after a commercially viable method is developed which can be assessed (Bureau of Land Management, 2013).

In early 2005, the BLM solicited nominations for parcels to be leased for RD&D of oil shale recovery technologies in Colorado, Utah, and Wyoming. In 2007, the BLM issued six oil shale RD&D leases; five were within the Piceance Basin.

BLM states, "With commercial development of oil shale at least several years away, the new planning process will allow the BLM to take a fresh look at what federal lands are best suited for oil shale and tar sands development. Final land-use decisions will be made in light of any new information about potential resource needs and impacts, and the technological innovations."



### Resource Management Objective

- A. To maintain a robust and diverse economic portfolio, Mesa County will encourage the development and production of oil and gas resources in and around Mesa County and provide a business-friendly environment within Mesa County to energy industry support services.

### Policy Statements

1. Support the goals and policies of the Mesa County Mineral and Energy Resource Master Plan.
2. Support streamlining the permitting process for new drilling activities within Mesa County to allow for more exploratory drilling and improved access to reserves.
3. Support the development of new and innovative technologies which enhance the safe and efficient production of oil and gas resources.
4. Encourage coordination among the various Federal agencies to facilitate hydrocarbon production permits in a timely manner, as prescribed in federal law.
5. Support the utilization of enhanced production techniques and the development of infrastructure to provide material supply and support to ensure further development throughout Mesa County.
6. Support development of natural resources on federally managed lands which could produce significant employment and residential growth in the future.

## **Pipelines**

### History and Culture

Pipeline infrastructure plays a crucial role in the development and transmission of hydrocarbons and various types of water (produced water, frac fluid, flow back, fresh water) at the national, state, and county levels. It is crucial that these avenues for transmission are allowed to thrive and develop within Mesa County. Pipelines offer a safe and effective means for delivering large amounts of liquid across extended distances with minimal risk for spills and is often preferable to trucking. (Global Energy Institute, 2013). The use of pipelines to move water can reduce truck traffic, local road impacts, noise, dust, odor, erosion, and other environmental impacts.

### Resource Assessment

Due to the development of oil and gas on the western slope there has been significant development of oil and gas transmission pipelines throughout the northern half of the County. Gas transmission lines are located north of Interstate 70 and east of Highway 50; there are approximately 311 miles of transmission lines across Mesa County. Smaller stretches of oil pipelines are present approximately five miles from the western border of Mesa County north of Interstate 70. Refer to Figure 15 for a map of the oil and gas transmission lines within the County. According to the National Pipeline Mapping System there have been 37 gas line incidents and no oil line incidents since 2002. (NPMS, n.d.)

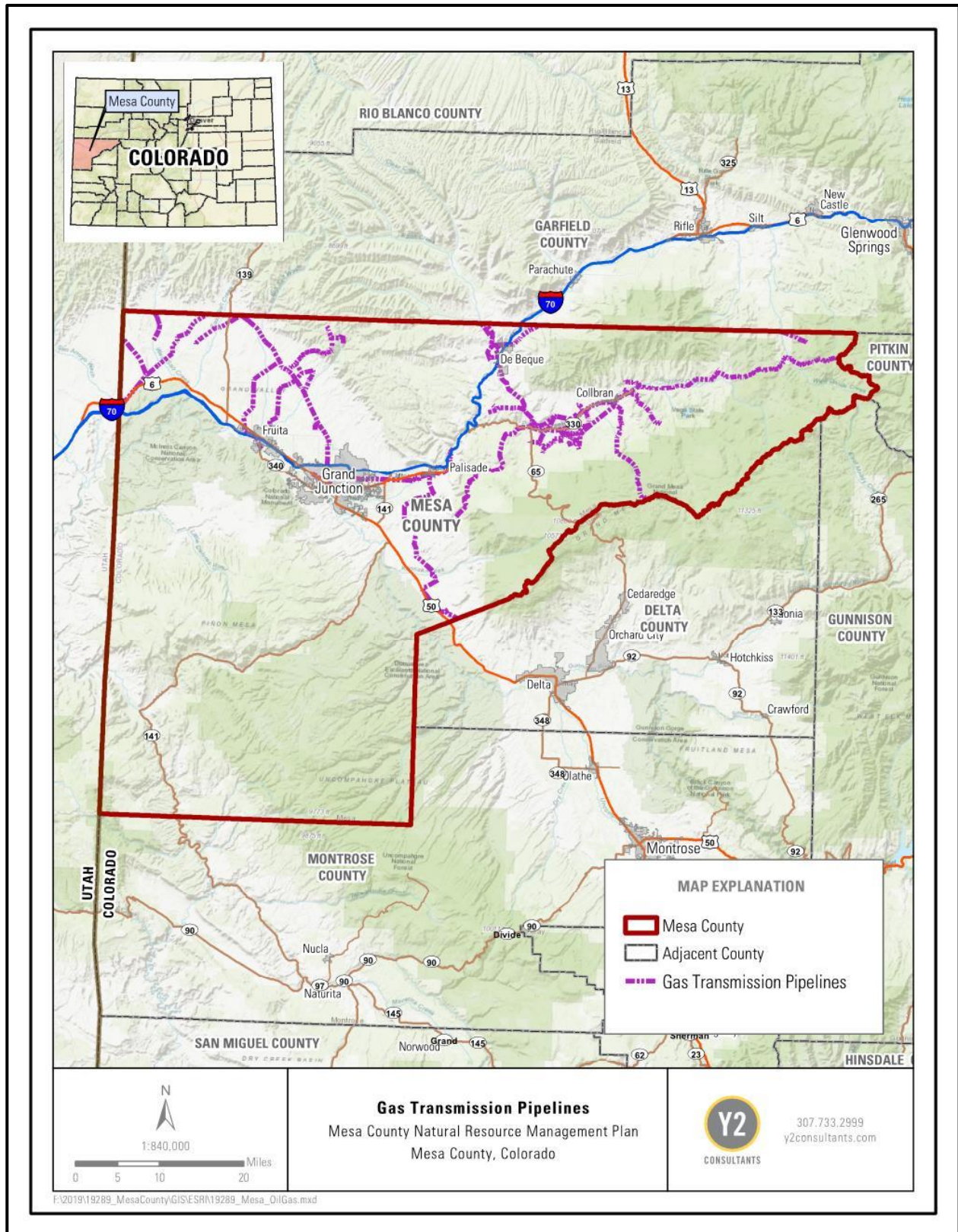


Figure 14. Gas transmission pipelines across Mesa County (NPMS, n.d.).

### Resource Management Objective

- A. To maintain a robust and diverse economic portfolio, Mesa County will encourage the development and production of pipeline resources in and around Mesa County and provide a business-friendly environment within Mesa County to energy industry support services.

### Policy Statements

1. Support streamlining the permitting process for new pipeline facilities within Mesa County to allow for more exploratory drilling and improved access to reserves.
2. Support the development of new and innovative technologies which enhance the safe and efficient use of pipelines.
3. Encourage coordination among the various Federal agencies and the State to facilitate pipeline permits in a timely manner, as prescribed in federal and state law.
4. Support the utilization of enhanced production techniques and the development of infrastructure to provide material supply and support to ensure further development throughout Mesa County.
5. Support the goals and policies of the Mesa County Mineral and Energy Resource Master Plan.
6. Encourage the use of pipelines, including temporary surface lines, in the development of oil and gas resources on federally managed lands.

## **Renewable Energy**

### History and Culture

Mesa County does not have an extensive history associated with renewable energy. Since 2012, solar and other renewable energy sources have grown extensively. Mesa County understands that the development of renewable energy is a critical component of energy infrastructure development. Changes in renewable energy will continue to influence the economy and communities of Mesa County.

In 2019, Colorado’s Governor Jared Polis signed seven climate and energy bills and unveiled a roadmap of the state’s path to 100% renewable electricity by 2040. The signed legislation will decarbonize the state’s economy to 90% below 2005 levels by 2050. (Morehouse, 2019)

### Resource Assessment

Renewable energy resources have grown rapidly in Mesa County and the surrounding areas. The Jump-Start tax credit program that launched in Mesa County in 2016 provided energy-focused startups the ability to accelerate their business growth by locating themselves in Mesa County. Currently there are multiple programs, such as the Western Colorado Alliance, promoting and supporting the continued expansion of solar power infrastructure and renewable energy use. Grand Valley Power has set goals to deliver a 60% renewable energy mix to its customers (approximately 18,000 people in rural areas) by 2030. At the start of 2020 Tri-State (an electric utility company) announced that the organization will be transitioning to 100% renewable energy within Colorado by 2040. With this transition includes a 50% increase in wind and solar supply by 2024, a 90% reduction in carbon dioxide emission by 2030, the retirement of several coal facilities, and the installation of multiple new solar projects in western Colorado. (Dyar, 2020; Western Colorado Alliance, 2017)

Mesa County is uniquely situated between two rivers (Colorado and Gunnison), two highways, and high voltage transmission and pipelines which ideally situates it for the development of renewable and traditional forms of energy. This provides an opportunity to increase the impacts of energy development on the local economy.

## **Wind**

Wind generation is not typically seen as viable in Mesa County. The eastern plains of Colorado are much more suited than western Colorado for wind energy development. (J. Hofman, personal communication, 2020)

## **Solar**

In early 2019, a 12-acre solar power garden was installed near Palisade through Xcel Energy's Solar Rewards Community Program. This garden is estimated to save the Town of Palisade \$1.2 million and save Grand Junction \$600,000 in electricity expenses over the next 20 years. This solar garden will also benefit multiple other subscribers including Mesa County Libraries, the Grand Junction Housing Authority, and the Museums of Western Colorado. Xcel Energy is planning to deliver 80% carbon free electricity by 2030 and 100% carbon free electricity by 2050. The wholesale power contractor is intending to continue to expand the solar infrastructure the area to meet these goals. (Hamilton, 2018; Vaccarelli, 2019)

There have been three 1-2 mega-watt (MW) solar facilities approved on private land in Mesa County in the last four years. Two solar facilities have been built (Cameo and East Orchard Mesa). The size and location of these facilities are limited by the Xcel Energy Community Solar program. Larger utility scale facilities may be viable on federal public lands near transmission lines and appropriate topography. (J. Hofman, personal communication, 2020)

Photovoltaic (PV) Solar facilities do not require scarce and valuable local water resources to generate electrical power.

The development of utility scale solar facilities can help offset the jobs lost from closed regional coal mines and coal powered generation.

## **Hydroelectric**

Mesa County is not currently suited for large-scale hydro-electric generation due to the lack of large reservoirs in the area to generate electrical power. However, Colorado and Mesa County have a history of small-scale hydro electrical generation. Examples include the Ames Hydroelectric Generation Plant near Ophir that has been operating since 1891, the Redlands Water and Power Company in the Grand Valley that uses hydro electrical generation to offset pumping costs during the irrigation season, and the Molina Upper and Lower powerplants on Cottonwood and Plateau Creeks. There are potential areas in Mesa County where small scale hydro electrical generation could be developed on public land using natural or development flows. (J. Hofman, personal communication, 2020)

The Federal Energy Regulatory Commissioner (FERC) under the Hydropower Regulatory Efficiency Act of 2013 has streamlined the permitting process for projects less than 5 megawatts making projects more viable than before.

## **Pumped Storage Hydroelectric**

The development of wind and solar energy presents significant issues with electrical load balancing. Pumped storage hydroelectric is a method to store the power potential of renewable energy generation

in reservoirs of different elevations. Upper reservoirs are filled (water is pumped up to them) during times of excess electrical generation and then drained to a lower reservoir to generate power when demand is higher. These reservoirs are typically smaller in scale than traditional hydro electrical generation seen in the American West. (J. Hofman, personal communication, 2020)

### ***Geothermal***

Geothermal energy is an up and coming form of renewable energy. Geothermal energy is heat derived from within the sub-surface of the earth and water or steam can be used to create energy. Geothermal energy has been used to heat and cool the campus of Colorado Mesa University.

### **Resource Management Objective**

- A. To maintain a robust and diverse economic portfolio, Mesa County will encourage the development and production of renewable energy resources and provide a business-friendly environment within Mesa County to energy industry support services.

### **Policy Statement**

1. Support streamlining the permitting process for new renewable energy facilities within Mesa County to allow for more exploratory drilling and improved access to reserves.
2. Support the development of new and innovative technologies which enhance the safe and efficient use of renewable energy.
3. Encourage coordination among the various Federal agencies and the State to facilitate renewable energy permits in a timely manner, as prescribed in federal and state law.
4. Support the utilization of enhanced production techniques and the development of infrastructure to provide material supply and support to ensure further development throughout Mesa County.
5. Encourage the development of small-scale hydro electrical generation on federally managed lands and facilities in the County.
6. Encourage develop of pumped storage hydroelectricity in appropriate locations on federally managed lands within the county.
7. Support the creation of a Clean Energy District.
8. Encourage the development of utility scale solar facilities on federally managed lands within the County.
9. Encourage the continued growth of the renewable energy industry and the associated changes in the oil and gas industry.

## 3.3 WILDLIFE

### Overview

#### [U.S. Fish and Wildlife Service \(USFWS\)](#)

The U.S. Fish & Wildlife Service (USFWS) is the agency within the Department of the Interior dedicated to the management of fish, wildlife, and their habitats, and charged with enforcing federal wildlife laws including the Endangered Species Act (ESA). In addition to managing threatened and endangered species, the agency manages migratory birds, restores significant fisheries, conserves and restores wildlife habitat, including wetlands, and distributes money to state fish and wildlife agencies. The agency also manages the National Wildlife Refuge (NWR) System created by President Theodore Roosevelt in 1903. (Wilson, 2014)

There are eight administrative regions for USFWS and approximately 700 field offices across the country. Colorado is in the Mountain Prairie Region which consists of eight states – Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming. The regional office for the Mountain Prairie Region is in Denver, CO. A Field Office is located in Grand Junction. There are eight National Wildlife Refuges in Colorado, as of the 2018 Annual Lands Report (USFWS, 2018a). However, there are currently no wildlife refuges present within Mesa County (USFWS, 2018a). The USFWS does manage some Reclamation project land along the Colorado River between Grand Junction and Fruita for wildlife habitat. Reclamation also has several properties within Mesa County that are managed for wildlife, particularly for mitigation for drying wetlands along canals and ditches due to the lining and piping of these waterways.

The Mesa County BOCC has had a MOU with the USFWS last signed in 2018. (Mesa County, 2018)

#### [Colorado Parks and Wildlife \(CPW\)](#)

Wildlife in Colorado is managed by the Colorado Parks and Wildlife (CPW). Colorado Game, Fish and Forestry Department was established in 1897. After various mergers and separations in the twentieth-century, Colorado Division of Wildlife and Colorado State Parks were merged in 2011 and renamed to the current Colorado Parks and Wildlife. Their mission is to perpetuate the wildlife resources of the state, to provide a quality state parks system, and to provide enjoyable and sustainable outdoor recreation opportunities that educate and inspire current and future generations to serve as active stewards of Colorado's natural resources (Colorado Parks & Wildlife - About Colorado Parks & Wildlife (CPW), n.d.). The CPW Commission acts as a liaison between the Department and the public. CPW's Commission is a board of eleven citizens including three sportsmen or sportswomen (one must be an outfitter), three agricultural producers, three recreationalists (one must be from a non-profit, non-consumptive wildlife organization), and two at-large members. Of these eleven commissioners, four must reside west of the Continental Divide. (Colorado Parks & Wildlife - Commission, n.d.)

The essential element of wildlife law going back to the founding of the United States is the public trust doctrine. The public trust doctrine holds that certain natural resources including fish and wildlife are preserved for public use and are not private property. When one purchases land, it does not secure ownership of fish and wildlife. Governments own and must protect and maintain these resources for the public's use. In the United States, despite some federal legislation, wildlife remains primarily the prerogative of the states (Glicksman, Robert L. & Coggins, George Cameron, n.d.).

The CPW utilizes a State Wildlife Action Plan (SWAP), revised in 2015, to provide a strategy for managing various wildlife groups including mammals, birds, reptiles, amphibians, fish, and mussels. This plan is not a legal document, a regulatory document, a recovery plan under the ESA, or a NEPA decision document (Colorado Parks and Wildlife, 2015). It is designed to complement existing and future planning and management programs. Colorado's SWAP was partially funded by the state Wildlife Grants Program, which was created through federal legislation to provide federal funding to states to create a list of wildlife species that have the greatest conservation need. The state plan is built upon eight essential elements, identified by Congress and implemented by the state game agency, with an overall focus on "species of greatest conservation need." The essential elements are as follows:

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

The species list includes 149 total species including 61 birds, 10 amphibians, 16 reptiles, 26 mammals, 27 fish, and 9 mollusks, each with a specific priority designation based on the essential elements listed above. (Colorado Parks and Wildlife, 2015)

The Colorado SWAP is habitat based, rather than species focused. This habitat-based approach focuses on the five primary landscape components of the state. Colorado's major habitat types are forests and woodlands including quaking aspen (*Populus tremuloides*), lodgepole pine (*Pinus contorta*), mixed conifer, pinyon-juniper, ponderosa pine (*Pinus ponderosa*), spruce-fir, limber pine (*Pinus flexilis*), and bristlecone pine (*Pinus longaeva*); shrublands including desert shrub, greasewood (*Sarcobatus vermiculatus*), oak and mixed mountain shrub, sagebrush (*Artemisia* spp.), saltbush (*Atriplex* spp.), sandsage (*Artemisia filifolia*), and upland shrub; grasslands including foothill and mountain grasslands, mixed and tallgrass prairies, and shortgrass prairie; riparian and wetlands including playas, riparian woodlands and shrublands, and wetlands; aquatic including Colorado Plateau – Wyoming basins and rivers, eastern plains rivers, eastern plains streams, lakes, mountain streams Rio Grande Valley rivers, Rio Grande Valley streams, transition zone streams; and other habitats including alpine, cliffs and canyons, hot springs, reservoirs and shorelines, sand dunes, and agriculture (Colorado Parks and Wildlife, 2015). Habitat-based approaches are designed to follow the idea of multiple species management. CPW uses the habitat-based approach to ensure all species are given acknowledgment.

Once a species is identified as a candidate species, funding and existing conservation efforts are evaluated. Funding sources such as ongoing conservation funding, external non-state Wildlife Grant funding, or state Wildlife Grant funding opportunities are evaluated to narrow down which level is assigned. Tier 1 species are in decline and represents the species that are truly of the highest conservation priority in the state. In these situations, state Wildlife Grants are obligatory to be used for conservation. Tier 1 species have a high conservation priority because of declining status in Colorado or across their range or have a high rate

of occurrence in Colorado constituting their “core” range and are at-risk across their range. Tier 2 species receive state Wildlife Grant funding if the funding for Tier 1 species is sufficient. Tier 2 species have a moderate level of conservation priority or have a high level of conservation priority but have substantial non-state Wildlife Grant funding available. Most often federally listed species are considered Tier 2 designation due to outside funding sources such as the Cooperative Endangered Species Conservation Fund. State Wildlife Grant Program funds are appropriated annually by Congress. In the appropriation process, individual states are evaluated based on their population and total geographical area. From these evaluations, states receive their apportioned funding amounts. Federal grants cover up to 75% of planning grants and 65% of plan implementation grants. (Colorado Parks and Wildlife, 2015; USFWS, n.d.)

The CPW updates the species on the Conservation Priority List in conjunction with the SWAP. The Colorado Species of Conservation Priority List can also be found on the CPW [website](#).

Annual status reports regarding statewide big game winter range and migration corridors are now available per Executive Order D 2019 011. This document collates data from over 40 conservation partners and Colorado Parks and Wildlife staff reports. This report can help inform development and transportation decisions in Mesa County. Five wildlife areas along the Colorado River were established as mitigation for the Grand Valley Unit: Horsethief Canyon State Wildlife Area, Grand Junction Wildlife Area, Orchard Mesa Wildlife Area, Colorado River Wildlife Area, and DeBeque Wildlife Area. Approximately 2,317 acres of land were acquired (1640) or withdrawn (497) for these wildlife areas. These wildlife areas were developed and are managed to replace wildlife habitat, such as cottonwood stands, shallow wetlands, and riparian vegetation, lost due to construction of the Unit. Colorado Parks and Wildlife manages the Horsethief Canyon State Wildlife Area, and approximately 9 acres of the Colorado River Wildlife Area under contract with Reclamation. Reclamation manages the remainder.

Both the USFWS and CPW have a close working relationship with the local BLM, USFS, and Reclamation offices.

### [Migration Corridors](#)

Migration corridors and big game winter range exist within Mesa County. Priority landscapes managed for big game winter range and migration priorities include the Book Cliffs Landscape and the Uncompahgre Plateau Landscape.

## **3.3.A Endangered, Threatened, and Sensitive Species**

### ***History and Culture***

#### [Endangered Species Act](#)

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



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

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

Threatened species are “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” (USFWS, 1973b)

Endangered species are “any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary to constitute a pest whose protection under the provisions of this Act would present an overwhelming and overriding risk to man.” (USFWS, 1973b)

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

USFWS is responsible for the identification of critical habitat. Critical habitat is a specific geographic area that contains features essential to the conservation and recovery of a listed species and may require special management or protection. Critical habitat can only be areas that qualify as “habitat” (*Weyerhaeuser Co. v. US Fish and Wildlife Service*, 139 S. Ct. 361, 368 (2018)). Neither the ESA nor USFWS regulations currently define “habitat.” Id. However, the UWFWS is currently proposing new rules to better define habitat, specifically limiting unoccupied habitat for a species to areas “where the necessary attributes to support the species presently exist” (Federal Register Vol. 85 No. 151 47334 (August 5, 2020)). Thus, under the proposed definition, “habitat” may only exist under the ESA when a listed species could currently survive within the habitat as of the day of the listing. Land not currently occupied by an endangered species can only be designated as critical habitat when the Secretary of the U.S. Fish and Wildlife Service determines that the land is “essential for the conservation of the species” (16 USC 1532(5)(A)). “Essential for the conservation of the species” is also not defined in either the ESA or USFWS regulations. Although economic impacts are not considered during the species listing process, the economic impacts of a critical habitat designation must be analyzed in the designation process. The USFWS may choose to exclude any area from critical habitat if the agency determines that the benefits of such exclusion outweigh the benefits of designating the area, unless such exclusion would result in the extinction of the species (16 U.S.C § 1533(b)(2)). A decision not to exclude critical habitat for economic reasons is reviewable by courts under an abuse of discretion standard (*Weyerhaeuser*, 139 S. Ct. at 370).

In response to the *Weyerhaeuser* Court’s decision allowing decisions not to exclude critical habitat to be reviewed under the Administrative Procedure Act, the U.S. Fish and Wildlife Service proposed rules regarding the exclusion of critical habitat. 85 FR at 55400. There are five major items developed in the proposed rule.

1. The rule as proposed will essentially give local governments expert status when discussing the economic and other nonbiological local impacts of critical habitat designation within their jurisdiction.
2. The rule also will reverse the USFWS’s current policy and will allow federal land to be excluded from critical habitat designation.
3. The rule sets a meaningful standard as to when critical habitat should be excluded.
4. The rule will encourage the USFWS to exclude critical habitat for more than just economic consideration, including whether the critical habitat may harm community development or has the potential to cause national or homeland security risks.
5. The rule will allow lands that have proven conservation agreements to be excluded from critical habitat. These agreements can even be agreements created by local governments or the state and not just the USFWS.

The ESA created several additional planning tools, including:

- Recovery plans (population and viability goals; define when delisting may be possible; what is required for delisting to begin).
- Reintroduction plans.
- Habitat conservation plans (define when “take” may occur, defines mitigation options).
- Conservation plans or agreements.
- Candidate Conservation Agreements (CCA) and CCAs with Assurances (CCAA) (private landowner arrangements for the protection of Candidate species that provides the landowner with protection if the species is listed) and Species of Concern. (USFWS, 2018c)

### [Bald and Golden Eagle Protection Act](#)

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

### [Migratory Bird Treaty Act](#)

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

### [Resource Assessment](#)

Currently listed threatened and endangered species can be found on the USFWS [Environmental Conservation Online System](#) (ECOS) (U.S. Fish and Wildlife Service, n.d.). At the writing of this report in

2020 there are eleven endangered, threatened, candidate, and proposed species and habitats that have been identified for Mesa County. Those species are listed below in Table 5 along with their current recovery plan status as of September 2020.

Table 5. Threatened and endangered species identified in Mesa County and their current recovery plan status.

Species	Status	Recovery Plan Status (as of September 2020)
Canada Lynx ( <i>Lynx canadensis</i> )	Threatened wherever found.	Canada lynx was found to have no additional conservation benefit in completing a recovery plan and is currently proposed for delisting.
Yellow-billed Cuckoo ( <i>Coccyzus americanus</i> )	Threatened in the western U.S.	Scheduled to have a final critical habitat designated in fiscal year 2021. The 2020 delisting petition was found to be not warranted by the USFWS. Due to the time it takes to complete these actions and the extensive coordination needed for a species ranging over 10 states, a recovery plan may not be completed within 18 months of the County adopting this plan.
Mexican spotted owl ( <i>Strix occidentalis lucida</i> )	Threatened wherever found.	Final recovery plan was updated in 2012.
Gunnison sage-grouse ( <i>Centrocercus minimus</i> )	Threatened wherever found.	Final recovery plan will be finalized by late fall of 2020.
Humpback chub ( <i>Gila cypha</i> )	Endangered wherever found.	Has a final recovery plan and recovery is implemented in Mesa County through the Upper Colorado River Endangered Fish Recovery Program.
Razorback sucker ( <i>Xyrauchen texanus</i> )	Endangered wherever found.	Has a final recovery plan and recovery is implemented in Mesa County through the Upper Colorado River Endangered Fish Recovery Program.
Colorado pikeminnow ( <i>Ptychocheilus lucius</i> )	Endangered wherever found (except where listed as an experimental population).	Has a final recovery plan and recovery is implemented in Mesa County through the Upper Colorado River Endangered Fish Recovery Program.
Bonytail chub ( <i>Gila elegans</i> )	Endangered wherever found.	Has a final recovery plan and recovery is implemented in Mesa County through the

		Upper Colorado River Endangered Fish Recovery Program.
DeBeque phacelia ( <i>Phacelia submutica</i> )	Threatened wherever found.	Recovery planning is scheduled as part of the USFWS's national work plan to have a draft recovery plan completed by 2022 and final in 2023.
Colorado hookless cactus ( <i>Sclerocactus glaucus</i> )	Threatened wherever found.	Scheduled as part of the USFWS's national work plan to have a draft recovery plan completed in 2022 and final by 2023.

### Resource Management Objective

- A. Threatened, Endangered, and Sensitive species are managed using credible quantitative data in coordination with Mesa County and other stakeholders.

### Policy Statements

1. All recovery planning efforts for threatened or endangered species should be made in coordination with Mesa County and should take into account the history and economy of Mesa County.
2. If a species is listed under the ESA, Mesa County requires the recovery plan to include:
  - a. Assurance that the listed species are native to Mesa County or have migrated to Mesa County from their native lands without human assistance and have not migrated to fill a niche that is manmade (reservoirs, irrigation canals, other created wetlands, etc.);
  - b. A site-specific management plan limited to the area consistent with the historical range and/or the natural migration range of the subject species;
  - c. Assurance that critical habitat designation not be in substantial conflict with customary use of natural resources or negatively impact the economy;
  - d. Establishment of on-the-ground baseline data and population goals for the species; and
  - e. Clear identification of target populations qualifying the species for delisting, and prompt delisting when targets are reached.
3. Federal management plans (i.e. RMPs and Forest Management Plans) should not be created for single species and should be consistent with multiple-use, sustained yield mandates.
4. Allow for involvement of the County in establishing recovery objectives for species of concern.
5. Support developing management actions to delist species once recovery objectives have been reached.
6. The County may choose to be a cooperating agency in federal rulemaking including any NEPA analysis related to the designation of critical habitat and development of recovery plans; proposed actions which affect the County regarding sensitive, threatened, or endangered species; the reintroduction or introduction of listed species; habitat conservation plans; and candidate conservation agreements.
7. The USFWS should provide a full and specific explanation whenever a decision or a rulemaking related to critical habitat designation, development of recovery plans; proposed actions which affect the County regarding sensitive, threatened, or endangered species; the reintroduction or introduction of listed species; habitat conservation plans; and candidate conservation agreements is inconsistent with the County's RMP or policies.

8. Critical habitat should include only those areas where the listed species could currently survive and should not include any areas that are missing an essential feature for the survival of the species or would require some degree of modification to support a sustainable population of the species.
9. Request that the USFWS provide a full analysis of the economic impacts on all proposed critical habitat designations or species management plans, and the inclusion of the County in this analysis.
10. Encourage cooperation between Federal agencies and private landowners to reduce the risk of listing under ESA.
11. Development of recovery plans should occur within 18 months of listing outlining clear objectives for delisting. For species already listed, development of a recovery plan should occur within 18 months of this document.
12. Immediate delisting of a species when population or recovery plan objectives have been met is strongly encouraged.
13. Local solutions (i.e., habitat management plans, conservation plans or conservation plans with assurances) should be utilized whenever possible to keep a species from being listed under ESA or as species of concern/species of special concern.
14. Prioritize control of predators and zoonotic and vector borne diseases negatively impacting special status, candidate, or listed species.
15. Management actions increasing the population of any listed species in the County without an approved recovery plan are discouraged. Without a recovery plan, management cannot focus on increasing the species population or habitat and progress towards delisting.
16. At a minimum, copies of legal descriptions showing the exact boundaries of all designated critical habitat, including wetlands, should be provided by USFWS to local governments in Mesa County.
17. Potential habitat should not be designated as critical habitat unless quantifiable data showing when and how features necessary for species recovery will be achieved on the property.
18. The County supports delisting of all wolf species under the Endangered Species Act to allow management of wolves at the state and local levels (Mesa County Resolution Concerning Wolf Management in Colorado).
19. The County opposes any efforts to introduce or expand the populations of wolves into Colorado (Mesa County Resolution Concerning Wolf Management in Colorado).
20. The County requests that any federal or federally-funded wolf management plans include funding to offset the negative impacts of wolves on livestock, wildlife management, hunting, and other adversely affected sectors of local economies (Mesa County Resolution Concerning Wolf Management in Colorado).
21. The County supports efforts to include a requirement that any publicly funded or sponsored wolf education programs include comprehensive and balanced discussions about the impacts of wolves on local economies, and include the perspective of livestock producers, hunters, and public health officials (Mesa County Resolution Concerning Wolf Management in Colorado).
22. Encourage use of CPW annual status reports to help inform development and transportation decisions in Mesa County.

### **3.3.B General Wildlife**

#### ***History and Culture***

See the Overview section for this chapter for additional information on the history, and culture of wildlife in Mesa County.

## **Resource Assessment**

### Wildlife Refuges

In 1903, President Theodore Roosevelt designated the first National Wildlife Refuge (NWR) by executive order. It was not until 1966 that the refuges were put into the NWR and administered by the USFWS. The USFWS administers 89.1 million acres of federal land in the U.S., of which 76.6 million are in Alaska (Federal Land Ownership, 2018). The mission of the National Wildlife Refuges is to administer these designated lands for the conservation, management, and if appropriate, restoration of fish, wildlife, and plant resources, and their habitats within the U.S. for the benefit of present and future generations. A number of activities take place on Refuges including hunting, fishing, ice fishing, bird watching, hiking, bicycling, and water recreation (About: Mission | National Wildlife Refuge System, 2018).

There are currently no wildlife refuges located within Mesa County.

### Bureau of Reclamation

The Horsethief State Wildlife Area is located within Mesa County. This 2,080-acre area is managed by the CPW under an agreement with Reclamation. The area was acquired and developed to partially replace wildlife habitat values lost as a result of the construction of the Grand Valley Unit of the Colorado River Basin Salinity Control Project. Wildlife in the area include desert bighorn, mule deer, and waterfowl including Canada geese and great blue herons. (Oh Ranger, n.d.)

### Bureau of Land Management

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

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

The Colorado State BLM Office identifies 50 species as sensitive. These species are included in Table 6, Appendix B.

### *U.S. Forest Service*

Regulations in 36 CFR 219.19 and 219.20 call for the selection, evaluation, and monitoring of management indicator species and their habitat. Management indicator species may be “plant or animal species and are selected because their population changes are believed to indicate the effects of management activities on other species of selected major biological communities or on water quality” (US Forest Service, 1982). These regulations do not imply that the population dynamics of management indicator species directly represent the population dynamics of other species. Criteria that direct management indicator species consideration include:

- Species is indigenous.
- Species is a year-long resident of the vicinity (non-migratory), or population trends of the species in the local or regional vicinity are closely tied to habitat conditions resulting from land uses on NFS lands in the same area.
- Species is considered a keystone species or habitat specialist.
- Species is sensitive to management activities on NFS lands in the local or regional vicinity. Population trends of the species are assumed to be related to changes in habitat composition, structure, ecological processes, and/or human activities.
- Species is appropriate for the scale that best represents the key issues or management concerns.
- Biologically and economically feasible to monitor populations and habitat of the species at similar spatial scales. Populations are of sufficient size or density to be reasonably detected and monitored. Accepted survey protocols exist. Analysis and interpretation of inventory data should produce meaningful and reliable trend information. Species that require high investment for low returns or suspect results should be avoided.
- Species where the scientific literature supports the assumed limiting factors and habitat associations. (USDA Forest Service, 2001)

Threatened, Endangered, and Candidate Species identified on the GMUG National Forests are included in Table 7, Appendix B. Management Indicator Species identified on the GMUG National Forests are included in Table 8, Appendix B. The Rocky Mountain Region of the USFS has 173 identified sensitive species. These species are included in Table 9 and Table 10 in Appendix B.

### ***Resource Management Objective***

- A. Wildlife is managed sustainably using credible qualitative data and management plans are developed in coordination with Mesa County and other stakeholders.

### ***Policy Statements***

1. Federal agencies acknowledge the resolution set forth by the Mesa County BOCC regarding wolf management (Mesa County Resolution Concerning Wolf Management in Colorado).
2. Federal management plans should be generated to protect the overall health of all natural resources, not specifically managed for one individual species.
3. Require prompt participation and response from Federal agencies when requested by Mesa County for resources concerns, management plans and sensitive, candidate, or listed species.

4. Management plans will use independent scientific data to generate plans.
5. Minimize management of “special status” species to decrease single-species management efforts.
6. Support habitat monitoring efforts and refine available habitat data.
7. Consultation and coordination should occur with Mesa County where federal monies or resources are committed for the development of management plans, population objectives, wildlife introductions, or other decisions that may affect the economic viability of the communities within Mesa County.
8. Peer-reviewed science, or those data meeting the agency data specifications, will be used in the management of disease spread between native and domestic species, with consultation and coordination of local governments in the County.
9. Habitat improvements on federally managed lands are supported that increase forage to reduce private land conflicts with wildlife in consultation with the County, Districts, and permittees.
10. Signage should be used to notify the public of seasonal wildlife related closures (calving/fawning).
11. Support management of Greater Sage-grouse according to the Colorado Greater Sage-grouse Conservation Plan, or local plans where they exist.
12. Support consultation, cooperation, and collaborative efforts to minimize impacts of vehicle collisions and highway fencing along county roads and highways within key wildlife migration corridors in Mesa County.
13. Develop monitoring programs that separate the use by species (e.g., wild horse, livestock, or wildlife) that can be used to inform management.
14. Allow for involvement of the County in federal Species of Concern and Sensitive Species review processes, including in the determination of what should be included as a Species of Concern or Sensitive Species. The County requests inclusion in discussions and decisions regarding any proposed introduction of experimental populations.
15. Mesa County opposes the federal management of non-ESA listed species (i.e., species of concern, species of special concern, or any other non-ESA designation) as though they are protected by the rules of the ESA.

### 3.3.C Fisheries

#### *History and Culture*

The CPW manages fisheries through native population and hatchery management. CPW operates 19 hatcheries across the state which rear and stock over 90 million fish per year. CPW maintains an online interactive Fishing Atlas containing fishery information such as accessibility, type of fishing, and species. The [CPW Fishing mobile app](#) is also a resource cataloging over 2,000 fishing locations, species availability, and stream gauges across the state. (Colorado Parks and Wildlife, n.d.-a, n.d.-b, 2019a)

#### *Resource Assessment*

Across Colorado, 29% of residents fish as a form of outdoor recreation. Anglers contributed \$2.4 billion to the economy in 2019. Within Mesa County there are a multitude of lakes and streams, though the Colorado River is one of the most prominent fisheries in the area. Common species available are multiple forms of trout, walleye, bass, bluegill, and catfish. (Colorado Parks and Wildlife, 2019b, 2019c)

#### *Resource Management Objective*

- A. Aquatic resources are managed for healthy and biodiverse fisheries that support recreation and tourism within Mesa County.



## ***Policy Statements***

1. Management plans should be generated to protect the overall health of all natural resources, not specifically managed for one individual species.
2. Management plans will use independent scientific data, peer-reviewed science, and/or those data meeting the ‘credible data’ agency specifications to generate plans.
3. Create management objectives based on the carrying capacity of the habitat including all multiple use mandates (livestock grazing, mineral extraction, etc.) on federally managed lands.
4. Support fisheries habitat monitoring efforts and refine available fisheries habitat data.

### **3.3.D Pests, Predator Control, and Livestock Predation**

#### ***History and Culture***

Predatory wildlife is important to the ecology of an ecosystem. However, predators have negative impacts on livestock operations, developing communities, and other agriculture operations. It is important to properly manage predators to ensure safe communities and stock, and healthy functioning ecosystems.

During the settlement of the western states, depredation was an issue across livestock operations. Predators were controlled on an individual basis until the early 1900s, when stock growers began asking for government assistance. The common mindset in the early 1900s was that “the only good predator is a dead one.” However, by the 1960s, with the release of the Leopold Report, the importance of proper management of predators became known (deCalesta, n.d.). The common public mindset began to shift to the control of predators threatening stock operations and communities while allowing natural predator populations to exist (deCalesta, n.d.).

#### ***Resource Assessment***

The Animal and Plant Health Inspection Service (APHIS) within the Department of Agriculture manages a Wildlife Damage Program. The Wildlife Damage Program researches and develops wildlife damage management methods and provides resources to the public (APHIS, n.d.). The Colorado State Legislature established predator control statutes. Those statutes include Colo. Rev. Stat. §§ 33-1-105, 33-3-103, 33-3-106, 33-4-101.3, 33-6-107, 33-6-208, 35-40-101.2 through 115. The Colorado Department of Agriculture’s depredation regulations can be found in Title 1200 of the Colorado Code of Regulations Colorado Code of Regulations 8 CCR 1201-12. (Colorado Department of Agriculture & Colorado parks and Wildlife, n.d.)

Wildlife population management through sportsman hunting and trapping occurs throughout Mesa County. Predator control within the County affects the economic stability of the livestock industry and the sport hunting/fishing industry. Predator control has been used to protect the health and safety of the public by reducing human-wildlife conflict and the spread of diseases commonly carried by predators. A few of the more common predators in Mesa County and the surrounding area include mountain lion, black bear, bobcat, coyote, and fox. The Mesa County BOCC adopted a Resolution in 2018 opposing the reintroduction of the gray wolf. In the November 2020 election, Colorado voters elected to allow the reintroduction of wolves in Colorado.

There are also several pests that must be properly managed including badger, muskrat, beaver, skunk, raccoon, porcupine, and multiple birds such as starlings, common crow, and magpie. It is important to recognize that changes in wildlife population dynamics and management in surrounding areas are likely to influence wildlife populations and behavior within Mesa County.

## Resource Management Objective

- A. Predator populations are managed to maintain healthy ecological levels, while still prioritizing reducing the occurrence of livestock depredation and the health and welfare of citizens of Mesa County.

## Policy Statements

1. Support selective science-based predator control as a valid means of increasing the productivity of state and federally managed lands within the County and as a valid method of attaining sustainability of the wildlife and domestic livestock populations.
2. Predator control measures should be applied on all private, state, and federally managed lands within the County.
3. Support recognized proactive efforts such as aerial hunting to control predator populations.
4. Mesa County does not support the reintroduction of the gray wolf into Colorado (Mesa County Resolution Concerning Wolf Management in Colorado).
5. Federal agencies should coordinate with the County in the determination of any impact of management of predator species when related to the management of ESA listed species or the use of APHIS funds, as required by federal agency mandates. This includes impacts on the economy and safety of the residents of the County.
6. Pursuant to state statute, the County will establish and implement a cooperative plan for predator control incorporating coordination with APHIS and county resources where available.

## 3.3.E Wild Horses, Burros, and Estray Livestock

### History and Culture

#### Wild Horses and Burros

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

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

Once the inventory occurs and the AML has been set, if an overpopulation of wild horses exists, the BLM “shall immediately remove excess animals from the [public] range so as to achieve appropriate management levels (AMLs)” (See 16 U.S.C. § 1333(b) (1) and (2) and 43 C.F.R. § 4720.1). “Upon examination of current information and a determination by the authorized officer that an excess of wild horses ... exists, the authorized officer shall remove the excess animals immediately...”. “Excess animals”

are defined as those that must be removed in order to preserve and maintain a thriving natural ecological balance and to preserve the “multiple use relationships” in an area (See 16 U.S.C. § 1332 (f)). As stated in another section of the WFRHBA, “[A]ll excess animals” must be removed by the BLM “so as to restore a thriving ecological balance to the range, and to protect the range from deterioration associated with overpopulation” to preserve and maintain the “multiple use relationship in that area.” See 16 U.S.C. § 1333 (b)(2). When a determination is made that there is an “excess,” action is immediately required because the “endangered and rapidly deteriorating range cannot wait” (*Blake v. Babbitt*, 837 F. Supp. 458, 459 (D. D.C. 1993)).

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

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

Although there is no federal statute requiring private landowners to allow wild horses to graze on their private lands, private landowners cannot remove the horses. The WFRHBA mandates that the BLM, once notified, must “immediately” remove excess wild horses from state and private land.

Administratively, the BLM manages two types of areas for wild horses: Herd Management Areas (HMAs) and Herd Areas (HAs). The Grand Junction BLM Field Office manages the Little Book Cliffs HMA. (U.S. Bureau of Land Management, 2016a)

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

### [Estray Livestock](#)

"Estray" means any bovine animal, horse, mule, ass, or alternative livestock as defined in section 35-41.5-102 (1) found running at large upon public or private lands in the state of Colorado whose owner is either known or unknown in the section where found or which is outside the limits of its usual range or pasture. It is unlawful for any person, corporation, or company, or any of its employees or agents, to take into its custody any such estray and retain possession of the same, except as provided in this article (Colo. Rev. Stat. 35-44-101 (2015)).

## ***Resource Assessment***

### [Little Book Cliffs Wild Horse Area Herd Management Area](#)

The Little Book Cliffs Wild Horse HMA is located eight miles northeast of Grand Junction covering 36,113 acres. The HMA is characterized by four major canyon and plateau systems. The designated AML is 90-

150 horses, as of the 2018 gather report there were approximately 190 wild horses in the HMA (BLM, 2018). The BLM has partnered with the Little Book Cliffs Wild Horse Range Fertility Darting Team to manage the population levels. Advocates for the herd started working with the BLM in the early 1980s, and fertility control through darting was introduced to the herd in 2002. Prior to darting, 30-40 foals were born in the Little Book Cliffs herd each year. Now 8-17 foals are born annually. The Little Book Cliffs herd grows at a rate of 8% annually compared to the national heard average growth rate of 20% per year. The Little Book Cliffs HMA is shown in Figure 16 below. (U.S. Bureau of Land Management, 2016a, 2016b)

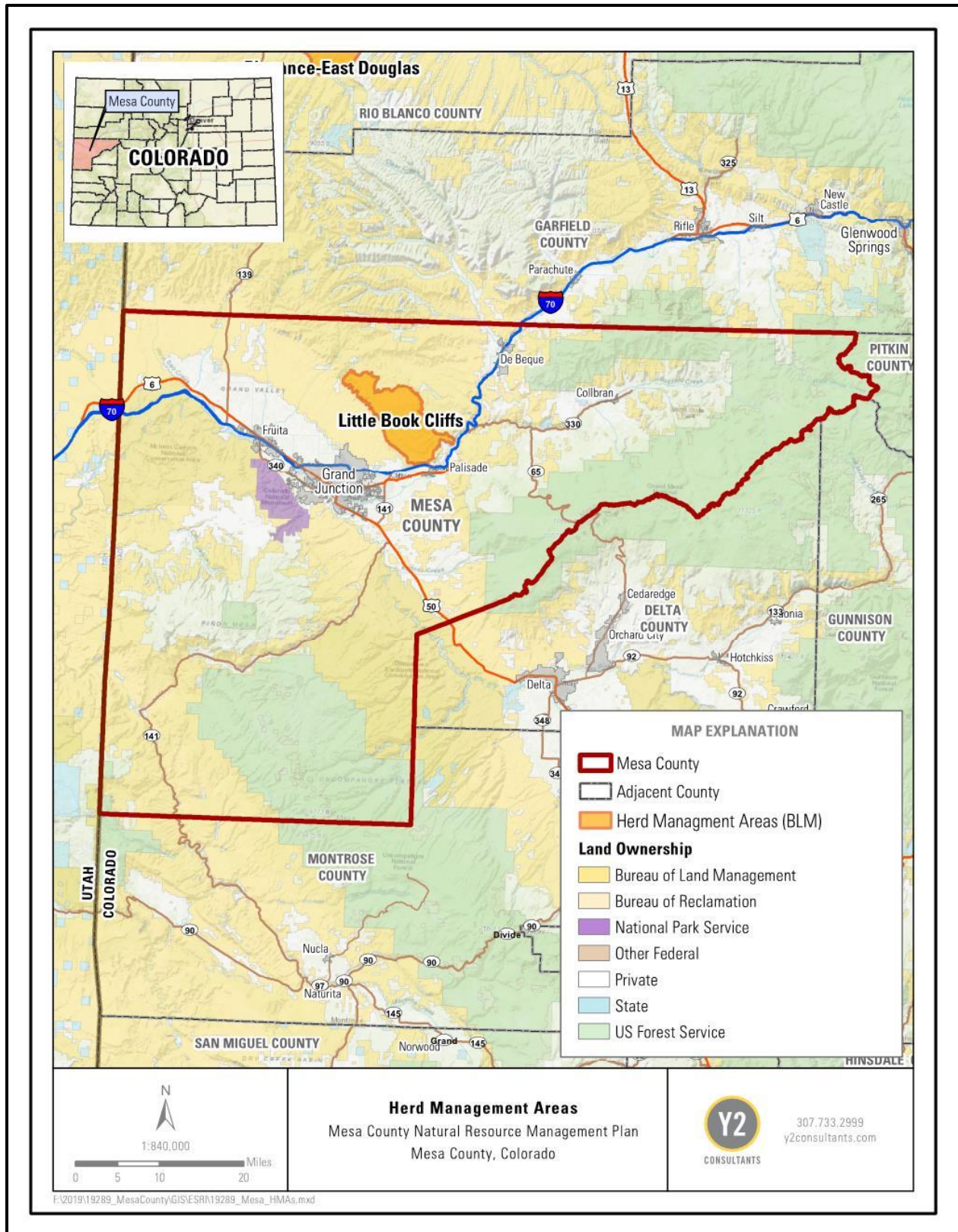


Figure 15. Herd Management Areas within Mesa County (BLM, 2020).

## Resource Management Objective

- A. Wild horses within the County shall be managed for a viable, healthy herd resulting in the thriving natural ecological balance (including the standards and guidelines for rangeland health) and multiple-use relationship in that area as required by the Act. (BLM, 2006)

## Policy Statements

1. Support the gathering and removal of all excess horses (those above AML) from the rangelands.
2. The rights of the allotment holder should be considered equal to that of wild horses as per multiple use mandates.
3. Support and encourage the immediate removal of wild horses from private lands when notified of their presence as defined through the WFRHB Act and Colorado estray laws. Immediate removal should be conducted in such a manner so that the horses will not return to private lands nor be placed within County boundaries as long as the BLM is out of compliance with AML.
4. Support and encourage the immediate removal of all wild horses within Mesa County that are found outside the Little Book Cliffs HMA in accordance with the Act.
5. The County opposes any proposed enlargement or expansion of the current HMA boundaries and any new HMAs or HAs.
6. An inventory of wild horses should be completed at least every three years.
7. Remove horses to the lowest range of the AML to reduce the frequency of gathers. Because completing a gather is a lengthy and expensive undertaking often hampered by litigation, and because horses have no predators, if not gathered to the lowest end of AML population, numbers will rebound requiring another gather in too short of time.
8. Support the continued use of long-term fertility control such as spaying of mares but only as a last resort to other viable solutions, and if the numbers are already within AML.
9. The County encourages the creation of public education programs through the extension service to inform the public at large about the need to maintain healthy ecosystems and the differences between livestock, wild horse, and wildlife management needs and impacts.
10. Rulemaking should be pursued to give the BLM, and those who adopt wild horses, additional options for the disposal of wild horses to allow BLM to meet their existing statutory requirements.
11. Modifications of HMA boundaries would be allowed only for the purpose of reducing resource conflicts and adverse effects on private lands, so long as there is no net increase in boundary size or AML numbers.
12. Any reduction in HMA size should be completed with appropriate reduction in AML.
13. Develop and implement habitat management and/or monitoring plans to specifically determine impacts of wild horses on range, riparian, water, wildlife, and other resources.
14. Monitoring plans should accurately identify the causal factors in resource changes (e.g., separate wild horse, livestock, and wildlife impacts) and if monitoring shows any adverse impacts, take action to manage the activity based on the specific results in the monitoring.
15. Once excess horses are removed from areas where livestock grazing permittees have taken reductions in AUMS, livestock grazing reductions should be reinstated as soon as resources recover.
16. Any equine animal released from private individuals, tribes, or neighboring lands onto federal public lands after 1971 should be considered as estray and be removed.
17. Develop monitoring programs that separate the utilization by species (e.g., wild horse, livestock, or wildlife) that can be used to inform management.

## 3.4 AGRICULTURE

### 3.4.A Agriculture Production and Livestock Grazing

#### History and Culture

Agriculture is an invaluable source of employment, affordable food, raw materials, and open space to Mesa County. Agricultural lands also contribute to the County's landscape and scenic beauty, provide wildlife habitat, and provide recreational opportunities for residents and visitors alike for hunting, fishing, and other tourism-related activities. Agriculture also provides numerous opportunities for environmental stewardship to benefit local ecosystems and serves as key component of the County's sustainable economy. The presence of the agriculture industry improves the quality of life within Mesa County. (Mesa County Board of Commissioners, 1997)

Mesa County has a diverse agricultural background due to its unique climate and ecological diversity. Agricultural industries include livestock production, crop production, orchards, and vineyards. According to the 2017 Agriculture Census, Mesa County's leading agriculture products are fruit, tree nuts, and grapes. Vineyards and orchards are an integral part of the agricultural economy in Mesa County. While these agricultural operations reside on private land they are influenced by state and federal management decisions (e.g., weed and pest management and funding assistance). Mesa County is first in the state on fruit production, reaching \$22,239,000 in market value for 2017. Mesa County is ranked 103 of 2,748 counties, nationally in fruit, tree nut, and berry production. Cattle and calf production resulted in \$29,989,000 for 2017; Mesa County being 14<sup>th</sup> in the state. (USDA, 2017b)

Mesa County BOCC set forth resolution MCM 97-132 concerning agriculture policy within the County. The resolution states:

*Any agricultural operation and/or practice that is historical, traditional, legitimate, and reasonable should be protected. Any new or expanded agricultural operation or practice that is legitimate and reasonable should be encouraged. (Mesa County Board of Commissioners, 1997)*

#### Agricultural Production

Crops produced in Mesa County include sugar beets, onions, hay, tomatoes, lavender, corn, hops, and hemp. Forage including hay is the top crop in Mesa County. In 2018, the Farm Bill reclassified hemp and made it legal to grow industrial hemp. In 2019, Mesa County had 214 permitted hemp farms. Orchards in Mesa County include peaches, pears, apples, apricots, nectarines, plums, cherries, and raspberries. Mesa County produces approximately 91% of Colorado's grape production. There are 432 acres of vineyards in Mesa County. The eastern zone of vineyards produced the highest at \$5,000/acre revenue. The lowest producing zone was the north region at less than \$1,000/acre. Over the long term, the eastern zone and East Orchard Mesa have the highest gross revenues at >\$4,000/acre. Since 2011, over 50% of the vineyard area has planted or transitioned to cold-hardy hybrid grapes to improve production. (Caspari & Colorado State University, 2016, 2018)

#### Livestock Grazing

The vegetation in Mesa County evolved under tens of thousands of years of grazing and periodic fire. Grazing in the region began to shape the modern vegetation we see today around 18,000 years ago in the Pleistocene. Eventually these species were replaced by the wildlife we know today. Wildlife, wildfire and

early humans continued to shape the vegetation of the basin. In the late 1600s to mid-1700s, Native Americans obtained the horse and became pasture managers as well as wildlife managers, manipulating the vegetation and animal populations.

Livestock grazing has been a major industry in Mesa County since early settlement. It continues to be a vital part of the economy and culture of the County, as well as an economic driver. Studies have shown that in recent years every cow produced in Mesa County contribute \$600-\$800 every year to the local economy in the form of trucks purchased from local dealers, services purchased from local veterinarians, and purchase of seed and feed from local stores (Vanwinkle, 2019).

Agriculture, as a way of life, benefits all residents of Mesa County. It is an important part of the economy and adds intrinsic value to life in Mesa County. Agriculture, as a business, brings with it noise, odors, dust, mud, smoke and other inconveniences. Some inconveniences are, but not limited to, weed burning, equipment and livestock on public roads, odors from manure and feeds, odors from chemical applications, lights and noises at all hours of day and night, and on-farm processing and marketing of crops and livestock. To maintain the way of life, we must protect the business from unnecessary intrusive litigation. Therefore, none of these inconveniences should be considered a nuisance as long as they occur as a part of legitimate, non-negligent, and legal agricultural practice, as stated in Colorado State Statute 35-3.5-101, 102, 103 as amended (MCM 97-132).

## **Resource Assessment**

### Agricultural Production

Irrigated agricultural lands rely on the distribution of water from rivers and reservoirs through canals and pipelines. Some or all of these may reside on or pass through federal and state lands where permitting issues are triggered for maintenance and expansion. According to the 2017 US Census of Agriculture, Mesa County had 76,221 acres of irrigated land (USDA, 2017b). This makes the retention and proper management of water rights a priority for the citizens of Mesa County. (United States Department of Agriculture National Agricultural Statistics Service et al., 2014; USDA, 2017a)

### Livestock Grazing

Permitted grazing on federal lands is a critical piece of livestock operations in Mesa County. The intermingled BLM and private lands allow ranching to continue in the Mesa County. Access to federally managed lands is critical to the continued ability to maintain the ranching industry in the County.

## **Bureau of Land Management**

The Taylor Grazing Act (TGA) of 1934 (43 U.S.C. 315) established the Grazing Service, which eventually became known as the BLM. Local BLM grazing advisory boards created an adjudication process to determine where, when, and what type of livestock grazing could occur on public rangelands. To receive an allotment through this process, the stockman had to have (1) “commensurate base property” on which he could graze his livestock when they were not using the federal lands, (2) have an economically viable livestock operation and (3) be members of the local community and support the local stability of the community. (43 U.S.C. § 315b) The TGA gives individuals the right to apply for grazing permits on federal lands based upon the ownership of qualified base property (43 U.S.C. § 315(b)). The purpose of the TGA is “to stabilize, preserve, and protect the use of public lands for livestock grazing purposes...” (*Barton v. United States*, 609 F.2d 977 (10th Cir. 1979)). As the court in *Public Lands Council v. Babbitt*, explained,



“Congress enacted the [TGA], establishing a threefold legislative goal to regulate the occupancy and use of the federal lands, to preserve the land and its resources from injury due to overgrazing, and “to provide for the orderly use, improvement, and development of the range” (154 F.3d 1160, 1161 (10th Cir. 1998)). Once a grazing district is established, grazing must occur on the land (*See generally, Mountain States Legal Foundation v. Andrus*, 499 F.Supp. 383 (D. Wyo. 1980)) (holding that the intent of FLPMA was to limit the ability of the Secretary of the Interior to remove large tracts of public land from the operation of the public land laws). Further, Congress intended that once the Secretary of the Interior established a grazing district under the TGA, the primary use of that land should be grazing (*Public Lands Council v. Babbitt*, 167 F.3d 1287, 1308 (10<sup>th</sup> Cir. 1999) *aff’d on other grounds*, 529 US 728 (2000)). The Secretary of the Interior can modify the boundaries of a grazing district, but unless land is removed from designation as grazing, or the Taylor Grazing Act designation is terminated, the Secretary must use it for grazing (43 U.S.C. § 315).

The BLM in Colorado is mandated to follow 43 CFR § 4180.1 - Fundamentals of Rangeland Health. The Colorado State Office of BLM have developed statewide Standards of Public Land Health. These standards describe conditions needed to sustain federal land health and relate to all uses of the federal lands. Standards are applied on a landscape scale and relate to the potential of the landscape and have been developed to provide further guidance on land management objectives. There are five standards assessing soils, riparian, plant and animal communities, special status and threatened and endangered species, and water quality.

There are 204 BLM grazing allotments covering 1,034,285 acres in Mesa County. The majority of Mesa County falls within the Grand Junction Field Office but parts of the Uncompahgre and Colorado River Valley Field Offices encompass Mesa County (see Figure 16 17).

### ***BLM Range Improvements***

All range improvements on BLM lands must be authorized by the agency. There are two options for authorization: (1) a Cooperative Range Improvement Agreement, or (2) a Range Improvement Permit. The Cooperative Range Improvement Agreement identifies how the costs of labor, materials, and maintenance are divided between the agency and the permittee. Range Improvement Funds can be used for labor, materials, and final survey and design of projects to improve rangelands. The Range Improvement Permit requires the permittee or lessee to provide full funding for construction and maintenance of the improvement. NEPA analysis is not required for normal repair and maintenance of range improvements that are listed on a term grazing permit; permission of the authorized officer is also not required. However, for reconstruction of a range improvement or construction of new improvements, NEPA analysis and a decision by the authorized officer is required. Range improvements such as water developments benefit wildlife in addition to livestock.

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

Within Mesa County there are 39 USFS grazing allotments covering 515,815 acres. The GMUG, Manti-La Sal, and White River National Forests all have lands within Mesa County (see Figure 17).

### ***USFS Range Improvements***

All range improvements on USFS lands must be authorized by the agency. The USFS allows structural improvements (e.g., fencing) and non-structural improvements (e.g., seeding and brush control). Any requirements for permittee construction or development of range improvements are identified in the grazing permit. It is a common practice for the USFS to furnish materials and the permittee to provide

labor for structural improvements. The permittee is assigned responsibility for the improvements (maintenance) but the USFS holds title to the improvement. Should the improvement not be adequately maintained, the USFS can take action against the permittee for non-compliance with their grazing permit. Range Betterment Funds are available for planning and building rangeland improvements.

### ***Resource Management Objective***

- A. Agricultural production is maintained as a viable and major component of the economy, history, and culture of Mesa County.
- B. Livestock grazing is maintained as a major component of the economy of Mesa County.

### ***Policy Statements***

1. Federal actions affecting agriculture are made in consultation with the County.
2. Support development of all plans and policies that directly or indirectly affect agriculture with the intent of increasing the stability and expansion of the industry as well as encouraging innovative techniques that improve the efficiency of crop production.
3. Support and assist agencies in quickly processing permits on federally managed lands for the construction, maintenance, or expansion of irrigation distribution systems (i.e. canals, ditches, pipelines) to private lands.
4. Allow maintenance of irrigation ditches and canals on federally managed lands where those rights already exist through a Range Improvement Agreement.
5. Support production agriculture and the sustainable use of natural resources to sustain agricultural enterprises.
6. Any agricultural property damage or crop loss caused by an escaped prescribed burn, fire suppression efforts, or damage caused by government agency action, resulting in economic loss in Mesa County should be considered justification for economic compensation and restoration by the responsible agency to the property owner at current market values.
7. Support streamlining the application process for range improvements. Proposed range improvements should be approved in six months or less.
8. Support watershed BMPs by Federal agencies to mitigate water pollution from heavy erosion and sedimentation from federally managed lands, and to work with local conservation districts in accomplishing these BMP's.
9. Any agricultural operation and/or practice that is historical, traditional, legitimate, and reasonable should be protected. Any new or expanded agricultural operation or practice that is legitimate and reasonable should be encouraged (MCM 97-132).
10. Support consultation, cooperation, and collaborative efforts to ensure that overall rangeland health is being maintained through monitoring and implementation of well-designed livestock grazing management plans on all public land allotments.
11. Federally managed lands within Mesa County should continue to be managed for multiple-use and sustained yields, which includes continued grazing.
12. Livestock grazing management decisions should be made based on the best available scientific information that is applicable to the rangeland resources in Mesa County. The scientific information used will be consistent with standards of the Data Quality Act.
13. Allotment retirements are not supported.
14. Support management plans generated for the overall health of all-natural resources. Plans specifically for managing one species are not supported.

15. Support livestock grazing on suitable federally owned and operated lands as an integral part of habitat management.
16. Support opening of Conservation Reserve Program lands for grazing and haying in times of drought or economic need.
17. Site-specific reviews conducted with the permittee should be used to determine the appropriate grazing suspension period post-fire.
18. Full site-specific economic and resource analysis of suspending grazing for allotment closures must be completed through NEPA prior to the closure.
19. Support creation of adaptive grazing management plans that allow permittees to respond to changes in resource conditions. These plans should include focused monitoring, triggers and responses, and alternative management plans.
20. Support timely processing of fully processed term grazing permit renewals.
21. Support the use of site-specific soils and range ecological site data to create appropriate objectives for livestock and wildlife.
22. Encourage use of drill seeding as a method of rangeland restoration or improvement where appropriate.
23. All seed mixes consistent with the Ecological Site Description and free of noxious weeds and invasive species are encouraged for all reclamation efforts.
24. Support collaboratively developed and implemented rangeland monitoring programs for all allotments using currently accepted scientifically based monitoring methods and return intervals utilizing properly trained rangeland personnel with an understanding of rangeland and its management to ensure proper collection and analysis of data.
25. Support the review and incorporation of data collected by a permittee or qualified team for use in management decisions.
26. Encourage development of additional rangeland improvements when the need arises.
27. Determine grazing rest prescriptions related to either wildfires or prescribed burns on a site-specific basis.

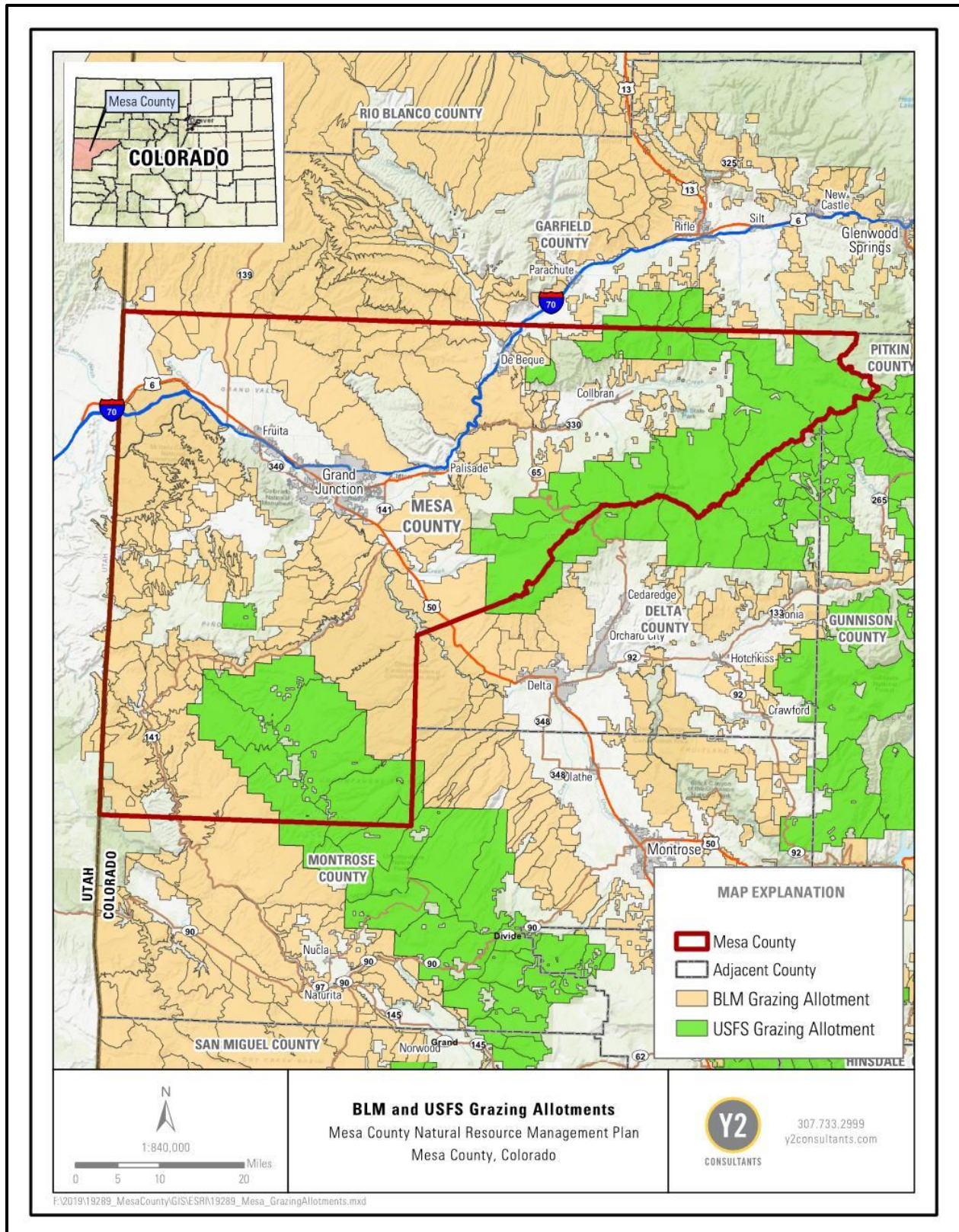


Figure 16. USFS and BLM grazing allotments within Mesa County (BLM, 2020).

## 3.4.B Noxious Weeds and Invasive Species

### *History and Culture*

Mesa County has traditionally practiced weed and pest control as a means to increase the productivity of the various lands within the County and as a means of promoting the health, safety, and general welfare of the residents of the County. In order to do so, a fundamental goal of weed and pest management has been to hold each of the various property owners in the County responsible for the control of the weeds and pests on their land; and just as importantly, to be responsible for the spread of weeds and pests from their property onto neighboring property.

The Weed and Pest District is the weed and pest control authority for the County. Their mission is to:

- Promote landowners' responsibility for caring for fruit trees and grape vines, and assist growers in their pest control efforts within the Upper Grand Valley Pest Control District;
- Identify, map and monitor pest and noxious weed infestations and enforce the Colorado Noxious Weed Act;
- Educate the public about the impact of pests and weeds on our environment and economy and assist them in control efforts; and
- Build networks of public and private organizations and agencies to coordinate the control of pests and noxious weeds. (Weed and Pest District, n.d.)

### *Resource Assessment*

#### *Federal Noxious Weed Management*

Pursuant to the Federal Noxious Weed Act (7 U.S.C. § 2814), Federal agencies have the authority and responsibility to manage undesirable plants and noxious weeds on federal lands. Each federal agency has a designated weed specialist and weed control program. The current federal noxious weeds list is maintained on the [USDA Plants Database](#) (NRCS, 2019). Noxious weeds mapped within BLM lands in the county can be found below in Figure 18.

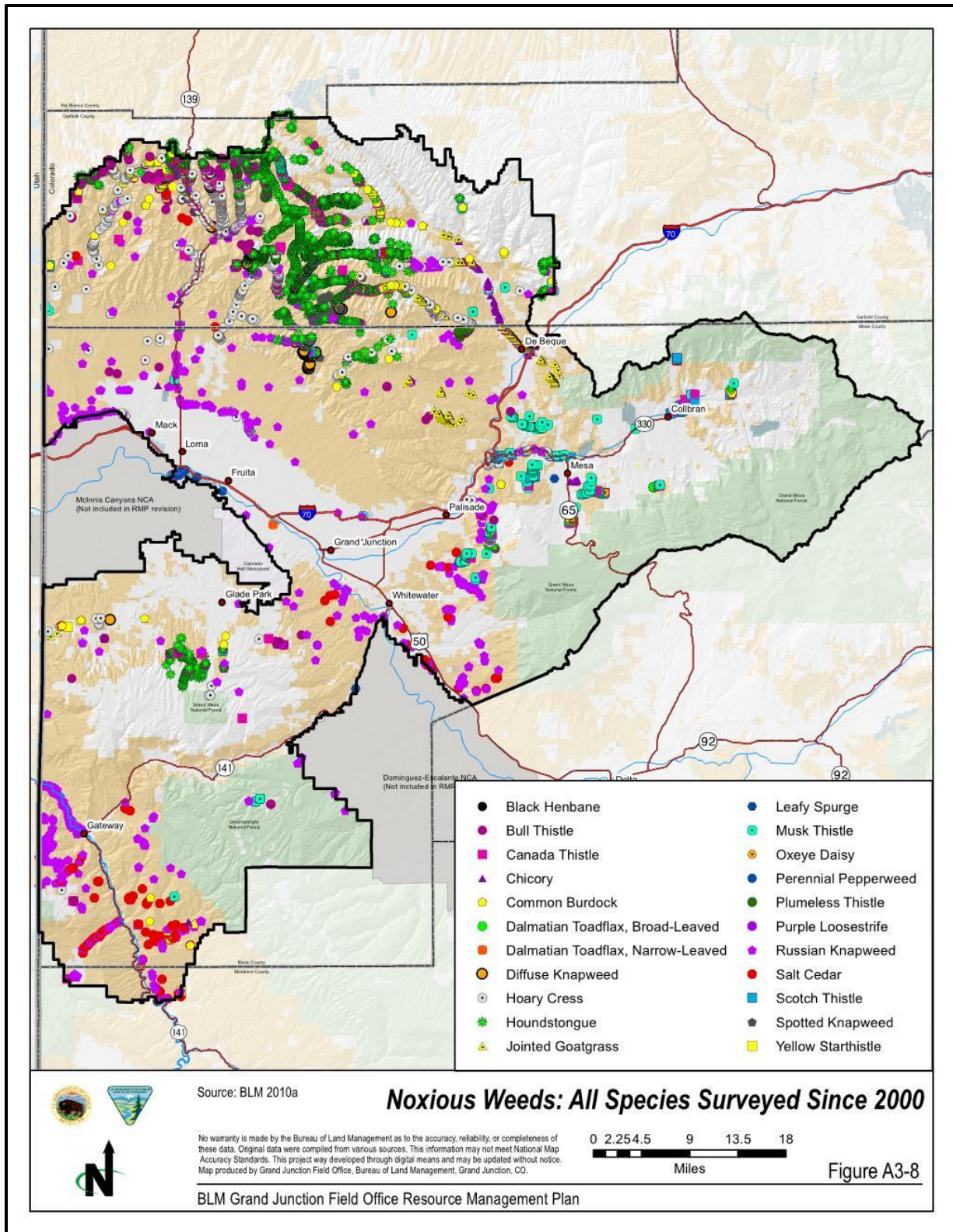


Figure 17. Noxious weeds mapped on BLM lands within the Grand Junction Field Office since 2000 (map taken from Grand Junction Field Office RMP).

### Colorado Noxious Weed Management

The Colorado Noxious Weed Act (C.R.S. § 35-5.5-101) defines a noxious weed as an alien plant or parts of an alien plant that have been designated by rule as being noxious or has been declared a noxious weed by a local advisory board, and meets one or more of the following criteria:

- Aggressively invades or is detrimental to economic crops or native plant communities; or
- Is poisonous to livestock; or
- Is a carrier of detrimental insects, diseases, or parasites; or
- The direct or indirect effect of the presence of this plant is to be detrimental to the environmentally sound management of natural or agricultural ecosystems.

Colorado noxious weeds are classified into three categories: ‘List A, B, or C’. List A species are designated to be eradicated throughout the state regardless of individual County plans. List B species are more established and are managed by the County to stop their spread. List C species are widespread throughout the state and management is optional for counties; management focus is on further education and research. For additional information regarding the Colorado State Noxious Weed Program, the Colorado Noxious Weed List, and Colorado’s County Weed Programs refer to the Colorado Noxious Weeds [website](#).

### Mesa County Noxious Weed Management

A local Weed Advisory Board (WAB) advises the County Commissioners on weed management in the County and assists in updating the Weed Management Plan (WMP) every three years. The Mesa County WMP’s goals are to:

1. Promote prevention, early detection and early treatment as the most cost-effective means for weed control for the preservation of agricultural production, recreational open space, natural environment, and aesthetics of urban and rural landscapes.
2. Prioritize weed management activities for the Mesa County Noxious Weed & Pest Management program so as to maximize the impact of control measures and funding.
3. Strive to contain, suppress or eradicate current weed infestations and reduce or eliminate weed seed production in certain species according to current State law, Rules, and Mesa County policy.
4. Identify, monitor and promptly initiate management efforts for the newly discovered high priority infestations so as to prevent their spread to or within unincorporated Mesa County.
5. Partner in the development and implementation of weed management plans for noxious weeds on Mesa County owned properties, easements, and maintained rights-of-way.
6. Protect agricultural production, native plant ecosystems, watershed, and recreational lands from degradation by noxious weeds by compliance with the Noxious Weed Act and collaborative efforts through cooperative agreements with municipal, State and Federal agencies and adjacent counties and States.
7. Preserve the quality of life in urban areas of unincorporated Mesa County through desirable plant stewardship and noxious weed management to enhance human health aspects, land values and aesthetics.
8. Provide technical support and recommendations for noxious weed management, and partner in the development of weed management plans with private landowners and land managers, and other governmental agencies.

9. Provide education for Mesa County citizens about the impact of noxious weeds on the economy and the environment. Provide relevant information about weed identification and on best management practices. (Mesa County Weed & Pest, 2020)

For the current Mesa County Noxious Weed List refer to the current Mesa County WMP located [here](#).

Various state and Federal agencies support weed and pest management by utilizing funds from discretionary or general fund sources such as the General Assembly. This only secures short-term funding for specific weed and pest infestations that generally last no more than one season. In recent years drought conditions have led state and Federal agencies to focus funds on fighting and protecting against wildfires rather than weed and pest management.

### [Upper Grand Valley Pest Control District](#)

The Upper Grand Valley Pest Control District (UGVPCD) was formed to protect commercial growers from weed, disease, and pest infestation. The UGVPCD spans Palisade and Clifton and is bounded by Interstate 70 to the north and Orchard Mesa Irrigation Canal Number 2 to the south. The District enforces laws, responds to complaints, manages the removal or care for neglected trees, educates the public, manages weed infestations, and inspects nursery stock. The UGVPCD also manages the Fruit Tree Removal Program for unmanaged or pest-ridden fruit trees on residential properties to limit the spread to orchards in the area. (WPD, n.d.)

### [Other Invasive Issues](#)

Mesa County recognizes the spread of cheatgrass (*Bromus tectorum*) on federally managed lands as one of the most severe present-day threats to grassland and sagebrush ecosystems, wildlife population health, and livestock grazing. While not listed as a noxious species in the state, due to its widespread distribution, cheatgrass and other annual bromes lumped under this common name are a serious threat in the County. This annual grass has reduced the productivity of native range plants and accelerated fire cycles within the County. While widespread control of the species is impossible, all efforts should be made to minimize its potential to take new footholds.

In addition to these plants, aquatic plants like hydrilla (*Hydrilla verticillata*), Eurasian watermilfoil (*Myriophyllum spicatum*), curly pondweed (*Potamogeton crispus*), and didymo (rock snot) (*Didymosphenia geminata*) are of concern. While most people think of invasive species as plants, several animal species are also of concern such as aquatic invasive species like zebra and quagga mussels (*Dreissena polymorpha*, *Dreissena bugensis*) New Zealand mudsnail (*Potamopyrgus antipodarum*), Asian carp (*Cyprinus* spp.), and rusty crayfish (*Orconectes rusticus*). Almost all these species can have a negative impact on irrigation structures if they become established. White pine blister rust (*Cronartium ribicola*), pine borers (*Dendroctonus* spp.), and spruce bud worms (*Choristoneura* spp.) can also cause problems in the forested regions of the County. Several agricultural pests exist that can negatively impact the farming regions of the County.

### ***Resource Management Objective***

- A. Noxious and invasive species are managed, in coordination with Mesa County, in a sustainable and effective manner that uses credible data addressing biology and ecology of the pest and system.



## Policy Statements

1. Encourage restoration of habitats with native species to reduce wildfire danger, promote diverse wildlife species, and reduce water consumption.
2. Require federal and state agencies to meet the weed control requirements of existing agreements, including the County Weed Management Plan.
3. Aggressive weed management practices are necessary in lands currently impacted by noxious weeds, and especially so in areas where adjacent private landowners are aggressively controlling weeds.
4. Encourage cooperation between adjacent landowners and Federal agencies to control weeds.
5. Support and encourage control efforts to be focused on the control of all federally listed, State of Colorado designated, and Mesa County declared weeds and pests.
6. The County expects coordination with other local, state, and Federal agencies to allow the Weed and Pest Control District road access across state and federal lands to access infestations on public and private lands, as is required for the suppression of invasive species and pests.
7. Support and encourage cooperative efforts with state, federal, and private landowners/managers to enhance cooperative weed and pest management efforts countywide as required by agency mandates; coordinated with, and primarily managed by, the Mesa County Weed and Pest District.
8. Evaluate prescribed burns as a means of controlling weed species and revitalizing rangeland vegetation to support and expand multiple use.
9. Encourage prescribed grazing to control invasive, noxious, and nuisance plant species. State and federal land managers should provide flexibility to and work with permittees to achieve this as a control method.
10. Support cheatgrass control research.
11. Support weed management plans to control noxious weeds and other invasive species as a full interagency collaborative effort.
12. Support and encourage development of a policy regarding adequate notice to all parties responsible for noxious weed control in the area.
13. Any habitat enhancement projects that do not have a defined and funded weed control and monitoring plan for the anticipated life of the enhancement are not supported.
14. Support the federal agencies' development of an environmental analysis to expand weed control options.
15. Encourage implementation of federal and local Weed Management Plans, including mapping of all invasive and noxious weed populations.
16. Support federal monitoring efforts to accurately identify the extent of noxious weed infestations, and the identification of dispersal mechanisms where possible.
17. Support the prevention and management of aquatic nuisance species (i.e., zebra mussels, quagga mussels) and other invasive species on all waters within Mesa County.
18. Support education programs for public and private land users regarding all possible vectors of weed spread.
19. Support preparation and compliance with a plan including ensuring adequate funding to control terrestrial and aquatic invasive species, including noxious weeds on federally managed lands.
20. Support the use of aerial devices (i.e., drones, fixed wing, helicopters, and other aircraft) for weed monitoring and control where feasible.
21. Support herbicide use in wilderness areas.

## 3.5 PUBLIC LAND RECREATION

### *History and Culture*

Outdoor recreation occurs year-round in Mesa County. Outdoor recreational activities on public lands within the county include skiing, snowshoeing, snowmobiling, walking, jogging/running, hiking/backpacking, horseback riding, road biking, mountain biking, off-highway vehicle/4-wheeling/motorcycling, swimming, boating, water/jet skiing, canoeing/kayaking, whitewater rafting, sledding, hunting, fishing, ice fishing, bird watching, wildlife viewing, developed/RV camping, tent camping, picnicking, target shooting, and rock climbing. Outdoor recreation on public lands provides both mental and physical health benefits. Outdoor recreational opportunities on public lands and accessibility to public spaces is crucial to the continued availability of outdoor recreation for residents of and visitors to Mesa County. (Colorado Parks and Wildlife, 2019b) There are many developed recreation sites on public lands within the county including shooting ranges, campgrounds, trailheads, picnic areas, river access points, scenic overlooks, and restrooms. Some of these developed sites are shown on Figure 19 below.

From 1998-2015 jobs in travel and tourism grew by 19% (Mesa County, CO, n.d.-a). In Colorado, approximately 229,000 jobs are directly tied to the outdoor recreation industry which generate \$9.7 billion in wages and salaries and \$2 billion in state and local tax revenue. The Outdoor Recreation Coalition of the Grand Valley is one of several organizations that unifies an industry that employs over 2,000 people and contributes \$300 million to the local economy. (Grand Junction Economic Partnership, 2016a)

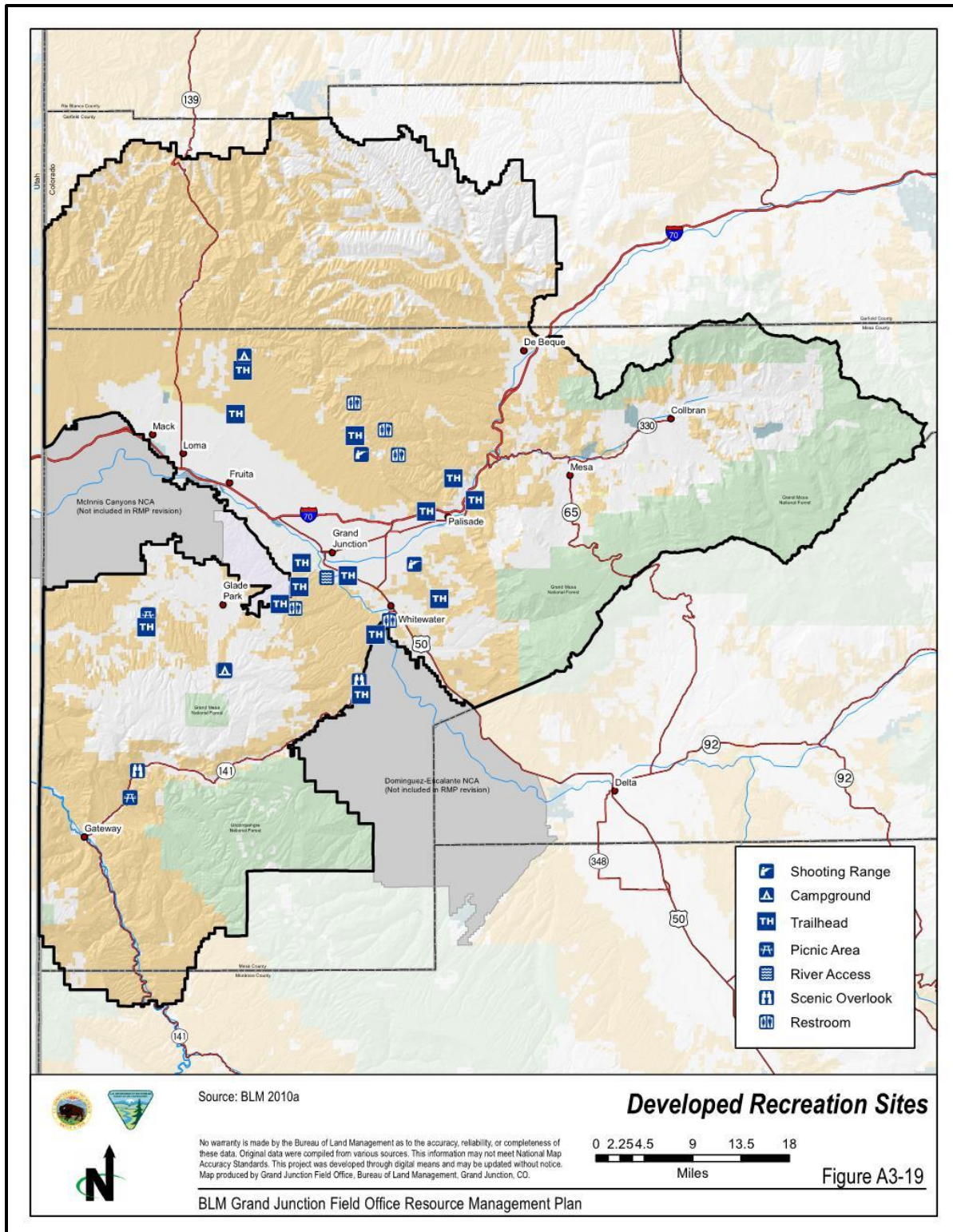


Figure 18. Developed recreation sites on BLM lands in Mesa County (map taken from Grand Junction Field Office RMP).

## **Resource Assessment**

Mesa County residents participate regularly in outdoor recreation. A 2016 report on outdoor recreation in Grand Valley (Mesa County) stated that 33% of residents participated in bicycling, 43% hiking/backpacking, 45% hunting/fishing, 43% water sports, 16% snow sports, and 46% camping (Grand Junction Economic Partnership, 2016a). Tourists visit Mesa County year-round for its abundant natural resources and federally managed land recreational opportunities including Colorado National Monument, the Gateway area, and McInnis Canyons National Conservation Area, and the world-class mountain biking.

### **Mountain Biking**

Mesa County is home to some of the most popular and iconic trails for mountain biking and contains 100 miles of trail within a handful of trail networks relatively close to one another. The county has become a popular spring and fall destination for bikers. Mountain biking is a large economic contributor to the county. The *Grand Valley Public Trail Systems Socio-Economic Study: Mesa County, Colorado* reported that nearly \$22 million is spent annually on goods and services in Mesa County related to outdoor trail use. (International Mountain Bicycling Association, 2018)

The BLM manages some of the most popular mountain bike trail systems in the Grand Valley area including the Lunch Loops, 18 Road, Kokopelli, and Palisade Rim trails which draw nearly 300,000 visitors annually. The USFS manages higher elevation lands that are key to year-round recreation and provide areas for recreationalists to escape the heat during the summer months. (International Mountain Bicycling Association, 2018)

The Palisade Plunge is designed to be a 32-mile, single-track trail from the top of the Grand Mesa to the town of Palisade. Still in the construction phase, the project has been in development for many years. Through a collaborative effort involving Mesa County, the Town of Palisade, City of Grand Junction, BLM, USFS, BOR, and the Colorado Plateau Mountain Bike Trail Association (COPMOBA), the Plunge is anticipated to be a world-class destination for mountain biking enthusiasts.

### **Winter Recreation**

Winter recreation is very popular within Mesa County with a diversity of activities. Many of these activities occur on the Grand Mesa where elevations reach near 11,000 feet and average snow is 250 inches each year. The Powderhorn Ski Resort is located on the northern side of the Grand Mesa and offers downhill skiing and snowboarding. There are three networks of cross-country ski trails including the Skyway trail system, County Line trail system, and Ward trail system that each offer different levels for skiers. Other trail options that are ungroomed but marked in the area include the West Bench Trail and Old Mesa Road. There is an intricate network of snowmobile trails that wind over and around the Grand Mesa, including the 120-mile-long Sunlight to Powderhorn Trail that stretches from Powderhorn Mountain Resort to Sunlight Ski Area near Glenwood Springs. Many of these snowmobile trails are also used by fat bikes in the warmer months. Ice fishing is also a popular winter sport in the county. Colorado River cutthroat can be caught in frozen lakes atop Grand Mesa and rainbow trout are in Vega Reservoir. (Visit Grand Junction, 2020)

### Watersports

Watersports within Mesa County include rafting, boating, water skiing/jet skiing, and paddle boarding. The GMUG National Forests contains over 300 lakes and 3,600 miles of tributaries providing countless opportunities for water recreation. Lakes accessible to motorized boats on the GMUG include Sunset Lake, Griffith Lake, Glacier Lake, and Granby Reservoir #1. There are also several lakes strictly for non-motorized or electric motors including Forty Acre Lake, Kitson Reservoir, Kenney Creek Reservoir, and Rimrock Lake. The Ruby Horsethief Canyon is one of the most popular areas for floating the Colorado River. This 25-mile stretch goes from Loma, CO to Westwater, UT and encompasses part of the McInnis Canyons National Conservation Area. (Grand Junction Colorado, 2020)

### Hunting and Fishing

Hunting and fishing are important resources and recreational activities for residents and non-residents of Mesa County. Big game hunting includes deer, elk, pronghorn, Rocky Mountain bighorn sheep, desert bighorn sheep, mountain lion, black bear, and moose; waterfowl include geese and ducks. Big game, small game, and waterfowl all provide hunting opportunities within the county. In 2017, Mesa County reported that there were 78,227 hunter days for big game, 43,788 hunter days for small game, and 6,540 hunter days for waterfowl (SCORP, 2018). The Colorado River is one of the most prominent fisheries within Mesa County. The GMUG however contains over 300 lakes and 3,600 miles of tributaries providing countless opportunities for fishing. Popular fishing lakes on the GMUG include Bull Creek Reservoir #1, Bull Creek Reservoir #2, Youngs Creek Reservoir, Kitson Reservoir, and Griffith Reservoir. Common fish species are Colorado River cutthroat, rainbow trout, yellow perch, walleye, bass, bluegill, and catfish. Ice fishing is also very popular in Mesa County particularly on frozen lakes atop the Grand Mesa and at Vega Reservoir.

Mesa County is located in both the Northwest and the Southwest CPW Regions. Hunting in the Northwest Region generated nine million dollars in state/local taxes, \$9 million dollars in federal taxes, and maintained 1,600 jobs in 2019. Hunting in the Southwest Region generated \$7 million dollars in state/local taxes, \$6 million dollars in federal taxes, and maintained 1,460 jobs. Across the state, the economic impact of the hunting industry was nearly \$1 billion in 2019. (Colorado Parks and Wildlife, 2019c, 2019d) Mesa County is within the top ten counties in Colorado for total hunting economic contributions and in 2017 provided 392 jobs in the hunting industry (SCORP, 2018).

### Shooting Sports

Shooting sports are a popular recreational activity within Mesa County on public lands. Target shooting is generally allowed on both BLM and USFS lands. However, discharging or using firearms, weapons, or fireworks is not allowed on developed recreation sites and areas except at sites specifically designated for that purpose. CPW's Cameo Shooting and Education Complex located northeast of Grand Junction, consists of multiple ranges for rifle, shotgun, pistol & archery. The BLM's 27 1/4 Road Shooting Range north of Grand Junction features a 1,000-meter rifle range and has 12 shooting benches (BLM, 2016a; USFS, n.d.-d) It is important that adequate protection measures are taken when shooting to ensure safety of all those who are using these lands. The BLM has designated several areas as being closed to target shooting. These areas are shown on Figure 20.

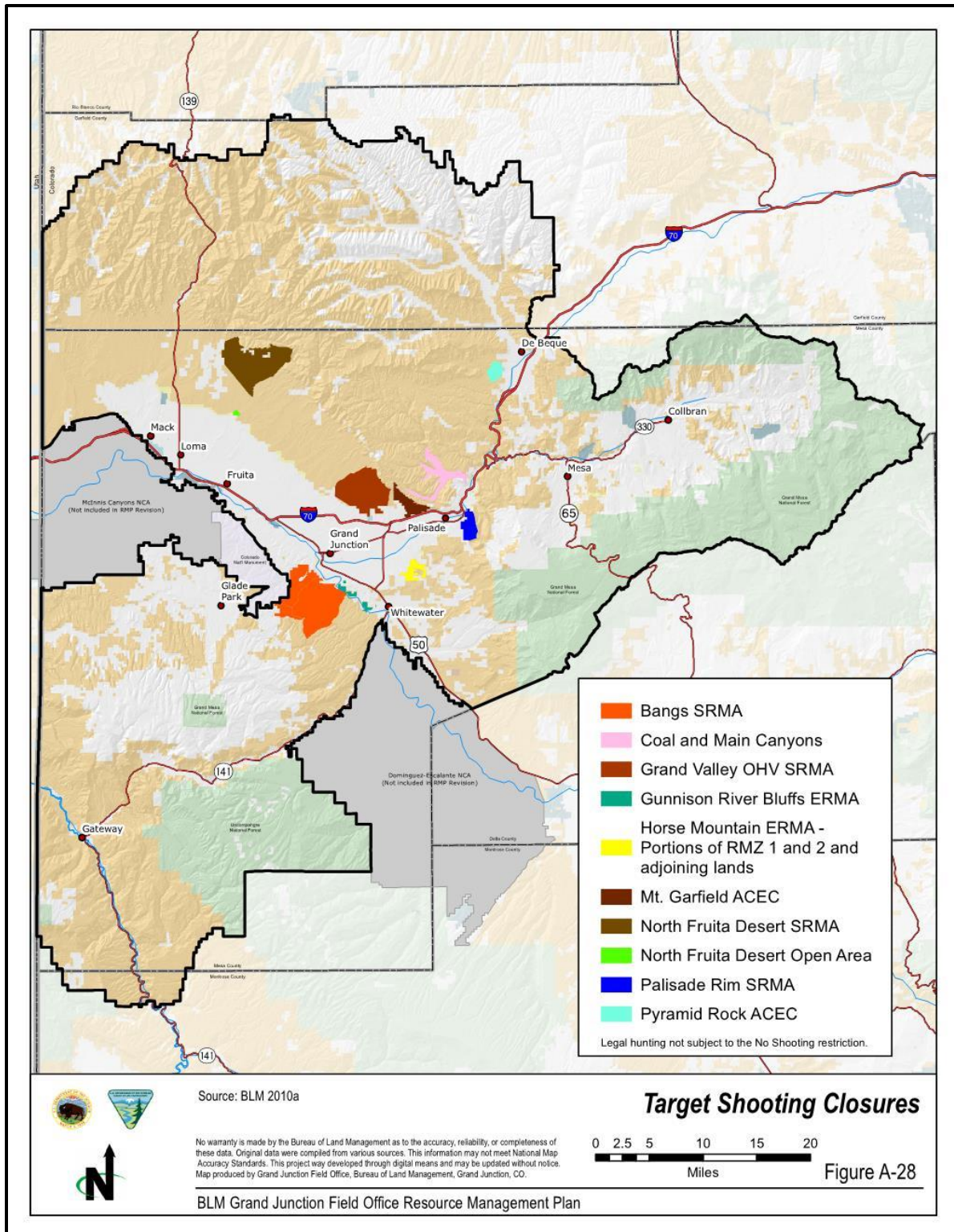


Figure 19. Target shooting closures on BLM lands within Mesa County. (map taken from Grand Junction Field Office 2010 RMP).

### [Monument and Conservation Areas](#)

The Colorado National Monument (CNM) offers a multitude of recreational opportunities including camping at the Saddlehorn Campground or in the backcountry, driving the Historic Rimrock Drive, hiking on the over 40 miles of maintained trails, bicycling, wildlife viewing, photography, picnics, and rock climbing. Over 397,000 people visited the Colorado National Monument in 2019 to enjoy its beauty and recreational opportunities.

McInnis Canyon National Conservation Area (NCA) provides a range of travel opportunities for travel by foot, horseback, bicycle, motorcycle, ATV, or full-sized vehicles. There are several recreation zones within McInnis Canyon. The Rabbit Valley Zone is managed to provide opportunities for motorized travel while the Front Country Zone focuses on quiet use, and the Mack Ridge Zone provides world class mountain biking. There are two developed campgrounds within the McInnis NCA as well as areas for dispersed camping. In 2018, the BLM issued an EA to address the influx of use in the area by increasing the number of developed campsites and limiting dispersed, user-created sites. The Front Country and Mack Ridge Zones are managed for day use only. The Colorado River flows through parts of the NCA. (BLM, 2017)

The Dominguez-Escalante is known for its breathtaking scenery and displays the iconic canyon country. The Escalante, Cottonwood, Little Dominguez, and Big Dominguez Creeks cascade through canyon walls that drain onto the eastern Uncompahgre Plateau. Recreational activities on Dominguez-Escalante NCA include boating, camping, mountain biking, OHV riding, horseback riding, and hiking. There are two access points to the Gunnison River within the NCA including the Escalante Put-In and the Bridgeport Put-In/Take-Out. (BLM, 2019)

### [Old Spanish National Historic Trail](#)

The Old Spanish National Historic Trail (NHT) became the 15<sup>th</sup> national historic trail in December 2002. The Old Spanish NHT is co-administered by the BLM and NPS. The northern branch of the trail makes its way through Mesa County. A 7-mile section of the trail is designated a public-use trail by Mesa County, the City of Grand Junction, the BLM, and the Riverfront Commission. Recreation along the trail includes mountain biking, horseback riding, boat launches, hiking, and where allowed 2-wheel drive routes, 4-wheel drive routes, and ATV routes. (BLM-NPS, 2018; MCPC, 2014)

### [Land and Water Conservation Fund](#)

The Land and Water Conservation Fund (LWCF) Act of 1964 was permanently reauthorized as of March 2019 and "...supports the protection of federal public lands and waters – including national parks, forests, wildlife refuges, and recreation areas – and voluntary conservation on private land. LWCF investments secure public access, improve recreational opportunities, and preserve ecosystem benefits for local communities." (US Department of the Interior, 2015) The LWCF has funded several projects in Mesa County including: Vega Reservoir State Park, Vega Reservoir Recreation Area, Fruita Swimming Pool, Island Acres State Recreation Area, Orchard Avenue Park, Mesa County Connected Lakes Park, Columbine Park, Highline State Recreation Area, Grand Junction Greenbelt, Uranium Downs Park, Connected Lakes Park No. 2, Highline Reservoir Maintenance Building, Monument School Tennis Courts, Berry Park Acquisition, Fruita Park, and Blue Heron Trail (InvestigateWest, n.d.) Through the FAST Act, the Recreational Trails Program (RTP) was reauthorized and "provides funds to the states to develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized recreational trail uses." (Office of Federal Lands Highway, 2018) The LWCF and RTP can be highly reliable sources of funding through grants

and loans. In Colorado, these funding sources are managed through the Colorado Parks and Wildlife State Trails Program.

### ***Resource Management Objective***

- A. Recreational resources are managed to protect the resources, promote appropriate, managed access and availability to the public for both tourism and recreational uses, both conserving the natural resources on which these activities depend on and diversifying and continuing to be a major contributor to the local, regional, state and federal economies.

### ***Policy Statements***

1. Continue to coordinate funding for development and maintenance of recreational facilities such as trails, campgrounds, trailheads, river access, etc.
2. Recognize and support the outdoor recreation economy and the critical role our public lands play in our economy and quality of life.
3. Support and encourage a year-round multiple use management approach to be used on federally managed lands as a means of continuing and enhancing recreation opportunities within the County.
4. Participate in the review and coordination of any land use fees, fee increases, and the creation of new fees for the use of federally managed lands.
5. Support improved accessibility, maintenance, and development of motorized and non-motorized trails to facilitate recreation and access to natural resources for residents and visitors while protecting resource quality.
6. Balance appropriate recreational uses and modes in respect of the health of the natural resources while striving not to discriminate in favor of one mode of recreation to the exclusion of others.
7. Support off-road (cross country) access for snowmobiling, game retrieval, cultural site visitation, and other recreational or tourism interests.
8. Consultation with Federal agencies should occur on areas identified as heavily used for camping or other overuse to allow temporary campsite closures to support vegetation and soil restoration.
9. Develop a funding mechanism for OHVs and mountain bikes for improved enforcement and emergency response efforts and maintenance/stewardship. Partnership with the State of Colorado and other agencies may be considered.
10. Coordinate with Federal agencies on special recreation permit renewals and proposals as a cooperating agency where appropriate and required by federal agency mandates.



## CHAPTER 4: APPENDICES

### APPENDIX A: POLICY STATEMENTS

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#### Chapter 1: Introduction

##### 1.3 Land Use Planning Process and Legal Framework

###### Resource Objective

- A. Credible data has a universal meaning for all Federal agencies in the County and is the basis for all agency decisions within the County.

###### Policy Statements

1. Quantitative data should be included in federal land use planning decisions that meets credible data criteria, even if the data were not produced by a federal agency.
2. Support the use of credible scientific data.
3. All Federal agencies should only use data that meets the minimum criteria described in their respective handbooks and manuals, as updated:
  - a. BLM: BLM H-1283-1 Data Administration and Management (Public) (Bureau of Land Management, 2012)
  - b. USFS: FS FSH 1909.12, Chapter 40, Land Management Planning Handbook – Key Processes Supporting Land Management Planning (US Forest Service, 2013)
  - c. Reclamation: Reclamation RMP, *Scientific Integrity* (CMP 13) (Bureau of Reclamation 2016) and Reclamation RMP, *Peer Review of Scientific Information and Assessments* (CMP 14) (Bureau of Reclamation 2019)
  - d. NPS: NPS PM 07-03 *NPS Interim Guidance Document Governing Code of Conduct, Peer Review, and Information Quality Correction* (National Park Service 2008); unless other criteria are agreed upon between the County and agencies.

#### Chapter 2: History, Economics, and Socioeconomics

##### 2.2 Cultural Resources

###### 2.2.C Resource Management Objective

- A. Cultural, historical, archeological, and paleontological resources are preserved and protected for current and future public education and enjoyment.

###### 2.2.D Policy Statements

1. Cooperate with state, federal and tribal authorities in identifying significant cultural resources (historical structures, archeological, and/or paleontological resources) in the County, make such sites known where allowed appropriately by law, and evaluate the significance of proposed land use actions and their impact on cultural resources.

2. Encourage meaningful consultation between the federal agencies and the appropriate tribes to evaluate, where appropriate, the economic and cultural impacts associated with cultural resource identification and protection and weigh one against the other in a cost/benefit context based on the County's interests while considering the interests of consulted tribes and federal law.
3. Support making significant local cultural resources (historical structures, archaeological, and/or paleontological resources) available for research and education, and strongly urge the protection of those cultural resources. If necessary, the County supports tailored buffer zones determined on a case-by-case basis, in consultation with the appropriate tribes, and SHPO and should not exceed one-quarter mile in width in most circumstances.

## Chapter 3: Resource Policies

### 3.1 Land

#### 3.1.B Transportation

##### **Resource Management Objective**

- A. Maintain and expand access, where possible, sustainable, and appropriate to federally managed lands in Mesa County for multiple use and purposes such as safety, health, welfare, commercial, and recreational opportunities.

##### **Policy Statements**

1. Support designation of all currently open trails, rights-of-ways, and roads as per adopted in the most recent Travel Management Plan as open. No road, trail, or RS 2477 right-of-way should be closed unless public safety or health demands its closing and the appropriate analysis and disclosure, in consultation with the County, is completed prior to closure. A road on federally managed lands should be closed without a full NEPA analysis.
2. Request that any planning process or activity that restricts or eliminates access to federally managed lands to notify and allow the County to initiate coordination and cooperation to resolve any potential conflicts with the County's objectives, principles, and policies, early in the process prior to taking action.
3. Designate historic stock trails as valid access routes for the purpose of trailing livestock between grazing areas in coordination with grazing permittees, the County and appropriate federal agency.
4. Roads on federally managed lands should remain open to provide for the economic benefit, use, and safety of the public. Where road closures are proposed, specific justification for the proposal should be given on a case-by-case basis, and the proposal should be discussed in coordination with Mesa County.
5. The network of roads within the boundaries of the County are necessary and essential for the health, safety, welfare, and commercial opportunities of all people within the County (BOCC 2014-75).
6. The free use of public roads and rights-of-way, which are essentially tied to the access of these resources, and for other uses set forth above, should not be encumbered or impeded by obstructions which create an unauthorized and potentially dangerous impediment to the free use of our roadways, routes of travel, and rights-of-way and pose a clear threat to the health, safety, welfare, and economic well-being of our citizens (BOCC 2014-75).

7. The County reserves its right and responsibility to manage the public ownership of highway rights-of-way accepted pursuant to the grant offered under R.S. 2477 and under the Colorado revised Statutes (BOCC 2014-75).
8. The County supports the use of OHVs for recreational use on public roads as adopted in travel management plans through cooperation with the County (Ordinance 12).
9. Federal land managers should properly manage water under, around, and above mapped landslides, when safe to do so, to prevent/ minimize new movement, especially where landslides could disrupt public transportation. In the event of a geologic hazard, rockfall and debris flow should also be mitigated to prevent loss of life, future damage, and transportation disruptions.

### [3.1.C Land Acquisition and Disposal](#)

#### **Resource Management Objective**

- A. Acquisition and disposal of federally managed lands are coordinated with Mesa County to ensure consistency with the Mesa County RMP.

#### **Policy Statements**

1. Acquisition and disposal of federal lands should be coordinated with Mesa County to ensure efficient management of federal lands.

### [3.1.D Special Management Areas](#)

#### **Resource Management Objective**

- A. Management and designation of lands including but not limited to, ACECs, SRMAs, ERMA, Scenic and Historic Byways, NCAs, Roadless Areas, WSAs, Wilderness Areas, and LWCs are coordinated with Mesa County to provide consistency with the Mesa County RMP.

#### **Policy Statements**

1. Encourage the protection and stewardship of our special management lands.
2. Management of special management areas should be coordinated with the County and consistent to the maximum degree with the Mesa County RMP.
3. Ensure that Federal agencies responsible for making wilderness recommendations to Congress comply with their respective coordination mandates when making wilderness determinations and developing wilderness inventories.
4. Fully exercise the County's rights to coordination and cooperating agency status with the proposal of any ACEC on land managed by the BLM, in accordance with FLPMA.
5. Wilderness Study Area designation by Congress should be expedited to achieve a decision. Wilderness Study Areas not designated by Congress as "wilderness" should be promptly returned to "multiple-use sustained yield" status as identified through a thorough, collaborative evaluation of appropriate management level and the underlying prescriptions from RMP.
6. Proposals for ACEC designations should strictly adhere to the relevance and importance criteria, and use credible data, in determining the need for an ACEC designation to protect the area in question and prevent irreparable damage to resources or natural systems.

7. Support the use of herbicides to control noxious weeds in wilderness areas if no alternative means for control are available.

### 3.1.E Forest Management

#### **Resource Management Objective**

- A. Manage forests sustainably under multiple use, balancing tourism, grazing, fuels management, outdoor recreation, water development/ management, and fire rehabilitation and other uses in coordination with Mesa County.
- B. Actively manage forest to provide a sustainable timber base, reduce hazardous fuels and sustain or improve watershed values, wildlife habitat, and visual resources.

#### **Policy Statements**

1. Forest management should support a coordinated timber harvesting and thinning method to promote forest health, reduce disease and insect infestation, reduce wildfire impacts, and prevent waste of forest products while supporting the economy of Mesa County for future generations.
2. Utilize livestock grazing and fuels management (e.g., dead tree/snag removal) programs to promote forest health and reduce wildfire risk. Said management programs should be used as deemed appropriate in consultation with the County.
3. Promote the prompt rehabilitation of harvested areas and areas affected by wildfire.
4. Support salvage logging operations, when not in conflict with federal law.
5. Support firewood collection as a customary and an acceptable practice.
6. The County supports federal Payments in Lieu of Taxes (PILT) to Mesa County.
7. Access to forest products such as fuel, building materials, and Christmas trees should be ongoing. Access to these sites should be through open roads per approved travel management plans adopted in cooperation with the County.
8. Support and participate in improving rangeland health to accomplish the sustainable rangeland health consistent with appropriate RMP.
9. Promote the management of forest resources to enhance visual resources.

### 3.1.F Wildfire Management

#### **Resource Management Objective**

- A. Wildfire, fuels, and fire rehabilitation are managed promptly and effectively using credible data, as defined above, in coordination with the County.

#### **Policy Statements**

1. Federal agencies should coordinate with local fire agencies. The USFS should adhere to all requirements set forth in the Cooperative Forestry Assistance Act *16 USC §2106*, including:
  - i. The effective cooperative relationships between the Secretary of Agriculture and the states regarding fire prevention and control on rural lands and in rural communities shall be retained and improved;
  - ii. Efforts in fire prevention and control in rural areas shall be coordinated among federal, state and local agencies;

- iii. In addition to providing assistance to state and local rural fire prevention and control programs, the Secretary of Interior and Agriculture should provide prompt and adequate assistance whenever a rural fire emergency overwhelms or threatens to overwhelm the firefighting capability of the affected state and rural area.
2. Federal agencies should incorporate local MCCWPP policies into their fire suppression and control plans and will support efforts of local fire departments in wildfire suppression activities.
3. Fire suppression efforts should be maximized through full coordination, communication, and cooperation between federal, state, and local fire-suppression units.
4. In the event that grazing on federally managed lands is temporarily suspended due to fire, recommence grazing on the basis of monitoring and site-specific objectives rather than solely on fixed timelines. Return livestock grazing to pre-fire levels when post-fire monitoring data shows established objectives have been met or have been achieved to an extent allowed by the site potential. Credible data as previously defined should be used to make these determinations.
5. Coordinate with other agencies to implement herbicide treatments, livestock grazing, biomass fuel removal, slash pile burning, and prescribed burning as fire control tools.
6. Support and encourage temporary fire restrictions based on fire hazard criteria to minimize the potential for human caused wildfires. Support and declare fire restrictions as appropriate in consultation with the USFS, BLM, and appropriate emergency service providers and agencies. Restrictions should be removed as soon as it is safe for work and recreation on federal lands to resume.
7. Rehabilitate forests, rangelands, and riparian areas damaged by wildfires, including reseeding, planting, and salvage logging operations as soon as possible for wildlife habitat, to reduce the potential for erosion, watershed contamination, and introduction of invasive or noxious weeds.
8. 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, collaboration processes and project implementation to economically and efficiently treat and protect the resources of Mesa County.
9. Support the Department of Interior's Secretarial Order 3336-Rangeland Fire Prevention, Management, and Restoration and require the BLM to comply with the order and all subsequent revisions, reports and instructional memos.
10. Use the BLM document *Earning Bridges: Strategies for Effective Community Relations Before, During and After Fire* to improve coordination between the BLM, state, Mesa County local fire associations and local stakeholders.
11. Support the management of invasive and noxious weeds after wildland fire events using tools including (but not limited to) livestock grazing; chemical, and other mechanical control that promote ecosystem health and as a management tool for vegetation manipulation; and fuels reduction for all federally managed lands. Prioritize the control of newly discovered populations of noxious weeds.
12. Support the use of ongoing research and experimental options for developing new and alternative treatments for the management of non-native noxious weeds after wildland fire events.
13. Conduct surveys of lands affected by fire in a timely manner following a fire to identify noxious weed presence.
14. Consultation and coordination with Mesa County is expected on proposed changes and updates to the Fire Management Plans on federally managed lands.

15. Allow for adaptive grazing management practices and include them in term permits to allow for flexible management practices that will decrease fuel loads on the landscape particularly in areas with heavy grass understory (CFR §4190.1).
16. Post-fire objectives should be consistent with site potential as defined in approved Desired Future Conditions or Ecological Site Descriptions.
17. Commit fire suppression resources only when important values are actually at risk, and when there is a reasonable chance of success.
18. Recognize that some naturally ignited wildfires can be used to improve natural resource conditions, and reduce the threat from future wildfires.

## **3.2 Natural Resources**

### 3.2.A Water

#### **Storm Water**

##### **Resource Management Objective**

- A. Stormwater is managed to ensure the health, safety, and welfare of all residents within Mesa County.

##### **Policy Statements**

1. Federal land managers should coordinate with the County regarding stormwater management.
2. In accordance with the Clean Water Act (CWA), federal land managers should provide timely financial assistance and reimbursement for stormwater management structures developed by the County.
3. Coordinate with the municipalities to develop, implement, and manage stormwater related aspects of the respective watershed plans and permit requirements.

#### **Dams and Reservoirs**

##### **Resource Management Objective**

- A. Dams and reservoirs are well maintained, accessible, and functional.
- B. Quality of all dams and reservoirs is preserved to protect life and property and developed responsibly in coordination with Mesa County.

##### **Policy Statements**

1. Mesa County should be consulted regarding federal land management decisions for their potential impact on water quality, yields, and timing of those yields; impacts on facilities such as dams, reservoirs, delivery systems, or monitoring facilities; and any other water-related concerns.
2. Support the construction of water storage.
3. Maintain the primary use of all reservoirs within the County for the purpose for which they were originally intended with the understanding that reservoirs may be repurposed for municipal use to fit the County's continued growth.

## ***Interstate Water Compacts***

### ***Resource Management Objective***

- A. To the fullest extent possible prepare the state for a potential Compact Call.
- B. Protect and improve the health and water quality of our river basins.
- C. Preserve and promote local control of planning for community development and the associated water needs.
- D. To the fullest extent possible, ensure that Federal agencies operate within existing state water law.
- E. Ensure that any future upstream water diversions protect and maintain water quality for downstream.

### ***Policy Statements***

- 1. Work with other Colorado Compact states and Federal agencies on developing, funding, and implementing a long-term water augmentation program.
- 2. Respect existing local water supply plans, land use plans, water quality plans, and other related documents adopted by local governments.
- 3. Local government regulatory tools adopted to mitigate impacts of water projects should be recognized and protected.
- 4. Promote the use of alternative means to limit the practices of “buy and dry” of agricultural lands.
- 5. Promote viable storage or enlargement of in-basin water storage projects.
- 6. Encourage agricultural water conservation efforts by allowing net water savings to be marketed independently.
- 7. Protect the important role that senior agricultural water rights play in maintaining a healthy environment, endangered fish flows, and in meeting the flows of a 1922 Compact Call (i.e. Grand Valley senior irrigation water rights).

## ***Water Rights***

### ***Resource Management Objective***

- A. State water law and policy is supported for all waters on federally managed lands within Mesa County.

### ***Policy Statements***

- 1. Placing water rights in the name of any state or federal agency when the water right is applied for and proved upon by a private individual or corporation, or as the condition of any permit, is not supported.
- 2. Support recognition of water rights as a private property right that may be owned separately from land.
- 3. Support the state of Colorado’s prior appropriation principle for water right allocation.
- 4. Water rights should not be acquired through exactions, including claims of beneficial use by a federal agency.

5. The reduction of water districts and senior water right holders' allocations below historic levels is not supported.
6. Support protection of senior water right holders' allocations.
7. Support the prohibition of water right exactions for right-of-way and ditch permits. It is the position of the County that in stream flow requirements are exactions.
8. Mesa County opposes over-reaching federal regulations on Colorado Waters; we support Colorado control of Colorado waters.
9. Federal actions impacting water quality and quantity should consider the impact to downstream water users and should not interfere with senior water rights.

## ***Water Quality & Quantity***

### ***Resource Management Objective***

- A. Sufficient water resources are available for future community growth, while protecting natural functions and ecosystems.
- B. Downstream water quality is considered and protected from upstream uses, including water conservation practices.
- C. Management practices to improve water quality are developed and implemented in coordination with the County.

### ***Policy Statements***

1. Prioritize locally led efforts to monitor and improve water quality, and where feasible complete in conjunction with existing state and Federal agencies with the same mandate.
2. Federal agencies should conduct baseline water quality sampling and cataloguing of all collected data for wells (including injection wells) drilled on federally managed lands.
3. Consult with Federal agencies, area municipal water providers, and conservation districts regarding federal land management decisions for their potential impact on water quality, yields and timing of those yields; impacts on facilities such as dams, reservoirs, delivery systems, or monitoring facilities; and any other water-related proposal.
4. Any action, or lack of action or permitted use that results in a significant or long- term decrease in water quality or quantity is not supported.
5. Support implementation of land management actions and practices that contribute to or maintain healthy drainages and watersheds.
6. Encourage good management and maintenance of watersheds to retain and slowly release water for desired plant, animal, and human uses, and to reduce the risk of flash floods.
7. Encourage coordination with the USFS, BLM, Reclamation, EPA, DEQ, and other relevant public agencies to ensure that management of watersheds, including municipal watersheds, meets the multiple needs of residents and promotes healthy forests and rangelands.
8. Support decisions and actions that comply with Colorado water laws and statutes.
9. Encourage and allow consumptive water right owners to improve water quality and water-use efficiency to provide additional water for economic development and agriculture.
10. 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 economic and socioeconomic needs and is consistent with Colorado water laws.



11. Support reclamation activities on mined lands that improve soil productivity and water quality and the function of streams channels, floodplains and wetlands for better productivity.
12. Support construction and management of roads, bridges, culverts, cut slopes, fill slopes, and artificial surfaces to minimize water concentration, erosion, and delivery of polluted water and sediment to streams.
13. Implement land use improvements and practices, which promote healthy drainages and watersheds.
14. Request Federal agencies to create and/or implement watershed Best Management Practices (BMPs) to mitigate water pollution caused by heavy erosion and sedimentation from federal lands under their management, and to work with local conservation districts in accomplishing these BMPs.
15. When considering water conservation practices, all Federal agencies should consider the negative impacts to downstream water quality and if the negative downstream quality impacts outweigh the upstream conservation benefit, the agency should either forego those conservation practices or develop alternative conservation practices that will lessen the harm to downstream water quality.

### ***Flood Plains***

#### ***Resource Management Objective***

- A. Floodplains are managed to ensure the health, safety, and welfare of all residents within the County and to promote ecological health of watersheds.

#### ***Policy Statements***

1. Support projects and encourage policies which manage storm water, run-off, and flooding on federally managed lands.
2. The County should be consulted where flooding and stormwater run-off could impact the County.

### ***Rivers and Streams***

#### ***Resource Management Objective***

- A. Rivers, streams, and watersheds are managed to maintain water quality, protect native and recreational fisheries, and provide for recreational, agricultural, and municipal needs while meeting in-stream flow requirements, and maintaining proper ecologic function.

#### ***Policy Statements***

1. Support management of rivers and streams to meet “in-stream” flow requirements, when adequately considering local existing and anticipated future water uses, local economic and socioeconomic needs and is consistent with Colorado water laws.
2. Support continued use of rivers and streams by all users.
3. The County should be consulted when impacts to rivers and streams are a potential outcome of a federal action or decision.

4. Support projects and policies which improve or maintain the current ecological function of rivers and streams within Mesa County.

### ***Wetlands and Riparian Areas***

#### ***Resource Management Objective***

- A. Wetlands and riparian areas within Mesa County are healthy and function properly.

#### ***Policy Statements***

1. Support the management, maintenance, protection, and restoration of wetland areas to proper functioning condition.
2. Support the use of responsible grazing and vegetation management as a tool to maintain wetlands/riparian areas.
3. Manage riparian areas damaged by non-native species (i.e. salt cedar) to decrease the impact of these species on the watershed, including water quality.
4. Use appropriate methods and practices to maintain and restore riparian areas to proper functioning condition.
5. Support the use of credible data and scientific standards for wetland designation.
6. Support the agricultural, municipal, industrial, recreational, and consumptive use of water to support the local economy.

### **3.2.B Air**

#### ***Resource Management Objective***

- A. Support the promotion of clean air practices and limiting air pollution within Mesa County.

#### ***Policy Statements***

1. Work with the federal, state, and local agencies to educate all stakeholders involved to develop Best Management Practices (BMP) concepts and plans to protect the air quality in the County.
2. Support the development and implementation of educational programs to provide best management practices on burning to improve air quality in the County.
3. Encourage Federal agencies to implement best management practices for forest and range management to decrease the number of wildfires.
4. Implementation of the Clean Air Act Amendments of 1990 must be balanced with policies that allow for economically viable and sustainable communities.
5. Support quantitative analysis of any reasonably foreseeable significant impacts to air quality for proposed rules, regulations and projects, including economic impacts.
6. Support consultation and coordination with the County in the development of mitigation strategies to reduce air quality impacts, particularly where National Ambient Air Quality Standards (NAAQS) are being exceeded.
7. Support consultation, coordination, and cooperation with the County when Federal agencies are developing permitting or leasing stipulations (including enforcement protocols and exceedance levels) for proposed activities that may impact air quality.

8. Federal agencies should take into consideration sources of ozone, natural and industrial or residential, and implement measures to reduce or hold ozone production to a minimum.
9. As with the open burning rule and local fire protection districts, the various governing agencies should revisit their resolutions and ordinances to bring them into alignment and take into account the higher impact of PM 2.5 pollution on health.

### 3.2.C Geology and Mineral Resources

#### **Mineral Resources**

##### **Resource Management Objective**

- A. The extraction of mineral resources within Mesa County are continued in a sustainable, economical, and ecologically healthy way.
- B. Mesa County asserts its right to be part of any regulatory process which impacts its economic and/ or socioeconomic stability.

##### **Policy Statements**

1. Support streamlining the permitting process for new activities within Mesa County to allow for more exploratory drilling and mining and improved access to reserves. Updates should be provided on permit status for current and proposed projects within the County's jurisdiction.
2. Consistent with the Mesa County Mineral and Energy Resource Master Plan, support consideration of appropriate lands within the political jurisdiction of Mesa County open to mineral exploration and extraction unless specifically precluded by federal, state, or local policy/ law.
3. Decisions to close lands to mineral exploration or extraction should be coordinated with the County prior to closure to consider the impact such closure will have on the County's economic viability and resolve potential conflicts with County plans and policies, as required by federal and state law.
4. Federal agencies should support management that follows that "federal lands will be managed in a manner which recognizes the United States' need for domestic sources of minerals, food, timber, and fiber from the federal lands, including implementation of the Mining and Minerals Policy Act of 1970," as stated in FLPMA.
5. Local, state, and federal land use and management plans should contain a thorough discussion and evaluation of energy and mineral development, including the implications such development may have on surface land uses and the County's economy. Additionally, all plans must demonstrate an understanding of the County's plans and policies and resolve any conflicts with the County's plans.
6. All lands not lawfully withdrawn from mineral exploration and development should remain available for their designated use. These lands should be developed in an orderly manner to accommodate exploration, development, and production. These activities will be performed in a manner consistent with the Mining and Mineral Policy Act of 1970.
7. State, federal, and County agencies should protect the rights of access, occupation, and property of anyone prospecting and/or developing minerals within Mesa County as required by federal and state law.
8. Any closures of access for prospecting, development, processing, and mining of mineral resources should be coordinated with the County.

9. Integrate mineral resources programs and activities with the planning and management of renewable resources through the Land and Resource Management planning process to ensure efficient policies are implemented.
10. In accordance with federal law and multiple use management principles encourage simultaneous or sequential mineral development with other resource uses in Mesa County.
11. Encourage mining reclamation to use best management practices to reclaim sites to realistic conditions based on site potential. Non-native seeding should be considered where appropriate.
12. Encourage justification in deferring lease and/ or permit applications.

## **Soils**

### **Resource Management Objective**

- A. Soil quality and health is maintained and conserved through best management practices.

### **Policy Statements**

1. Support projects and policies which improve soil quality.
2. Support erosion control as a means of flood control.
3. For new soil disturbing projects, support implementation of BMPs to manage runoff and stabilize soils on site.
4. Support land use designations and practices that can improve soil health.
5. Mesa County supports and encourages the use of natural processes, including managed livestock grazing, as key to site reclamation for soil health and biodiversity.
6. Encourage the implementation of BMPs for watershed management practices.

## **3.2.D Energy Resources**

### **Oil, Gas, and Coal**

#### **Resource Management Objective**

- A. To maintain a robust and diverse economic portfolio, Mesa County will encourage the development and production of oil and gas resources in and around Mesa County and provide a business-friendly environment within Mesa County to energy industry support services.

#### **Policy Statements**

1. Support the goals and policies of the Mesa County Mineral and Energy Resource Master Plan.
2. Support streamlining the permitting process for new drilling activities within Mesa County to allow for more exploratory drilling and improved access to reserves.
3. Support the development of new and innovative technologies which enhance the safe and efficient production of oil and gas resources.
4. Encourage coordination among the various Federal agencies to facilitate hydrocarbon production permits in a timely manner, as prescribed in federal law.
5. Support the utilization of enhanced production techniques and the development of infrastructure to provide material supply and support to ensure further development throughout Mesa County.

6. Support development of natural resources on federally managed lands which could produce significant employment and residential growth in the future.

## **Pipelines**

### **Resource Management Objective**

- A. To maintain a robust and diverse economic portfolio, Mesa County will encourage the development and production of pipeline resources in and around Mesa County and provide a business-friendly environment within Mesa County to energy industry support services.

### **Policy Statements**

1. Support streamlining the permitting process for new pipeline facilities within Mesa County to allow for more exploratory drilling and improved access to reserves.
2. Support the development of new and innovative technologies which enhance the safe and efficient use of pipelines.
3. Encourage coordination among the various Federal agencies and the State to facilitate pipeline permits in a timely manner, as prescribed in federal and state law.
4. Support the utilization of enhanced production techniques and the development of infrastructure to provide material supply and support to ensure further development throughout Mesa County.
5. Support the goals and policies of the Mesa County Mineral and Energy Resource Master Plan.
6. Encourage the use of pipelines, including temporary surface lines, in the development of oil and gas resources on federally managed lands.

## **Renewable Energy**

### **Resource Management Objective**

- A. To maintain a robust and diverse economic portfolio, Mesa County will encourage the development and production of renewable energy resources and provide a business-friendly environment within Mesa County to energy industry support services.

### **Policy Statement**

1. Support streamlining the permitting process for new renewable energy facilities within Mesa County to allow for more exploratory drilling and improved access to reserves.
2. Support the development of new and innovative technologies which enhance the safe and efficient use of renewable energy.
3. Encourage coordination among the various Federal agencies and the State to facilitate renewable energy permits in a timely manner, as prescribed in federal and state law.
4. Support the utilization of enhanced production techniques and the development of infrastructure to provide material supply and support to ensure further development throughout Mesa County.
5. Encourage the development of small-scale hydro electrical generation on federally managed lands and facilities in the County.

6. Encourage develop of pumped storage hydroelectricity in appropriate locations on federally managed lands within the county.
7. Support the creation of a Clean Energy District.
8. Encourage the development of utility scale solar facilities on federally managed lands within the County.
9. Encourage the continued growth of the renewable energy industry and the associated changes in the oil and gas industry.

### **3.3 Wildlife**

#### **3.3.A Endangered, Threatened, and Sensitive Species**

##### **Resource Management Objective**

- A. Threatened, Endangered, and Sensitive species are managed using credible quantitative data in coordination with Mesa County and other stakeholders.

##### **Policy Statements**

1. All recovery planning efforts for threatened or endangered species should be made in coordination with Mesa County and should take into account the history and economy of Mesa County.
2. If a species is listed under the ESA, Mesa County requires the recovery plan to include:
  - f. Assurance that the listed species are native to Mesa County or have migrated to Mesa County from their native lands without human assistance and have not migrated to fill a niche that is manmade (reservoirs, irrigation canals, other created wetlands, etc.);
  - g. A site-specific management plan limited to the area consistent with the historical range and/or the natural migration range of the subject species;
  - h. Assurance that critical habitat designation not be in substantial conflict with customary use of natural resources or negatively impact the economy;
  - i. Establishment of on-the-ground baseline data and population goals for the species; and
  - j. Clear identification of target populations qualifying the species for delisting, and prompt delisting when targets are reached.
3. Federal management plans (i.e. RMPs and Forest Management Plans) should not be created for single species and should be consistent with multiple-use, sustained yield mandates.
4. Allow for involvement of the County in establishing recovery objectives for species of concern.
5. Support developing management actions to delist species once recovery objectives have been reached.
6. The County may choose to be a cooperating agency in federal rulemaking including any NEPA analysis related to the designation of critical habitat and development of recovery plans; proposed actions which affect the County regarding sensitive, threatened, or endangered species; the reintroduction or introduction of listed species; habitat conservation plans; and candidate conservation agreements.
7. The USFWS should provide a full and specific explanation whenever a decision or a rulemaking related to critical habitat designation, development of recovery plans; proposed actions which affect the County regarding sensitive, threatened, or endangered species; the reintroduction or introduction of listed species; habitat conservation plans; and candidate conservation agreements is inconsistent with the County's RMP or policies.

8. Critical habitat should include only those areas where the listed species could currently survive and should not include any areas that are missing an essential feature for the survival of the species or would require some degree of modification to support a sustainable population of the species.
9. Request that the USFWS provide a full analysis of the economic impacts on all proposed critical habitat designations or species management plans, and the inclusion of the County in this analysis.
10. Encourage cooperation between Federal agencies and private landowners to reduce the risk of listing under ESA.
11. Development of recovery plans should occur within 18 months of listing outlining clear objectives for delisting. For species already listed, development of a recovery plan should occur within 18 months of this document.
12. Immediate delisting of a species when population or recovery plan objectives have been met is strongly encouraged.
13. Local solutions (i.e., habitat management plans, conservation plans or conservation plans with assurances) should be utilized whenever possible to keep a species from being listed under ESA or as species of concern/species of special concern.
14. Prioritize control of predators and zoonotic and vector borne diseases negatively impacting special status, candidate, or listed species.
15. Management actions increasing the population of any listed species in the County without an approved recovery plan are discouraged. Without a recovery plan, management cannot focus on increasing the species population or habitat and progress towards delisting.
16. At a minimum, copies of legal descriptions showing the exact boundaries of all designated critical habitat, including wetlands, should be provided by USFWS to local governments in Mesa County.
17. Potential habitat should not be designated as critical habitat unless quantifiable data showing when and how features necessary for species recovery will be achieved on the property.
18. The County supports delisting of all wolf species under the Endangered Species Act to allow management of wolves at the state and local levels (Mesa County Resolution Concerning Wolf Management in Colorado).
19. The County opposes any efforts to introduce or expand the populations of wolves into Colorado (Mesa County Resolution Concerning Wolf Management in Colorado).
20. The County requests that any federal or federally-funded wolf management plans include funding to offset the negative impacts of wolves on livestock, wildlife management, hunting, and other adversely affected sectors of local economies (Mesa County Resolution Concerning Wolf Management in Colorado).
21. The County supports efforts to include a requirement that any publicly funded or sponsored wolf education programs include comprehensive and balanced discussions about the impacts of wolves on local economies, and include the perspective of livestock producers, hunters, and public health officials (Mesa County Resolution Concerning Wolf Management in Colorado).
22. Encourage use of CPW annual status reports to help inform development and transportation decisions in Mesa County.3.3.B General Wildlife.

### ***Resource Management Objective***

- A. Wildlife is managed sustainably using credible qualitative data and management plans are developed in coordination with Mesa County and other stakeholders.

### **Policy Statements**

1. Federal agencies acknowledge the resolution set forth by the Mesa County BOCC regarding wolf management (Mesa County Resolution Concerning Wolf Management in Colorado).
2. Federal management plans should be generated to protect the overall health of all natural resources, not specifically managed for one individual species.
3. Require prompt participation and response from Federal agencies when requested by Mesa County for resources concerns, management plans and sensitive, candidate, or listed species.
4. Management plans will use independent scientific data to generate plans.
5. Minimize management of “special status” species to decrease single-species management efforts.
6. Support habitat monitoring efforts and refine available habitat data.
7. Consultation and coordination should occur with Mesa County where federal monies or resources are committed for the development of management plans, population objectives, wildlife introductions, or other decisions that may affect the economic viability of the communities within Mesa County.
8. Peer-reviewed science, or those data meeting the agency data specifications, will be used in the management of disease spread between native and domestic species, with consultation and coordination of local governments in the County.
9. Habitat improvements on federally managed lands are supported that increase forage to reduce private land conflicts with wildlife in consultation with the County, Districts, and permittees.
10. Signage should be used to notify the public of seasonal wildlife related closures (calving/fawning).
11. Support management of Greater Sage-grouse according to the Colorado Greater Sage-grouse Conservation Plan, or local plans where they exist.
12. Support consultation, cooperation, and collaborative efforts to minimize impacts of vehicle collisions and highway fencing along county roads and highways within key wildlife migration corridors in Mesa County.
13. Develop monitoring programs that separate the use by species (e.g., wild horse, livestock, or wildlife) that can be used to inform management.
14. Allow for involvement of the County in federal Species of Concern and Sensitive Species review processes, including in the determination of what should be included as a Species of Concern or Sensitive Species. The County requests inclusion in discussions and decisions regarding any proposed introduction of experimental populations.
15. Mesa County opposes the federal management of non-ESA listed species (i.e., species of concern, species of special concern, or any other non-ESA designation) as though they are protected by the rules of the ESA.

### 3.3.C Fisheries

#### **Resource Management Objective**

- A. Aquatic resources are managed for healthy and biodiverse fisheries that support recreation and tourism within Mesa County.

#### **Policy Statements**

1. Management plans should be generated to protect the overall health of all natural resources, not specifically managed for one individual species.



2. Management plans will use independent scientific data, peer-reviewed science, and/or those data meeting the 'credible data' agency specifications to generate plans.
3. Create management objectives based on the carrying capacity of the habitat including all multiple use mandates (livestock grazing, mineral extraction, etc.) on federally managed lands.
4. Support fisheries habitat monitoring efforts and refine available fisheries habitat data.

### 3.3.D Pests, Predator Control, and Livestock Predation

#### **Resource Management Objective**

- A. Predator populations are managed to maintain healthy ecological levels, while still prioritizing reducing the occurrence of livestock depredation and the health and welfare of citizens of Mesa County.

#### **Policy Statements**

1. Support selective science-based predator control as a valid means of increasing the productivity of state and federally managed lands within the County and as a valid method of attaining sustainability of the wildlife and domestic livestock populations.
2. Predator control measures should be applied on all private, state, and federally managed lands within the County.
3. Support recognized proactive efforts such as aerial hunting to control predator populations.
4. Mesa County does not support the reintroduction of the gray wolf into Colorado (Mesa County Resolution Concerning Wolf Management in Colorado).
5. Federal agencies should coordinate with the County in the determination of any impact of management of predator species when related to the management of ESA listed species or the use of APHIS funds, as required by federal agency mandates. This includes impacts on the economy and safety of the residents of the County.
6. Pursuant to state statute, the County will establish and implement a cooperative plan for predator control incorporating coordination with APHIS and county resources where available.

### 3.3.E Wild Horses, Burros, and Estray Livestock

#### **Resource Management Objective**

- A. Wild horses within the County shall be managed for a viable, healthy herd resulting in the thriving natural ecological balance (including the standards and guidelines for rangeland health) and multiple-use relationship in that area as required by the Act. (BLM, 2006)

#### **Policy Statements**

1. Support the gathering and removal of all excess horses (those above AML) from the rangelands.
2. The rights of the allotment holder should be considered equal to that of wild horses as per multiple use mandates.
3. Support and encourage the immediate removal of wild horses from private lands when notified of their presence as defined through the WFRHB Act and Colorado estray laws. Immediate removal should be conducted in such a manner so that the horses will not return to private lands nor be placed within County boundaries as long as the BLM is out of compliance with AML.

4. Support and encourage the immediate removal of all wild horses within Mesa County that are found outside the Little Book Cliffs HMA in accordance with the Act.
5. The County opposes any proposed enlargement or expansion of the current HMA boundaries and any new HMAs or HAs.
6. An inventory of wild horses should be completed at least every three years.
7. Remove horses to the lowest range of the AML to reduce the frequency of gathers. Because completing a gather is a lengthy and expensive undertaking often hampered by litigation, and because horses have no predators, if not gathered to the lowest end of AML population, numbers will rebound requiring another gather in too short of time.
8. Support the continued use of long-term fertility control such as spaying of mares but only as a last resort to other viable solutions, and if the numbers are already within AML.
9. The County encourages the creation of public education programs through the extension service to inform the public at large about the need to maintain healthy ecosystems and the differences between livestock, wild horse, and wildlife management needs and impacts.
10. Rulemaking should be pursued to give the BLM, and those who adopt wild horses, additional options for the disposal of wild horses to allow BLM to meet their existing statutory requirements.
11. Modifications of HMA boundaries would be allowed only for the purpose of reducing resource conflicts and adverse effects on private lands, so long as there is no net increase in boundary size or AML numbers.
12. Any reduction in HMA size should be completed with appropriate reduction in AML.
13. Develop and implement habitat management and/or monitoring plans to specifically determine impacts of wild horses on range, riparian, water, wildlife, and other resources.
14. Monitoring plans should accurately identify the causal factors in resource changes (e.g., separate wild horse, livestock, and wildlife impacts) and if monitoring shows any adverse impacts, take action to manage the activity based on the specific results in the monitoring.
15. Once excess horses are removed from areas where livestock grazing permittees have taken reductions in AUMS, livestock grazing reductions should be reinstated as soon as resources recover.
16. Any equine animal released from private individuals, tribes, or neighboring lands onto federal public lands after 1971 should be considered as stray and be removed.
17. Develop monitoring programs that separate the utilization by species (e.g., wild horse, livestock, or wildlife) that can be used to inform management.

### **3.4 Agriculture**

#### **3.4.A Agriculture Production and Livestock Grazing**

##### **Resource Management Objective**

- A. Agricultural production is maintained as a viable and major component of the economy, history, and culture of Mesa County.
- B. Livestock grazing is maintained as a major component of the economy of Mesa County.

##### **Policy Statements**

1. Federal actions affecting agriculture are made in consultation with the County.

2. Support development of all plans and policies that directly or indirectly affect agriculture with the intent of increasing the stability and expansion of the industry as well as encouraging innovative techniques that improve the efficiency of crop production.
3. Support and assist agencies in quickly processing permits on federally managed lands for the construction, maintenance, or expansion of irrigation distribution systems (i.e. canals, ditches, pipelines) to private lands.
4. Allow maintenance of irrigation ditches and canals on federally managed lands where those rights already exist through a Range Improvement Agreement.
5. Support production agriculture and the sustainable use of natural resources to sustain agricultural enterprises.
6. Any agricultural property damage or crop loss caused by an escaped prescribed burn, fire suppression efforts, or damage caused by government agency action, resulting in economic loss in Mesa County should be considered justification for economic compensation and restoration by the responsible agency to the property owner at current market values.
7. Support streamlining the application process for range improvements. Proposed range improvements should be approved in six months or less.
8. Support watershed BMPs by Federal agencies to mitigate water pollution from heavy erosion and sedimentation from federally managed lands, and to work with local conservation districts in accomplishing these BMP's.
9. Any agricultural operation and/or practice that is historical, traditional, legitimate, and reasonable should be protected. Any new or expanded agricultural operation or practice that is legitimate and reasonable should be encouraged (MCM 97-132).
10. Support consultation, cooperation, and collaborative efforts to ensure that overall rangeland health is being maintained through monitoring and implementation of well-designed livestock grazing management plans on all public land allotments.
11. Federally managed lands within Mesa County should continue to be managed for multiple-use and sustained yields, which includes continued grazing.
12. Livestock grazing management decisions should be made based on the best available scientific information that is applicable to the rangeland resources in Mesa County. The scientific information used will be consistent with standards of the Data Quality Act.
13. Allotment retirements are not supported.
14. Support management plans generated for the overall health of all-natural resources. Plans specifically for managing one species are not supported.
15. Support livestock grazing on suitable federally owned and operated lands as an integral part of habitat management.
16. Support opening of Conservation Reserve Program lands for grazing and haying in times of drought or economic need.
17. Site-specific reviews conducted with the permittee should be used to determine the appropriate grazing suspension period post-fire.
18. Full site-specific economic and resource analysis of suspending grazing for allotment closures must be completed through NEPA prior to the closure.
19. Support creation of adaptive grazing management plans that allow permittees to respond to changes in resource conditions. These plans should include focused monitoring, triggers and responses, and alternative management plans.
20. Support timely processing of fully processed term grazing permit renewals.
21. Support the use of site-specific soils and range ecological site data to create appropriate objectives for livestock and wildlife.

22. Encourage use of drill seeding as a method of rangeland restoration or improvement where appropriate.
23. All seed mixes consistent with the Ecological Site Description and free of noxious weeds and invasive species are encouraged for all reclamation efforts.
24. Support collaboratively developed and implemented rangeland monitoring programs for all allotments using currently accepted scientifically based monitoring methods and return intervals utilizing properly trained rangeland personnel with an understanding of rangeland and its management to ensure proper collection and analysis of data.
25. Support the review and incorporation of data collected by a permittee or qualified team for use in management decisions.
26. Encourage development of additional rangeland improvements when the need arises.
27. Determine grazing rest prescriptions related to either wildfires or prescribed burns on a site-specific basis.

### 3.4.B Noxious Weeds and Invasive Species

#### **Resource Management Objective**

- A. Noxious and invasive species are managed, in coordination with Mesa County, in a sustainable and effective manner that uses credible data addressing biology and ecology of the pest and system.

#### **Policy Statements**

1. Encourage restoration of habitats with native species to reduce wildfire danger, promote diverse wildlife species, and reduce water consumption.
2. Require federal and state agencies to meet the weed control requirements of existing agreements, including the County Weed Management Plan.
3. Aggressive weed management practices are necessary in lands currently impacted by noxious weeds, and especially so in areas where adjacent private landowners are aggressively controlling weeds.
4. Encourage cooperation between adjacent landowners and Federal agencies to control weeds.
5. Support and encourage control efforts to be focused on the control of all federally listed, State of Colorado designated, and Mesa County declared weeds and pests.
6. The County expects coordination with other local, state, and Federal agencies to allow the Weed and Pest Control District road access across state and federal lands to access infestations on public and private lands, as is required for the suppression of invasive species and pests.
7. Support and encourage cooperative efforts with state, federal, and private landowners/managers to enhance cooperative weed and pest management efforts countywide as required by agency mandates; coordinated with, and primarily managed by, the Mesa County Weed and Pest District.
8. Evaluate prescribed burns as a means of controlling weed species and revitalizing rangeland vegetation to support and expand multiple use.
9. Encourage prescribed grazing to control invasive, noxious, and nuisance plant species. State and federal land managers should provide flexibility to and work with permittees to achieve this as a control method.
10. Support cheatgrass control research.

11. Support weed management plans to control noxious weeds and other invasive species as a full interagency collaborative effort.
12. Support and encourage development of a policy regarding adequate notice to all parties responsible for noxious weed control in the area.
13. Any habitat enhancement projects that do not have a defined and funded weed control and monitoring plan for the anticipated life of the enhancement are not supported.
14. Support the federal agencies' development of an environmental analysis to expand weed control options.
15. Encourage implementation of federal and local Weed Management Plans, including mapping of all invasive and noxious weed populations.
16. Support federal monitoring efforts to accurately identify the extent of noxious weed infestations, and the identification of dispersal mechanisms where possible.
17. Support the prevention and management of aquatic nuisance species (i.e., zebra mussels, quagga mussels) and other invasive species on all waters within Mesa County.
18. Support education programs for public and private land users regarding all possible vectors of weed spread.
19. Support preparation and compliance with a plan including ensuring adequate funding to control terrestrial and aquatic invasive species, including noxious weeds on federally managed lands.
20. Support the use of aerial devices (i.e., drones, fixed wing, helicopters, and other aircraft) for weed monitoring and control where feasible.
21. Support herbicide use in wilderness areas.

### **3.5 Public Land Recreation**

#### Resource Management Objective

- A. Recreational resources are managed to protect the resources, promote appropriate, managed access and availability to the public for both tourism and recreational uses, both conserving the natural resources on which these activities depend on and diversifying and continuing to be a major contributor to the local, regional, state and federal economies.

#### Policy Statements

1. Continue to coordinate funding for development and maintenance of recreational facilities such as trails, campgrounds, trailheads, river access, etc.
2. Recognize and support the outdoor recreation economy and the critical role our public lands play in our economy and quality of life.
3. Support and encourage a year-round multiple use management approach to be used on federally managed lands as a means of continuing and enhancing recreation opportunities within the County.
4. Participate in the review and coordination of any land use fees, fee increases, and the creation of new fees for the use of federally managed lands.
5. Support improved accessibility, maintenance, and development of motorized and non-motorized trails to facilitate recreation and access to natural resources for residents and visitors while protecting resource quality.
6. Balance appropriate recreational uses and modes in respect of the health of the natural resources while striving not to discriminate in favor of one mode of recreation to the exclusion of others.
7. Support off-road (cross country) access for snowmobiling, game retrieval, cultural site visitation, and other recreational or tourism interests.

8. Consultation with Federal agencies should occur on areas identified as heavily used for camping or other overuse to allow temporary campsite closures to support vegetation and soil restoration.
9. Develop a funding mechanism for OHVs and mountain bikes for improved enforcement and emergency response efforts and maintenance/stewardship. Partnership with the State of Colorado and other agencies may be considered.
10. Coordinate with Federal agencies on special recreation permit renewals and proposals as a cooperating agency where appropriate and required by federal agency mandates.

## APPENDIX B: TABLES

Table 6: BLM’s Sensitive Species List for Colorado (Colorado Parks and Wildlife, 2015).

<b>Species</b>	<b>Common Name</b>
<b>Amphibians</b>	
<i>Acris blanchardi</i>	Blanchard’s cricket frog
<i>Anaxyrus boreas boreas</i>	Boreal toad (Southern Rocky Mountain population)
<i>Hyla arenicolor</i>	canyon tree frog
<i>Lithobates blairi</i>	plains leopard frog
<i>Lithobates pipiens</i>	Northern leopard frog
<i>Spea intermontana</i>	Great Basin spadefoot
<b>Birds</b>	
<i>Accipiter gentilis</i>	Northern Goshawk
<i>Athene cunicularia</i>	Burrowing Owl
<i>Buteo regalis</i>	Ferruginous Hawk
<i>Centrocercus minimus</i>	Gunnison Sage-grouse
<i>Centrocercus urophasianus</i>	Greater Sage-grouse
<i>Charadrius alexandrinus nivosus</i>	Western Snowy Plover
<i>Charadrius montanus</i>	Mountain Plover
<i>Coccyzus americanus occidentalis</i>	Western Yellow-billed Cuckoo
<i>Cypseloides niger</i>	Black Swift
<i>Falco peregrinus anatum</i>	American Peregrine Falcon
<i>Haliaeetus leucocephalus</i>	Bald Eagle
<i>Numenius americanus</i>	Long-billed Curlew
<i>Pelecanus erythrorhynchos</i>	American White Pelican
<i>Plegadis chihi</i>	White-faced Ibis
<i>Spizella breweri</i>	Brewer’s Sparrow
<i>Tympanuchus pallidicinctus</i>	Lesser Prairie-chicken
<i>Tympanuchus phasianellus columbianus</i>	Columbian Sharp-tailed Grouse
<b>Fish</b>	
<i>Catostomus discobolus</i>	bluehead sucker
<i>Catostomus latipinnis</i>	flannelmouth sucker
<i>Catostomus playtrhynchus</i>	mountain sucker
<i>Catostomus plebeius</i>	Rio Grande sucker
<i>Etheostoma cragini</i>	Arkansas darter
<i>Gila Pandora</i>	Rio Grande chub
<i>Gila robusta</i>	roundtail chub
<i>Oncorhynchus clarkii pleuriticus</i>	Colorado River cutthroat trout
<i>Oncorhynchus clarkii virginalis</i>	Rio Grande cutthroat trout
<b>Mammals</b>	
<i>Corynorhinus townsendii pallescens</i>	Townsend’s big-eared bat
<i>Cynomys gunnisoni</i>	Gunnison’s prairie dog

<i>Cynomys leucurus</i>	white-tailed prairie dog
<i>Cynomys ludovicianus</i>	black-tailed prairie dog
<i>Euderma maculatum</i>	spotted bat
<i>Idionycteris phyllotis</i>	Allen's big-eared bat
<i>Myotis thysanodes</i>	fringed myotis
<i>Nyctinomops macrotis</i>	big free-tailed bat
<i>Ovis Canadensis</i>	bighorn sheep
<i>Vulpes macrotis</i>	kit fox
<i>Vulpes velox</i>	swift fox
<i>Zapus hudsonius luteus</i>	New Mexico meadow jumping mouse
<b>Reptiles</b>	
<i>Crotalus oreganus concolor</i>	midget faded rattlesnake
<i>Gambelia wislizenii</i>	long-nosed leopard lizard
<i>Lampropeltis californiae</i>	California kingsnake
<i>Lampropeltis triangulum</i>	milksnake
<i>Sceloporus magister</i>	desert spiny lizard
<i>Sistrurus catenatus</i>	massasauga

**Table 7: Threatened, Endangered, and Candidate species for the GMUG National Forest (Speas & Broderdorp, 2011).**

<b>Species</b>	<b>Common Name</b>
<b>Birds</b>	
<i>Strix occidentalis lucida</i>	Mexican Spotted Owl
<i>Centrocercus minimus</i>	Gunnison Sage-grouse
<b>Fish</b>	
<i>Gila cypha</i>	Humpback chub
<i>Gila elegans</i>	Bonytail chub
<i>Ptychocheilus lucius</i>	Colorado pikeminnow
<i>Xyrauchen texanus</i>	Razorback sucker
<i>Oncorhynchus clarki stomias</i>	Greenback cutthroat trout
<b>Mammals</b>	
<i>Gulo gulo luscus</i>	North American wolverine
<i>Cynomys gunnisoni</i>	Gunnison's prairie dog
<b>Invertebrates</b>	
<i>Boloria acrocynema</i>	Uncompahgre fritillary
<b>Plants</b>	
<i>Sclerocactus glaucus</i>	Colorado hookless cactus
<i>Phacelia scopulina var. submutica</i>	De BequeDeBeque phacelia



**Table 8: Management Indicator Species for the GMUG National Forests (USDA Forest Service, 2005a, 2005b).**

<i>Species</i>	<b>Common Name</b>
<b>Birds</b>	
<i>Accipiter gentilis</i>	Goshawk
<i>Spizella breweri</i>	Brewers Sparrow
<i>Baeolophus ridgwayi</i>	Juniper Titmouse
<i>Odocoileus hemionus</i>	mule deer
<i>Sciurus aberti</i>	Albert’s squirrel
<i>Martes martes</i>	pine marten
<b>Fish</b>	
<i>Salmo trutta</i>	brown trout
<i>Oncorhynchus clarkii pleuriticus</i>	Colorado River cutthroat trout
<i>Oncorhynchus mykiss</i>	Rainbow trout

**Table 9: Regional Forester’s Sensitive Animal Species List for the Rocky Mountain Region (U.S. Forest Service, 2017).**

<i>Species</i>	<b>Common Name</b>
<b>Amphibians</b>	
<i>Anaxyrus boreas boreas</i>	boreal toad
<i>Lithobates blairi</i>	plains leopard frog
<i>Lithobates pipiens</i>	northern leopard frog
<i>Lithobates sylvaticus</i>	wood frog
<i>Rana luteiventris</i>	Columbia spotted frog
<b>Birds</b>	
<i>Accipiter gentilis</i>	Northern Goshawk
<i>Aegolius funereus</i>	Boreal Owl
<i>Ammodramus savannarum</i>	Grasshopper Sparrow
<i>Artemisiospiza nevadensis</i>	Sagebrush Sparrow
<i>Asio flammeus</i>	Short-eared Owl
<i>Athene cucularia</i>	Burrowing Owl
<i>Botaurus lentiginosus</i>	American Bittern
<i>Buteo regalis</i>	Ferruginous Hawk
<i>Calcarius ornatus</i>	Chestnut-collared Longspur
<i>Centrocercus urophasianus</i>	Greater Sage-Grouse
<i>Charadrius montanus</i>	Mountain Plover
<i>Chlidonias niger</i>	Black Tern
<i>Circus cyaneus</i>	Northern Harrier
<i>Contopus cooperi</i>	Olive-sided Flycatcher
<i>Cygnus buccinator</i>	Trumpeter Swan

<i>Cypseloides niger</i>	Black Swift
<i>Falco peregrinus anatum</i>	Peregrine Falcon
<i>Haliaeetus leucocephalus</i>	Bald Eagle
<i>Histrionicus histrionicus</i>	Harlequin Duck
<i>Lagopus leucura</i>	White-tailed Ptarmigan
<i>Lanius ludovicianus</i>	Loggerhead Shrike
<i>Melanerpes lewis</i>	Lewis's Woodpecker
<i>Numenius americanus</i>	Long-billed Curlew
<i>Peucaea cassinii</i>	Cassin's Sparrow
<i>Picoides arcticus</i>	Black-backed Woodpecker
<i>Progne subis</i>	Purple Martin
<i>Psiloscops flammeolus</i>	Flammulated Owl
<i>Rhynchophanes mccownii</i>	McCown's Longspur
<i>Spizella breweri</i>	Brewer's Sparrow
<i>Tympanuchus cupido</i>	Greater Prairie-Chicken
<i>Tympanuchus phasianellus columbianus</i>	Columbian Sharp-tailed Grouse
<b>Fish</b>	
<i>Catostomus discobolus</i>	bluehead sucker
<i>Catostomus latipinnis</i>	flannelmouth sucker
<i>Catostomus platyrhynchus</i>	mountain sucker
<i>Catostomus plebeius</i>	Rio Grande sucker
<i>Chrosomus eos</i>	northern redbelly dace
<i>Chrosomus erythrogaster</i>	southern redbelly dace
<i>Chrosomus neogaeus</i>	finescale dace
<i>Couesius plumbeus</i>	lake chub
<i>Fundulus sciadicus</i>	Plains topminnow
<i>Gila pandora</i>	Rio Grande chub
<i>Gila robusta</i>	roundtail chub
<i>Hybognathus placitus</i>	plains minnow
<i>Macrhybopsis gelida</i>	sturgeon chub
<i>Margariscus nachtriebi</i>	northern pearl dace
<i>Nocomis biguttatus</i>	hornyhead chub
<i>Oncorhynchus clarkii bouvieri</i>	Yellowstone cutthroat
<i>Oncorhynchus clarkii pleuriticus</i>	Colorado River cutthroat
<i>Oncorhynchus clarkii virginalis</i>	Rio Grande cutthroat
<i>Platygobio gracilis</i>	flathead chub
<b>Insects</b>	
<i>Bombus occidentalis</i>	western bumble bee
<i>Capnia arapahoe</i>	Arapahoe snowfly
<i>Danaus plexippus plexippus</i>	monarch
<i>Hesperia ottoe</i>	Ottoe skipper
<i>Ochrotrichia susanae</i>	Susan's purse-making caddisfly

<i>Somatochlora hudsonica</i>	Hudsonian emerald
<i>Speyeria idalia</i>	regal fritillary
<i>Speyeria nokomis nokomis</i>	Nokomis fritillary, Great Basin silverspot
<b>Mammals</b>	
<i>Conepatus leuconotus</i>	American hog-nosed skunk
<i>Corynorhinus townsendii</i>	Townsend’s big-eared bat
<i>Cynomys gunnisoni</i>	Gunnison’s prairie dog
<i>Cynomys leucurus</i>	white-tailed prairie dog
<i>Cynomys ludovicianus</i>	black-tailed prairie dog
<i>Euderma maculatum</i>	spotted bat
<i>Gulo gulo</i>	North American wolverine
<i>Lasiurus cinereus</i>	hoary bat
<i>Lontra canadensis</i>	river otter
<i>Martes americana</i>	American marten
<i>Microtus richardsoni</i>	water vole
<i>Myotis thysanodes</i>	fringed myotis
<i>Ovis canadensis canadensis</i>	Rocky Mountain bighorn sheep
<i>Ovis canadensis nelsoni</i>	desert bighorn sheep
<i>Sorex hoyi</i>	pygmy shrew
<i>Thomomys clusius</i>	Wyoming pocket gopher
<i>Vulpes macrotis</i>	kit fox
<i>Vulpes velox</i>	swift fox
<b>Molluscs</b>	
<i>Acroloxus coloradensis</i>	Rocky Mountain capshell
<i>Oreohelix pygmaea</i>	pygmy mountainsnail
<i>Oreohelix strigosa cooperi</i>	Cooper’s Rocky Mountainsnail
<b>Reptiles</b>	
<i>Sistrurus catenatus edwardsii</i>	desert massasauga
<i>Storeria occipitomaculata pahasapae</i>	Black Hills redbelly snake

**Table 10: Regional Forester’s Sensitive Plant Species List for the Rocky Mountain Region (U.S. Forest Service, 2017).**

<b>Species</b>	<b>Common Name</b>
<b>Non-Vascular</b>	
<i>Sphagnum angustifolium</i>	sphagnum
<i>Sphagnum balticum</i>	Baltic sphagnum
<b>Ferns &amp; Allies</b>	
<i>Botrychium ascendens</i>	trianglelobe moonwort
<i>Botrychium campestre</i>	Iowa moonwort, prairie moonwort
<i>Botrychium paradoxum</i>	peculiar moonwort
<i>Lycopodium complanatum</i>	groundcedar

<i>Selaginella selaginoides</i>	club spikemoss
<b>Angiosperms - Monocots</b>	
<i>Calochortus flexuosus</i>	winding mariposa lily
<i>Carex alopecoidea</i>	foxtail sedge
<i>Carex diandra</i>	lesser panicled sedge
<i>Carex livida</i>	livid sedge
<i>Cypripedium montanum</i>	mountain lady's slipper
<i>Cypripedium parviflorum</i>	lesser yellow lady's slipper
<i>Eleocharis elliptica</i>	elliptic spikerush, slender spikerush
<i>Epipactis gigantea</i>	stream orchid, giant helleborine
<i>Eriophorum chamissonis</i>	Chamisso's cottongrass
<i>Eriophorum gracile</i>	slender cottongrass
<i>Festuca hallii</i>	plains rough fescue
<i>Galearis rotundifolia</i>	roundleaf orchid
<i>Kobresia simpliciuscula</i>	simple bog sedge
<i>Liparis loeselii</i>	yellow widelip orchid
<i>Malaxis monophyllos</i> var. <i>brachypoda</i>	white adder's-mouth orchid
<i>Platanthera orbiculata</i>	lesser roundleaved orchid
<i>Ptilagrostis porteri</i>	Porter's false needlegrass
<i>Schoenoplectus hallii</i>	Hall's bulrush
<i>Triteleia grandiflora</i>	largeflower triteleia
<b>Angiosperms - Dicots</b>	
<i>Aliciella sedifolia</i>	stonecrop gilia
<i>Aquilegia chrysantha</i>	Rydberg's golden columbine
<i>Aquilegia laramiensis</i>	Laramie columbine
<i>Armeria maritima</i> ssp. <i>sibirica</i>	Siberian sea thrift
<i>Asclepias uncialis</i>	wheel milkweed
<i>Astragalus barrii</i>	Barr's milkvetch
<i>Astragalus iodopetalus</i>	violet milkvetch
<i>Astragalus leptaleus</i>	park milkvetch
<i>Astragalus missouriensis</i> var. <i>humistratus</i>	Missouri milkvetch, Archuleta milkvetch
<i>Astragalus proximus</i>	Aztec milkvetch
<i>Astragalus ripleyi</i>	Ripley's milkvetch
<i>Braya glabella</i>	smooth northern-rockcress
<i>Chenopodium cycloides</i>	sandhill goosefoot
<i>Cuscuta plattensis</i>	prairie dodder, Wyoming dodder
<i>Descurainia torulosa</i>	mountain tansymustard
<i>Draba exunguiculata</i>	clawless draba
<i>Draba grayana</i>	Gray's draba
<i>Draba smithii</i>	Smith's draba
<i>Draba weberi</i>	Weber's draba, Weber's whitlowgrass
<i>Drosera anglica</i>	English sundew

<i>Drosera rotundifolia</i>	roundleaf sundew
<i>Eriogonum brandegeei</i>	Brandegee's buckwheat
<i>Eriogonum exilifolium</i>	dropleaf buckwheat
<i>Eriogonum visherii</i>	Visher's buckwheat, Dakota buckwheat
<i>Gutierrezia elegans</i>	Lone Mesa snakeweed
<i>Ipomopsis aggregata</i> ssp. <i>weberi</i>	scarlet gilia
<i>Lesquerella fremontii</i>	Fremont's bladderpod
<i>Lesquerella pruinosa</i>	Pagosa Springs bladderpod
<i>Mimulus gemmiparus</i>	Rocky Mountain monkeyflower, budding monkeyflower
<i>Neoparrya lithophila</i>	Bill's neoparrya
<i>Oreoxis humilis</i>	Pike's Peak alpineparsley
<i>Packera mancosana</i>	Mancos shale packera
<i>Parnassia kotzebuei</i>	Kotzebue's grass of Parnassus
<i>Penstemon absarokensis</i>	Absaroka Range beardtongue
<i>Penstemon caryi</i>	Cary's beardtongue
<i>Penstemon degeneri</i>	Degener's beardtongue
<i>Penstemon harringtonii</i>	Harrington's beardtongue
<i>Physaria didymocarpa</i> var. <i>lanata</i>	common twinpod
<i>Physaria pulvinata</i>	cushion bladderpod
<i>Physaria scrotiformis</i>	west silver bladderpod
<i>Potentilla rupicola</i>	rock cinquefoil, Rocky Mountain cinquefoil
<i>Primula egalikensis</i>	Greenland primrose
<i>Pyrrocoma carthamoides</i> var. <i>subsquarrosa</i>	largeflower goldenweed
<i>Pyrrocoma clementis</i> var. <i>villosa</i>	tranquil goldenweed
<i>Pyrrocoma integrifolia</i>	many-stemmed goldenweed
<i>Ranunculus grayi</i>	ice cold buttercup
<i>Rubus arcticus</i> ssp. <i>acaulis</i>	dwarf raspberry
<i>Salix arizonica</i>	Arizona willow
<i>Salix barrattiana</i>	Barratt's willow
<i>Salix candida</i>	sageleaf willow, sage willow
<i>Salix myrtilifolia</i>	blueberry willow
<i>Salix serissima</i>	autumn willow
<i>Sanguinaria canadensis</i>	bloodroot
<i>Shoshonea pulvinata</i>	Shoshone carrot
<i>Thalictrum heliophilum</i>	Cathedral Bluff meadow-rue
<i>Townsendia condensata</i> var. <i>anomala</i>	cushion Townsend daisy
<i>Utricularia minor</i>	lesser bladderwort
<i>Viburnum opulus</i> var. <i>americanum</i>	American cranberrybush, mooseberry
<i>Viola selkirkii</i>	Selkirk's violet
<i>Xanthisma coloradoense</i>	Colorado tansyaster
<b>Gymnosperms</b>	
<i>Pinus albicaulis</i>	whitebark pine

## APPENDIX C: WORKS CITED

- APHIS. (n.d.). *USDA APHIS | Wildlife Services*. Retrieved September 18, 2019, from [https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/SA\\_Program\\_Overview](https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/SA_Program_Overview)
- ASWM. (n.d.-a). *Law & Policy*. Associate of State Wetland Managers. Retrieved March 10, 2020, from <https://www.aswm.org/wetlands-law>
- ASWM. (n.d.-b). *Wetland Programs*. Associate of State Wetland Managers. Retrieved March 10, 2020, from <https://www.aswm.org/wetland-programs>
- Benson, R. (2016, June 24). *Colorado Geology* [Text]. <https://coloradoencyclopedia.org/article/colorado-geology>
- BLM. (n.d.). *Tabeguache* [Text]. Retrieved October 16, 2020, from <https://www.blm.gov/visit/search-details/16725/2>
- BLM. (2006). *The wild free-roaming horses and burros act of 1971*. 8.
- BLM. (2016a). *Programs: Recreation: Recreation Programs: Hunting, Fishing and Recreational Shooting* [Text]. <https://www.blm.gov/programs/recreation/recreation-programs/recreational-shooting>
- BLM. (2016b, October 2). *Programs: Natural Resources: Wetlands and Riparian: Riparian Health* [Text]. <https://www.blm.gov/programs/natural-resources/wetlands-and-riparian/riparian-health>
- BLM. (2017). *McInnis Canyons National Conservation Area (MCNCA) Travel Map* [Text]. <https://www.blm.gov/documents/colorado/public-room/map/mcinnis-canyons-national-conservation-area-mcnca-travel-map>
- BLM. (2018, September 10). *Programs: Wild Horse and Burro: Herd Management: Gathers and Removals: Colorado: 2018 Little Book Cliffs Wild Horse Gather* [Text]. <https://www.blm.gov/programs/wild-horse-and-burro/herd-management/gathers-and-removals/colorado/2018-little-book-cliffs-gather>
- BLM. (2019). *Dominguez-Escalante National Conservation Area Brochure*. <https://www.blm.gov/sites/blm.gov/files/uploads/2019updatedwebfriendly.DENCAbrochure.pdf>
- BLM. (2020). *Colorado GIS and Data Management | Bureau of Land Management*. <https://www.blm.gov/site-page/services-geospatial-gis-data-colorado>
- BLM-NPS. (2018). *MesaDelta\_Draft\_10\_05-compressed.pdf*. [https://oldspanishtrail.org/wp-content/uploads/2018/11/MesaDelta\\_Draft\\_10\\_05-compressed.pdf](https://oldspanishtrail.org/wp-content/uploads/2018/11/MesaDelta_Draft_10_05-compressed.pdf)
- BOR. (n.d.). *Colorado River Storage Project | UC Region | Bureau of Reclamation*. Retrieved March 10, 2020, from <https://www.usbr.gov/uc/rm/crsp/index.html>
- Budd-Falen, K. (2018). *Local Government Participation in Federal Agency Decision Making*.
- Bureau of Reclamation. (2018, August 5). *The Bureau of Reclamation- A Very Brief History* [Government]. Reclamation History. <https://www.usbr.gov/history/borhist.html>
- Bureau of Land Management. (n.d.-a). *Gateway* [Text]. Retrieved January 24, 2020, from <https://www.blm.gov/visit/gateway>
- Bureau of Land Management. (n.d.-b). *Grand Valley Open OHV Area* [Text]. Retrieved January 24, 2020, from <https://www.blm.gov/visit/search-details/16674/2>
- Bureau of Land Management. (2012). *1283 Data Administration and Management Handbook*. [https://www.blm.gov/sites/blm.gov/files/uploads/mediacenter\\_blmpolicymanual1283.pdf](https://www.blm.gov/sites/blm.gov/files/uploads/mediacenter_blmpolicymanual1283.pdf)
- Bureau of Land Management. (2013). *Record of Decision for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the BLM in Colorado, Utah, and Wyoming and Final EIS*. [https://eplanning.blm.gov/epl-front-office/projects/lup/65266/79042/91307/2013\\_Oil\\_Shale\\_PEIS\\_ROD.pdf](https://eplanning.blm.gov/epl-front-office/projects/lup/65266/79042/91307/2013_Oil_Shale_PEIS_ROD.pdf)

- Bureau of Land Management. (2015a). *Environmental Assessment DOI-BLM-MT-C030-2014-189-EA*. [https://www.blm.gov/sites/blm.gov/files/MT-DAKs%20NDFO\\_July2015\\_LeaseSaleEA\\_DRAFT\\_9Feb2015.pdf](https://www.blm.gov/sites/blm.gov/files/MT-DAKs%20NDFO_July2015_LeaseSaleEA_DRAFT_9Feb2015.pdf)
- Bureau of Land Management. (2015b). *Recreation Definitions*.
- Bureau of Land Management. (2015c). *Grand Junction Field Office RMP Appendix A Figures Maps*. [https://eplanning.blm.gov/epl-front-office/projects/lup/55944/67731/73685/Appendix\\_A\\_Figures\\_Maps\\_ARMP.pdf](https://eplanning.blm.gov/epl-front-office/projects/lup/55944/67731/73685/Appendix_A_Figures_Maps_ARMP.pdf)
- Bureau of Land Management. (2015d). *Grand Junction Field Office RMP Record of Decision*. [https://eplanning.blm.gov/epl-front-office/projects/lup/55944/67734/73704/3\\_GJFO\\_RMP\\_Record\\_of\\_Decision.pdf](https://eplanning.blm.gov/epl-front-office/projects/lup/55944/67734/73704/3_GJFO_RMP_Record_of_Decision.pdf)
- Bureau of Land Management. (2016a, August 15). *About: History of BLM: National Timeline* [Text]. <https://www.blm.gov/about/history/timeline>
- Bureau of Land Management. (2016b, August 18). *Programs: Cultural Resources: Paleontology* [Text]. <https://www.blm.gov/paleontology>
- Bureau of Land Management. (2017a, February 28). *Programs: National Conservation Lands: Colorado: Dominguez-Escalante NCA* [Text]. <https://www.blm.gov/programs/national-conservation-lands/colorado/dominguez-escalante-nca>
- Bureau of Land Management. (2017b, February 28). *Programs: National Conservation Lands: Colorado: McInnis Canyons* [Text]. <https://www.blm.gov/programs/national-conservation-lands/colorado/mcinnis-canyons>
- Bureau of Land Management. (2017c, May 22). *Oil and Gas Leasing Reform Land Use Planning and Lease Parcel Reviews* [Text]. <https://www.blm.gov/policy/im-2010-117>
- Bureau of Land Management. (2018a, March 8). *Programs: National Conservation Lands: Colorado: Black Ridge Canyons WSA* [Text]. <https://www.blm.gov/site-page/programs-national-conservation-lands-colorado-black-ridge-canyons-wsa>
- Bureau of Land Management. (2018b, March 8). *Programs: National Conservation Lands: Colorado: Dominguez Canyon WSA* [Text]. <https://www.blm.gov/site-page/programs-national-conservation-lands-colorado-dominguez-canyon-wsa>
- Bureau of Land Management. (2018c, March 8). *Programs: National Conservation Lands: Colorado: Little Book Cliffs WSA* [Text]. <https://www.blm.gov/site-page/programs-national-conservation-lands-colorado-little-book-cliffs-wsa>
- Bureau of Land Management. (2018d, March 8). *Programs: National Conservation Lands: Colorado: Sewemup WSA* [Text]. <https://www.blm.gov/site-page/programs-national-conservation-lands-colorado-sewemup-wsa>
- Bureau of Land Management. (2018e, March 8). *Programs: National Conservation Lands: Colorado: The Palisade WSA* [Text]. <https://www.blm.gov/site-page/programs-national-conservation-lands-colorado-palisade-wsa>
- Bureau of Land Management - Colorado River Valley Field Office. (2015). *Record of Decision and Approved Resource Management Plan* (pp. 1–160). [https://eplanning.blm.gov/epl-front-office/projects/lup/68506/90704/109012/01\\_CRVFO\\_ROD\\_ARMP\\_FINAL\\_6-12-15.pdf](https://eplanning.blm.gov/epl-front-office/projects/lup/68506/90704/109012/01_CRVFO_ROD_ARMP_FINAL_6-12-15.pdf)
- Bureau of Land Management- Uncompahgre Field Office. (2020). *Colorado—Uncompahgre FO - Uncompahgre Field Office Resource Management Plan*. <https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=86004>
- Bureau of Reclamation—About Us*. (2019, January 30). Bureau of Reclamation. <https://www.usbr.gov/main/about/>

- Caspari, H., & Colorado State University. (2016). *Economics of growing grapes in Mesa County*. <https://webdoc.agsci.colostate.edu/aes/wrcr/techbulletins/Economics%20of%20growing%20grapes%20zones,%202000-2015.pdf>
- Caspari, H., & Colorado State University. (2018). *Colorado Viticulture Survey 2018*. <https://webdoc.agsci.colostate.edu/aes/wrcr/techbulletins/Survey2018.pdf>
- CDPHE. (2018, February 23). *Water quality 10-year roadmap*. Department of Public Health and Environment. <https://www.colorado.gov/pacific/cdphe/WQ-10-Year-Roadmap>
- CDWR. (n.d.). *Map Viewer*. Colorado's Decision Support Systems. Retrieved March 10, 2020, from <https://gis.colorado.gov/dnrviewer/Index.html?viewer=mapviewer>
- Chenoweth, W. L. (1987). *The Riggs Hill and Dinosaur Hill Sites, Mesa County, Colorado*. 97–100.
- CHNP. (n.d.). *Colorado Wetland Program Plan*. Colorado Wetland Information Center. Retrieved March 10, 2020, from <https://cnhp.colostate.edu/cwic/about-cwic/wetland-plan/>
- Clifton Water District. (n.d.). *Clifton Water District—Quality Water Provider for Western Colorado*. Retrieved July 9, 2020, from <https://cliftonwaterdistrict.org/about.html>
- Colorado and Gunnison Basin Roundtable Education Projects | Colorado Mesa Univ.* (n.d.). Retrieved April 27, 2020, from <https://www.coloradomesa.edu/water-center/river-basin-roundtables/index.html>
- Colorado Department of Agriculture, & Colorado parks and Wildlife. (n.d.). *Depredating Animal Regulations*. <https://cpw.state.co.us/Documents/RulesRegs/Brochure/DepredatingAnimalRegulationsBrochure.pdf>
- Colorado Department of Transportation. (n.d.). *Dinosaur Diamond* [Page]. Colorado Department of Transportation. Retrieved June 29, 2020, from <https://www.codot.gov/travel/scenic-byways/northwest/dinosaur-diamond>
- Colorado DNR. (n.d.). *Department of Natural Resources: Division of Water Resources*. Retrieved March 4, 2020, from <https://cdnr.us/#/division/DWR>
- Colorado DNR. (2014a, June 10). *Groundwater Program*. Department of Public Health and Environment. <https://www.colorado.gov/pacific/cdphe/groundwater-program>
- Colorado DNR. (2014b, June 10). *Rivers, lakes and streams*. Department of Public Health and Environment. <https://www.colorado.gov/pacific/cdphe/clean-water-rivers-lakes-and-streams>
- Colorado DNR. (2014c, June 10). *Stream and river monitoring plan*. Department of Public Health and Environment. <https://www.colorado.gov/pacific/cdphe/stream-and-river-monitoring-plan>
- Colorado Information Marketplace. (2016). *Oil and Gas Floodplain – Colorado 100-year Effective as of January 28, 2016 | Colorado Information Marketplace | data.colorado.gov*. Colorado Information Marketplace. <https://data.colorado.gov/Environment/Oil-and-Gas-Floodplain-Colorado-100-year-Effective/49i7-pqgv/data?pane=feed>
- Colorado Parks & Wildlife—About Colorado Parks & Wildlife (CPW)*. (n.d.). Retrieved March 8, 2019, from <https://cpw.state.co.us/aboutus/>
- Colorado Parks & Wildlife—Commission*. (n.d.). Retrieved March 12, 2019, from <https://cpw.state.co.us/aboutus/Pages/commission.aspx>
- Colorado Parks and Wildlife. (n.d.-a). *Colorado Fish Hatcheries*. Colorado Parks and Wildlife. Retrieved January 31, 2020, from <https://cpw.state.co.us/learn/Pages/Hatcheries.aspx>
- Colorado Parks and Wildlife. (n.d.-b). *Colorado Fishing Atlas*. Retrieved January 31, 2020, from <https://ndismaps.nrel.colostate.edu/index.html?app=FishingAtlas>
- Colorado Parks and Wildlife. (2015). *Colorado's 2015 State Wildlife Action Plan*. 865.
- Colorado Parks and Wildlife. (2019a). *Colorado 2019 Fact Sheet*. <https://cpw.state.co.us/Documents/About/Reports/StatewideFactSheet.pdf>



- Colorado Parks and Wildlife. (2019b). *Colorado Parks and Wildlife 2019 Fact Sheet*.  
<https://cpw.state.co.us/Documents/About/Reports/StatewideFactSheet.pdf>
- Colorado Parks and Wildlife. (2019c). *Northwest Region Fact Sheet 2019. 2*.
- Colorado Parks and Wildlife. (2019d). *Southwest Region Fact Sheet 2019*.
- Colorado SHPO. (n.d.). *State Historic Preservation Office (SHPO) | History Colorado*. Retrieved July 13, 2020, from <https://www.historycolorado.org/state-historic-preservation-office>
- Colorado State Forest Service. (n.d.). *Pinon Pine Mortality in Western Colorado*. Retrieved July 9, 2020, from <http://www.wci.colostate.edu/Assets/pdf/pinyon.ips.pdf>
- Colorado State University. (n.d.). *Water Rights | Colorado Water Knowledge | Colorado State University*. Retrieved March 4, 2020, from <https://waterknowledge.colostate.edu/water-management-administration/water-rights/>
- Colorado, W. E. (2015, February 27). Call it a compact: Why examining the limits of Colorado River sharing is key to a successful state water plan. *Water Education Colorado*.  
<https://www.watereducationcolorado.org/publications-and-radio/blog/call-it-a-compact-why-examining-the-limits-of-colorado-river-sharing-is-key-to-a-successful-state-water-plan/>
- Colorado.com. (2019, December 10). *Colorado Scenic Byway: Grand Mesa | Colorado.com*.  
<https://www.colorado.com/articles/colorado-scenic-byway-grand-mesa>
- Commission of the European Communities. (1986). *Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES): EC Annual Report*. Office for Official Publications of the European Communities.
- Congressional Research Service. (2015). *The National Trails System: A Brief Overview*. 13.
- deCalesta, D. S. (n.d.). *Predator Control: History and Policies*. Oregon State University Extension Service.
- Department of Energy. (n.d.). *A Brief History of the Department of Energy*. Energy.Gov. Retrieved June 30, 2020, from <https://www.energy.gov/management/office-management/operational-management/history/brief-history-department-energy>
- DOE, K. (2020). *Grand Junction, Colorado DOE Fact Sheet*. 3.
- DrillingEdge. (n.d.). *Mesa County, CO Permits, Production, Wells & Operators*. Retrieved March 3, 2020, from <http://www.drillingedge.com/colorado/ mesa-county>
- Dyar, J. (2020, January 17). *A historic announcement for clean energy in Colorado*. Western Colorado Alliance for Community Action. <https://westerncoloradoalliance.org/a-historic-announcement-for-clean-energy-in-colorado/>
- Economic Profile System. (2020). *A Profile of Public Land Amenities*.
- Encyclopedia Staff. (2016, June 27). *Mesa County* [Text]. Colorado Encyclopedia.  
<https://coloradoencyclopedia.org/article/ mesa-county>
- EnergyAPI. (2017). *Natural Gas and Oil Fuel Colorado*.  
[https://www.api.org/~ /media/Files/Policy/Jobs/Economics-Nat-Gas-Oil/API\\_OilEconomy\\_Colorado.pdf](https://www.api.org/~ /media/Files/Policy/Jobs/Economics-Nat-Gas-Oil/API_OilEconomy_Colorado.pdf)
- Erdmann, C. (1934). *The Book Cliffs coal field in Garfield and Mesa counties, Colorado*.  
<https://doi.org/10.3133/b851>
- Executive Order 13352*. (2017, July 31). FedCenter.  
<https://www.fedcenter.gov/Bookmarks/index.cfm?id=57>
- Federal Land Policy and Management Act, Pub. L. No. 94–579 (1976).
- FEMA. (n.d.-a). *Community Assistance Program—State Support Services Element*. Retrieved December 16, 2019, from <https://www.fema.gov/community-assistance-program-state-support-services-element>
- FEMA. (n.d.-b). *FEMA’s National Flood Hazard Layer (NFHL) Viewer*. Retrieved December 16, 2019, from <https://hazards->

- fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd
- FEMA. (n.d.-c). *Risk Map Progress—Mapping Information Platform Studies Tracker*. ArcGIS. Retrieved February 15, 2019, from <http://www.arcgis.com/home/webmap/viewer.html?webmap=6331cc6b45734c4eabfde6102d5fc0b1&extent=-148.9197,13.1588,-46.0876,55.5312>
- FEMA. (n.d.-d). *Risk Mapping, Assessment and Planning (Risk MAP)*. Retrieved December 16, 2019, from <https://www.fema.gov/risk-mapping-assessment-and-planning-risk-map>
- FindLaw. (n.d.). *Water Rights Law: Prior Appropriation*. Findlaw. Retrieved December 19, 2019, from <https://corporate.findlaw.com/business-operations/water-rights-law-prior-appropriation.html>
- GJFO. (2009). *Wild and Scenic River Eligibility Report Bureau of Land Management, Grand Junction Field Office*. <https://www.gmugrevision.com/wp-content/uploads/2019/03/BLM-Wild-Scenic.pdf>
- GJFO. (2016). *Travel Management Plan Grand Junction Field Office Review*. 13.
- Glicksman, Robert L., & Coggins, George Cameron. (n.d.). *Modern Public Land Law*.
- Global Energy Institute. (2013, February 1). *Benefits of Keystone XL*. Global Energy Institute. <https://www.globalenergyinstitute.org/benefits-keystone-xl>
- Grand Junction Colorado. (2020). *The Best Waterway for Your Water Sports! | Visit Grand Junction, Colorado*. <https://www.visitgrandjunction.com/best-waterway-your-water-sports>
- Grand Junction Economic Partnership. (2016a). *Colorados Grand Valley WHERE OUTDOOR RECREATION Means Busines*. <https://www.gjep.org/wp-content/uploads/2017/01/Outdoor-Recreation-Industry-2016.pdf>
- Grand Junction Economic Partnership. (2016b, April 11). Agriculture, Food and Beverage. *GJEP*. <https://www.gjep.org/key-industries/agribusiness/>
- Grand Junction Economic Partnership. (2016c, April 11). Energy and Renewables. *GJEP*. <https://www.gjep.org/key-industries/energy-renewables/>
- Hamilton, A. (2018, December 15). *Western Colorado cities expect big savings from solar power*. AP NEWS. <https://apnews.com/bbfbdd505e7545288798209add6617a6>
- Hofman, J. (2020). *Renewable Energy Discussion* [Personal communication].
- Ike. (2016, May 1). *Mining History in Mesa County*. Mesa County Libraries. <https://mesacountylibraries.org/2016/05/mining-history-in-mesa-county/>
- International Mountain Bicycling Association. (2018). *Draft Grand Valley Strategic Trails Plan*. [https://www.mesacounty.us/globalassets/planning/codes-plans--policies/plans/resource-management-plan/draft\\_grand-valley-strategic-report-20180917v4.1--mountain-bike-trails-plan](https://www.mesacounty.us/globalassets/planning/codes-plans--policies/plans/resource-management-plan/draft_grand-valley-strategic-report-20180917v4.1--mountain-bike-trails-plan)
- InvestigateWest. (n.d.). *Land and Water Conservation Fund Database: Colorado | InvestigateWest*. Retrieved July 8, 2020, from <http://projects.invw.org/data/lwcf/grants-co.html>
- Kiefer. (n.d.). *Book Cliffs: Climbing, Hiking & Mountaineering: SummitPost*. Retrieved June 30, 2020, from <https://www.summitpost.org/page/482735>
- MapView. (n.d.). *MapView/Transportation\_MapView\_js (FeatureServer)*. Retrieved November 10, 2020, from [https://dtdapps.coloradodot.info/arcgis/rest/services/MapView/Transportation\\_MapView\\_js/FeatureServer](https://dtdapps.coloradodot.info/arcgis/rest/services/MapView/Transportation_MapView_js/FeatureServer)
- Martsof, A. (2020). *Mesa County Hazard Mitigation Plan*. 204.
- MCPC. (2014). *2014 Old Spanish Trail Plan*. <https://www.mesacounty.us/globalassets/planning/codes-plans--policies/plans/resource-management-plan/2014-Old-Spanish-Trail-Plan>
- Mesa County. (n.d.-a). *Flood Safety—Mesa County, Colorado*. Retrieved March 5, 2020, from <https://www.mesacounty.us/publicworks/floodplain-management/flood-safety/>

- Mesa County. (n.d.-b). *Mesa County GIS Viewer: Floodplain Map*. Retrieved March 5, 2020, from <https://emap.mesacounty.us/viewer/?maptype=flood>
- Mesa County. (1997). *Mesa County MOU with BLM*. <https://www.mesacounty.us/globalassets/planning/codes-plans--policies/plans/resource-management-plan/mesa-county--blm.pdf>
- Mesa County. (2011). *Mesa County Mineral and Energy Resource Master Plan*. <https://www.mesacounty.us/globalassets/planning/codes-plans--policies/plans/energy-master-plan/mineral-and-energy-resources-master-plan.pdf>
- Mesa County. (2014). *Mesa County MOU with NPS*. <https://www.mesacounty.us/globalassets/planning/codes-plans--policies/plans/resource-management-plan/mesa-county--nps-expired.pdf>
- Mesa County. (2018). *Mesa County MOU with USFWS*. <https://www.mesacounty.us/globalassets/planning/codes-plans--policies/plans/resource-management-plan/mesa-county--usfs.pdf>
- Mesa County. (2020). *Stormwater—Mesa County, Colorado*. <https://stormwater.mesacounty.us/>
- Mesa County Board of Commissioners. (1997). *MCM-97-132 Right to Farm Policy*.
- Mesa County Board of Commissioners. (2014). *Mesa County Oil & Gas Resolution*.
- Mesa County, CO. (n.d.-a). *Geography—Mesa County, Colorado*. Retrieved January 24, 2020, from <https://www.mesacounty.us/residents/about-us/geography/>
- Mesa County, CO. (n.d.-b). *History—Mesa County, Colorado*. Retrieved January 31, 2020, from <https://www.mesacounty.us/residents/about-us/history/>
- Mesa County, Colorado | Map, History and Towns in Mesa, CO*. (n.d.). Uncover Colorado. Retrieved March 31, 2020, from <https://www.uncovercolorado.com/counties/mesa/>
- Mesa County, Colorado, City of Grand Junction, Colorado, Town of Palisade, Colorado, Ute Water Conservancy District, Mesa Water and Sanitation District, Saddle Mountain Ranch, BLM, Grand Junction Field Office, US Forest Service, & Genesis Gas & Oil, LLC. (2007). *Watershed Plan for the Town of Palisade and the City of Grand Junction*.
- Mesa County GIS. (2020). *Mesa County GIS Wildfire Shapefile*.
- Mesa County Public Health. (2018). *Mesa County Community Health Needs Assessment 2018-2020*. <https://health.mesacounty.us/wp-content/uploads/CHNA-2018-2020-Web.pdf>
- Mesa County Weed & Pest. (2020). *Mesa County Noxious Weed Management Plan*. <https://www.mesacounty.us/globalassets/weed-and-pest-district/plans/mesa-county-noxious-weed-plan.pdf>
- Mesa County Workforce Center. (2016). *Mesa County Workforce Center Industry Report Mining, Quarry, Oil and Gas Extraction*. <https://www.gjep.org/wp-content/uploads/2016/08/gjep-density-energy-2nd-qtr-2016-final.pdf>
- Mining In Mesa County, Colorado*. (n.d.). The Diggings™. Retrieved February 20, 2020, from <https://thediggings.com/usa/colorado/mesa-co077>
- Morehouse, C. (2019). *Colorado Gov Polis unveils roadmap to 100% renewables by 2040, signs 11 clean energy bills*. Utility Dive. <https://www.utilitydive.com/news/colorado-gov-polis-unveils-roadmap-to-100-carbon-free-by-2040-signs-11-cl/555975/>
- Museums of Western Colorado—History*. (n.d.). Museums of Western Colorado. Retrieved March 19, 2020, from <https://museumofwesternco.com/blog/timeline/pre-1880s/>
- National Park Service. (2014). *Intermountain Region Long Range Transportation Plan 2014-0235*.
- National Park Service. (2015, February 24). *People—Colorado National Monument (U.S. National Park Service)*. <https://www.nps.gov/colm/learn/historyculture/people.htm>

- National Park Service. (2019a, March 20). *Management—Colorado National Monument (U.S. National Park Service)*. <https://www.nps.gov/colm/learn/management/index.htm>
- National Park Service. (2019b, October 15). *Colorado National Monument (U.S. National Park Service)*. <https://www.nps.gov/colm/index.htm>
- National Park Service. (2020a, January 24). *Stats Report Viewer*. [https://irma.nps.gov/STATS/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20\(1904%20-%20Last%20Calendar%20Year\)?Park=COLM](https://irma.nps.gov/STATS/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20(1904%20-%20Last%20Calendar%20Year)?Park=COLM)
- National Park Service. (2020b, March). *Laws, Regulations, & Policies—Fossils and Paleontology*. <https://www.nps.gov/subjects/fossils/fossil-protection.htm>
- National Wild and Scenic Rivers System. (n.d.). *Colorado*. Retrieved June 29, 2020, from <https://www.rivers.gov/colorado.php>
- NPMS. (n.d.). *NPMS Public Viewer Map*. Retrieved March 3, 2020, from <https://pvnps.phmsa.dot.gov/PublicViewer/>
- NPS. (n.d.). *National Park Service History: National Park System Timeline*. History E-Library. Retrieved November 13, 2018, from [https://www.nps.gov/parkhistory/hisnps/nps/history/timeline\\_annotated.htm](https://www.nps.gov/parkhistory/hisnps/nps/history/timeline_annotated.htm)
- NPS. (2015). *Foundation Document Colorado National Monument*. [https://www.nps.gov/colm/learn/management/upload/COLM\\_FD\\_PRINT.pdf](https://www.nps.gov/colm/learn/management/upload/COLM_FD_PRINT.pdf)
- NPS. (2018, September 11). *Transportation Planning—Transportation [Government]*. National Park Service Department of the Interior. <https://www.nps.gov/subjects/transportation/planning.htm>
- NRCS. (n.d.-a). *Soil Surveys by State | NRCS Soils*. Retrieved December 16, 2019, from <https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=WY>
- NRCS. (n.d.-b). *Web Soil Survey*. Retrieved February 25, 2019, from <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>
- NRCS. (2018, March 17). *Soil Health | NRCS Soils*. <https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>
- NRCS. (2019, August). *Welcome to the PLANTS Database | USDA PLANTS*. <https://plants.sc.egov.usda.gov/java/>
- Office of Management and Budget. (2004). *Memorandum: Issuance of OMB's "final Information Quality Bulletin for Peer Review."* [https://www.cio.noaa.gov/services\\_programs/pdfs/OMB\\_Peer\\_Review\\_Bulletin\\_m05-03.pdf](https://www.cio.noaa.gov/services_programs/pdfs/OMB_Peer_Review_Bulletin_m05-03.pdf)
- Oh Ranger. (n.d.). *Horsethief Canyon State Wildlife Area | Oh, Ranger!* Retrieved July 9, 2020, from <http://www.ohranger.com/horsethief-canyon-state-wildlife-area>
- Prism Interpretive Services. (2016). *Dinosaur Diamond Prehistoric Highway Management Plan.pdf*. Google Docs. [https://drive.google.com/file/d/0B6BtAVE2Hf-wQTRvSDIvSVczeEE/view?usp=sharing&usp=embed\\_facebook](https://drive.google.com/file/d/0B6BtAVE2Hf-wQTRvSDIvSVczeEE/view?usp=sharing&usp=embed_facebook)
- Programs: Energy and Minerals: Oil and Gas: About: Colorado*. (2016, October 16). [Text]. <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/about/colorado>
- SCORP. (2018). *The 2017 Economic Contributions of Outdoor Recreation in Colorado*. [https://cpw.state.co.us/Documents/Trails/SCORP/2017EconomicContributions\\_SCORP.pdf#search=economic%20impact%20reports](https://cpw.state.co.us/Documents/Trails/SCORP/2017EconomicContributions_SCORP.pdf#search=economic%20impact%20reports)
- Speas, C., & Broderdorp, K. (2011). *Grand Mesa, Uncompahgre and Gunnison National Forest Unit Threatened, Endangered, Proposed and Candidate Species List. 2*.
- Unaweep Tabeguache Scenic & Historic Byway. (2013). *Unaweep Tabeguache Scenic and Historic Byway*. Utbyway. <https://www.utbyway.com>
- United States Department of Agriculture National Agricultural Statistics Service, Vilsack, T., & Clark, C. Z. F. (2014). *2012 Census of Agriculture (Wyoming State and County Data)*.

- [https://www.nass.usda.gov/Publications/AgCensus/2012/Full\\_Report/Volume\\_1,\\_Chapter\\_2\\_County\\_Level/Wyoming/wyv1.pdf](https://www.nass.usda.gov/Publications/AgCensus/2012/Full_Report/Volume_1,_Chapter_2_County_Level/Wyoming/wyv1.pdf)
- U.S. Bureau of Land Management. (2016a, October 4). *Little Book Cliffs Wild Horse Range: Herd Management Areas in Colorado* [Text]. <https://www.blm.gov/programs/wild-horse-and-burro/herd-management/herd-management-areas/colorado/little-book>
- U.S. Bureau of Land Management. (2016b, October 22). *Wild Horse and Burro Little Book Cliffs Partnership* [Text]. <https://www.blm.gov/programs/wild-horse-and-burro/partnerships/little-books-cliff>
- US Census Bureau. (n.d.). *Census—Geography Profile*. Retrieved January 31, 2020, from <https://data.census.gov/cedsci/profile?q=Mesa%20County,%20Colorado%29.&g=0500000US08077&table=DP05&tid=ACSDP1Y2018.DP05>
- U.S. Fish and Wildlife Service. (n.d.). *Environmental Conservation Online System*. Retrieved January 30, 2020, from <https://ecos.fws.gov/ecp0/reports/species-by-current-range-county?fips=08077>
- U.S. Forest Service. (n.d.). *Definitions of inventoried roadless areas, potential wilderness areas, recommended wilderness areas and designated wilderness*. Retrieved April 15, 2020, from [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/fsbdev3\\_000250.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev3_000250.pdf)
- US Forest Service. (1982, September 30). *National Forest System Land and Resource Management Planning 1982 Rule*. <https://www.fs.fed.us/emc/nfma/includes/nfmareg.html>
- US Forest Service. (2006). *Coal Resource and Development Potential: Grand Mesa, Uncompahgre, and Gunnison National Forests*. [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/fseprd522368.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd522368.pdf)
- US Forest Service. (2013). *FSH 1909.12—Process Supporting Land Management Planning*. [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5409879.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5409879.pdf)
- U.S. Forest Service. (2017). Chapter 2670—Threatened, endangered, and sensitive plants and animals. In *FSM 2600—Wildlife, fish, and sensitive plant habitat management*. [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/fseprd553653.docx](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd553653.docx)
- USDA. (2017a). *2017 Census of Agriculture County Profile: Carbon County*. [https://www.nass.usda.gov/Publications/AgCensus/2017/Online\\_Resources/County\\_Profiles/Wyoming/cp56007.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Wyoming/cp56007.pdf)
- USDA. (2017b). *Mesa County Agriculture Census*. [https://www.nass.usda.gov/Publications/AgCensus/2017/Online\\_Resources/County\\_Profiles/Colorado/cp08077.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Colorado/cp08077.pdf)
- USDA Forest Service. (n.d.). *Grand Mesa Uncompahgre and Gunnison National Forests—About the Forest*. Retrieved April 1, 2020, from <https://www.fs.usda.gov/detail/gmug/about-forest/?cid=stelprdb5210671>
- USDA Forest Service. (2001). *Final Environmental Impact Statement for the Northern Great Plains Management Plan Revision*. [https://www.fs.usda.gov/detail/mbr/landmanagement/planning/?cid=fsbdev3\\_025111](https://www.fs.usda.gov/detail/mbr/landmanagement/planning/?cid=fsbdev3_025111)
- USDA Forest Service. (2005a). *Grand Mesa, Uncompahgre and Gunnison National Forests Management Indicator Species Forest Plan Amendment EA: Appendix D*.
- USDA Forest Service. (2005b). *Grand Mesa, Uncompahgre and Gunnison National Forests Management Indicator Species Decision Notice and Finding of No Significant Impact*. [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/fsbdev7\\_003183.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev7_003183.pdf)
- USDA Forest Service. (2019). *Grand Mesa, Uncompahgre, and Gunnison National Forests Working Draft of the Revised Land Management Plan*.
- USDA: Soil Science Division Staff. (2017). *Soil Survey Manual (SSM)*. [https://www.nrcs.usda.gov/wps/portal/nrcs/detail//?cid=nrcs142p2\\_054262](https://www.nrcs.usda.gov/wps/portal/nrcs/detail//?cid=nrcs142p2_054262)

- USFS. (n.d.-a). *Grand Mesa Uncompahgre and Gunnison National Forests—Special Places*. Retrieved June 29, 2020, from <https://www.fs.usda.gov/detail/gmug/specialplaces/?cid=stelprdb5181324>
- USFS. (n.d.-b). *Key Elements of the Colorado Roadless Rule*. Retrieved October 15, 2020, from [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5292338.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5292338.pdf)
- USFS. (n.d.-c). *Manti-La Sal National Forest—Home*. Retrieved June 29, 2020, from <https://www.fs.usda.gov/mantilasal>
- USFS. (n.d.-d). *Shooting | US Forest Service*. Retrieved October 16, 2020, from <https://www.fs.usda.gov/visit/know-before-you-go/shooting>
- USFS. (2016). *Roadless Area Conservation National Forest System Lands in Colorado Record of Decision*. [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/fseprd527897.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd527897.pdf)
- USFWS. (n.d.). *USFWS-WSFR State Wildlife Grant Program*. Retrieved March 12, 2019, from <https://wsfrprograms.fws.gov/subpages/grantprograms/swg/swg.htm>
- USFWS. (1973a). *Endangered Species Act of 1973*. <https://www.fws.gov/laws/lawsdigest/esact.html>
- USFWS. (1973b). *Endangered Species Act of 1973, As Amended through the 108th Congress*. 44.
- USFWS. (2018a). *2018 Annual Report of Lands Data Tables*.
- USFWS. (2018b). *U.S. Fish & Wildlife Service—Migratory Bird Program | Conserving America’s Birds*. <https://www.fws.gov/birds/policies-and-regulations/laws-legislations/bald-and-golden-eagle-protection-act.php>
- USFWS. (2018c, March 16). *Endangered Species | What We Do | Listing and Critical Habitat | Critical Habitat | FAQ*. <https://www.fws.gov/endangered/what-we-do/critical-habitats-faq.html>
- USFWS. (2020). *USFWS: Laws that Protect Bald Eagles*. <https://www.fws.gov/midwest/eagle/history/protect.html>
- USGS. (n.d.). *Colorado Water Science Center—Data and Tools*. Retrieved March 5, 2020, from <https://www.usgs.gov/centers/co-water/data-tools>
- USGS. (2005). *Colorado geologic map data*. <https://mrddata.usgs.gov/geology/state/state.php?state=CO>
- USGS. (2016, December 16). *USGS: National Hydrography Dataset—User Guide*. <https://nhd.usgs.gov/userguide.html>
- USGS. (2020). *Earth Resources Observation and Science (EROS) Center*. <https://www.usgs.gov/centers/eros>
- Ute Water Conservancy District. (n.d.). *Ute Water Conservancy District*. Utewater. Retrieved July 9, 2020, from <https://www.utewater.org>
- Vaccarelli, J. (2019, February). *Goal: 60% green by 2030*. The Grand Junction Daily Sentinel. [https://www.gjsentinel.com/news/western\\_colorado/goal-green-by/article\\_92a8f3c4-2b69-11e9-aab5-20677ce05640.html](https://www.gjsentinel.com/news/western_colorado/goal-green-by/article_92a8f3c4-2b69-11e9-aab5-20677ce05640.html)
- Vanwinkle, J. (2019). *Economy and the landscape benefit from beef production*. The Grand Junction Daily Sentinel. [https://www.gjsentinel.com/opinion/columns/economy-and-the-landscape-benefit-from-beef-production/article\\_50f73e40-e91e-11e9-9fa5-20677ce07cb4.html](https://www.gjsentinel.com/opinion/columns/economy-and-the-landscape-benefit-from-beef-production/article_50f73e40-e91e-11e9-9fa5-20677ce07cb4.html)
- Vincent, C. H., Comay, L. B., Crafton, R. E., & Hoover, K. (2019). *Federal Land Ownership: Acquisition and Disposal Authorities*. 15.
- Visit Grand Junction. (2020). *Top Winter Activities Around Grand Junction | Visit Grand Junction, Colorado*. <https://www.visitgrandjunction.com/top-winter-activities-around-grand-junction>
- Weed and Pest District. (n.d.). *Weed and Pest District—Mesa County, Colorado*. Mesa County. Retrieved March 10, 2020, from <https://www.mesacounty.us/pest/>
- Western Colorado Alliance. (2017, July 24). *Clean Energy: Western Colorado Alliance*. Western Colorado Alliance for Community Action. <https://westerncoloradoalliance.org/campaigns/clean-energy/>
- Wilson, R. K. (2014). *America’s Public Lands: From Yellowstone to Smokey Bear and Beyond*. Rowman & Littlefield.

WPD. (n.d.). *Upper Grand Valley Pest Control District—Mesa County, Colorado*. Retrieved March 11, 2020, from <https://www.mesacounty.us/pest/ugvpcd/>

WQCD. (2016). *Integrated Water Quality Monitoring and Assessment Report 2016*. Google Docs. [https://drive.google.com/file/d/1JQwGMPNn5jl8QTKqQu60TC-ZAsmh1IDf/view?usp=drive\\_open&usp=embed\\_facebook](https://drive.google.com/file/d/1JQwGMPNn5jl8QTKqQu60TC-ZAsmh1IDf/view?usp=drive_open&usp=embed_facebook)

## APPENDIX D: PUBLIC COMMENTS

Table 11. Public comments received for Mesa County RMP.

Comment Received From	Comment Received	Response
<p>Scott B. – Colorado Wildlands Project</p>	<p>NRMP Language (p. 34):                      The courts have clearly established that the states have the proprietary jurisdiction over rights-of-way within their state. <i>Colorado v. Toll</i>, 268 US 228, 231 (1925). This jurisdiction and control over rights-of-way through public lands must be actively ceded by the state (or counties as arms of the state) to the federal government or curtailed by Congress. <i>US v. Garfield County</i>, 122 F. Supp.2d 1201, 1235 (D. Utah 2000) citing <i>Kleppe v. New Mexico</i>, 426 US 529, 541-46 (1976). Congress has yet to overturn R.S. 2477 or wrest control over the determination of what is a valid R.S. 2477 right-of-way. Thus, the question of whether an R.S. 2477 is established and the scope of the right-of-way is a matter of state law. See <i>U.S. v. Garfield County</i>, 122 F.Supp.2d at 1255; <i>Sierra Club v. Hodel</i>, 848 F.2d 1068, 1080 (10th Cir. 1988).                      CWP Comments: This paragraph misleadingly states the law, arguing that “states have the proprietary jurisdiction over rights-of-way within their states” and “Congress has yet to overturn R.S. 2477 or wrest control over the determination of what is a valid R.S. 2477 right-of-way.” In fact, federal law governs the interpretation of R.S. 2477 and state law is only applicable insofar as it is compatible with federal intent. <i>SUWA v. BLM</i>, 425 F.3d 735, 767-68 (10th Cir. 2005). And, even where title to an R.S. 2477 right-of-way has been adjudicated, the holder does not possess fee simple ownership, but has merely an easement, or a right to use the land in a specific manner. <i>Id.</i> at 747. The United States retains ownership of the servient estate and the ability to reasonably regulate the R.S. 2477 right-of-way. <i>Id.</i> at 746-47. As the Supreme Court has expressly held, <i>Colorado v. Toll</i>, simply stands for the proposition that “congress had not purported to assume jurisdiction over highways with the Rocky Mountain Nationals</p>	<p>County does have a right to RS 2477 rights of ways and has a legitimate interest in protecting those rights. <i>SUWA v. BLM</i>, indeed states that federal law governs the interpretation of R.S. 2477 and state law is only applicable insofar as it is compatible with federal intent. 425 F.3d 735 (10th Cir. 2005). However, the Court then goes on to state that state law and common law established through state law is and has been the appropriate avenue as to the interpretation of whether there is a valid right-of-way and resolving R.S. 2477 disputes both before and after the law was repealed. <i>SUWA</i>, 425 F.3d at 765 (“the Court incorporated state law to guide its decision, citing a string of five state court decisions for the proposition that ‘the continuing identity of [a] road must be presumed until overcome by proof to the contrary, the burden of which rests upon the [party challenging the validity of an established road].’ <i>Id.</i> at 468, 52 S.Ct. 225. In contrast to this and the many other decisions employing state law standards to resolve R.S. 2477 disputes, the parties have not cited, and we have not found, any cases before its repeal in which R.S. 2477 controversies were resolved by anything other than state law. This</p>



	<p>Park, not that it lacked the power to do so under the Property Clause.”  Kleppe v. New Mexico, 426 U.S. 529, 544 (1976).</p>	<p>unanimity of interpretation over a great many years is entitled to weight.”) Further, when interpreting whether a right-of-way under R.S. 2477, the BLM, as well as the courts, consistently has looked to state statutes and common law. <i>Id.</i> Additionally, when the BLM attempted to adopt a nationwide interpretation of R.S. 2477, thus nullifying the long history of using state law to interpret and resolve R.S. 2477 conflicts, Congress rejected this attempt and passed a permanent appropriations rider forbidding the implementation of those standards absent express authorization from Congress. U.S. Department of the Interior and Related Agencies' Appropriations Act, 1997, § 108, enacted by the Omnibus Consolidated Appropriations Act, 1997, Pub.L. No. 104–208, 110 Stat. 3009 (1996). Thus, in the end, the <i>SUWA</i> Court cited by the commenter determined that state law (in that case, the state of Utah) was appropriate to use to govern the recognition of a valid R.S. 2477 right-of-way. Thus, in the end, state law is still used as the primary tool to determine the validity and scope of a R.S. 2477 right-of-way. Answering the second comment regarding the fact that R.S. 2477 does not give the holder fee simple ownership, but an easement. This interpretation is true, R.S. 2477 does not give the holder a fee ownership. However, that does not change the fact that an easement is a permanent property right with a right to use</p>
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		<p>and maintain until it is abandoned by the holder. In order to establish abandonment of an easement, the party asserting that the easement was abandoned must show affirmative acts manifesting an intention on the part of the owner of the dominant estate to abandon the easement. <i>Westland Nursing Home Inc. v. Benson</i>, 517 P.2d 862, 866 (Colo App. 1974). Mere nonuse of an easement, even for a long time does not constitute an abandonment. <i>Id.</i> Thus, an R.S. 2477 is a property right that exists until the holder of the right-of-way (typically the County, but sometimes a private user) manifests an intent to abandon the right. Finally, in answering the third comment, Congress does have the right to assume jurisdiction over lands within its own lands under the Property Clause, so in theory it could do so with R.S. 2477 Rights-of-way. However, Congress has never done and the right still survives unless or until such an action takes place. Changes made to further clarify R.S. 2477 rights regarding abandonment.</p>
<p>Scott B. – Colorado Wildlands Project</p>	<p>The Tenth Circuit has already held that federal land managers are required to fulfill their obligations to protect the public lands, even where an R.S. 2477 right-of-way exists. <i>SUWA</i>, 425 F.3d at 747 (“Just as the National Park Service has obligations to protect National Park land, the BLM has obligations to protect the land over which the [R.S. 2477 claims] at issue here pass.”). This reality derives from the long-established principle of easements, that an “easement holder must exercise its rights so as not to interfere unreasonably with the rights of the owner of the servient estate.” <i>Id.</i></p>	<p>It is true that an easement holder must exercise its rights so as not to interfere unreasonably with the rights of the owner of the servient estate. However, that right goes both ways, the courts have clearly stated that both the holder of the dominant and servient estate must exercise their rights so as to not interfere with the other. <i>SUWA</i>, 425 F.3d at 746 citing <i>Hodel</i>, 848 F.2d at 1083. Thus, there</p>

	<p>Indeed, scope of an R.S. 2477 right-of-way is determined in part by how Congress intends the surrounding lands to be managed. <i>Kane Cnty. v. United States</i>, 772 F.3d 1205, 1224 (10th Cir. 2014) (“FLPMA had the effect of freezing R.S. 2477 rights where they were in 1976. It brought about a statutory sea change that instituted a preference for retention of the lands in federal ownership . . . These policies inform our determination of the scope of R.S. 2477 rights-of-way”).</p>	<p>must be a system of coordination between the federal agency and the holder of the R.S. 2477 right-of-way whenever there may be an action that may affect the rights or use of the other. <i>Id.</i> Further, the courts have also clearly demarcated that use of an R.S. 2477 right-of-way is a question of scope on a case-by-case basis that will allow for the use that is reasonable and necessary for the type of use to which the road has been put until 1976. <i>Id.</i> This, however, does not mean that the road had to be maintained in precisely the same condition it was in on October 21, 1976; rather, it could be improved “as necessary to meet the exigencies of increased travel,” so long as this was done “in the light of traditional uses to which the right-of-way was put” as of repeal of the statute in 1976. <i>Hodel</i>, 848 F.2d at 1083. Changes made to document to further explain coordination requirement between R.S. 2477 holder and the federal agency.</p>
<p>Scott B. – Colorado Wildlands Project</p>	<p>Policy Statement 1: There may be other legitimate reasons for the managing agency to close or temporarily suspend public travel on a route. This could include environmental hazards such as landslides or other geologic hazards. Seasonal closures for wildlife occur in the county and protect wildlife during sensitive periods, yet this policy fails to consider these types of closures. Finally, there may be reasons for closing, either temporarily or permanently, a route to protect important natural resources that may be damaged by vehicular travel. The policy fails to contemplate how land managers can balance their obligations to weigh tradeoffs of transportation against other resource considerations, pursuant to federal laws and regulations.</p>	<p>Policy statement that Commissioners support and no change will be made.</p>

Scott B. – Colorado Wildlands Project	Policy Statement 9: See general R.S. 2477 comment above, which makes this policy statement legally wrong and misleading regarding the county’s rights and responsibilities regarding alleged R.S. 2477 claims.	See above responses to comments regarding R.S. 2477. No changes made
Scott B. – Colorado Wildlands Project	Policy Statement 4: Agencies are charged with developing and maintaining their own wilderness inventories, subject to FLPMA and other authorities. Inventory data is generally accepted at any time from either the public or a government entity such as a county. Identification of a resource is different from making a management or allocation decision about a resource. A resource either exists or it does not, so it is difficult to envision how federal land managers can coordinate with the county on making a determination on the existence of wilderness characteristics, though the federal land managers would no doubt welcome information from the county that may aid them in making such determinations. However, when federal land managers make a decision about how to manage a resource such as wilderness characteristics, it would be in the context of a NEPA planning process such as a new RMP or forest plan, and the county would be able to seek cooperator status.	The County believes that there is a policy decision when the agencies decide if there are wilderness characteristics or not. Such a decision can substantially impact future resource decision and surrounding stakeholders. Creating and maintaining a wilderness inventory falls within the definition of a final agency decision. The purpose of coordination and consistency review is to ensure that the County is involved in such decisions at the earliest possible moment. This policy is consistent with the County's desire to be involved in such decisions; therefore no changes are made to this policy. No changes made.
Scott B. – Colorado Wildlands Project	Policy Statement 6: Wilderness Study Areas, if released by Congress, are immediately subject to the underlying management decisions already in place within the BLM’s RMP. The BLM Grand Junction RMP has already made detailed management decisions for how these lands would be managed if released by Congress (Approved RMP pages 209-212), and those decisions strongly favor retaining their wild and undeveloped character. So a 1-year deadline is not meaningful since the decisions for future management are already made and no additional public process would be necessary after Congress acts.	The direction given by the BOCC disagrees with this comment, therefore no change will be made.
Karen S. – Citizens for Clean Air	The map in Figure 5 shows wildfires within the Mesa County Management Area up to and including 2019. As we now know, the August/September 2020 Pine Gulch Fire was the largest in the state’s history, having burned over 139 thousand acres. During the Pine Gulch wildfire, smoke lingered in	Map updated. Comment received and taken into consideration.

	<p>the Grand Valley for almost the entire month of August, registering as high as 279 AQI according to PurpleAir mapping data. This planning document should include language that alerts county officials to the probability of future smoke events as intense as or worse than the summer of 2020. Indoor air quality became the focus of many residents staying in their homes to escape the inescapable outdoor heavy smoke. However, PurpleAir indoor monitors showed indoor air was often almost as bad as outdoors, leading many to purchase air purifiers, air conditioners (vs. the prevalent evaporative coolers) and other smoke-related short-term fixes. Predicted increased drought and higher temperatures increase the probability of larger and more intense wildfires in the immediate future.</p>	
Bennett B.	<p>Mesa County's rivers and water courses (100-year flood plain mapped and unmapped) should remain unbuilt on and left in their natural state. Wetlands should be protected and enhanced.</p>	<p>Comment received. Already addressed in the plan.</p>
Larry A.	<p>According to state water well records, there are more than 3,000 water wells in Mesa county and more than 400 abandoned wells. However, there are few water wells on federal land in Mesa County. Well depth ranges from a few feet to more than 1,000 feet and wells penetrate several types of aquifers. Some wells are for monitoring, but most are for domestic or commercial use.</p>	<p>Comment received and taken into consideration.</p>
Larry A.	<p>Quantity Groundwater can be hydraulically connected to other sources of water in a watershed; therefore, it is an important link in managing federal and state lands. Floodplains, underlain by alluvial valley aquifers, may recharge or discharge water to streams and other parts of the alluvial aquifer depending on hydraulic conditions of the area. Also, groundwater from alluvial or bedrock aquifers can contribute up to 25 percent of flow (called baseflow) in perennial streams.</p>	<p>Comment received and taken into consideration.</p>
Larry A.	<p>Quality Groundwater quality depends on several factors including distance from recharge source, type of rock and soil at recharge, and distance traveled. As a general rule, shallow groundwater has better quality than deeper</p>	<p>Comment received and taken into consideration.</p>

	<p>aquifers.</p> <p>Alluvial aquifers can clean and filter groundwater that pass through its sand, silt, and clay. For example, in Laramie County, Colorado, produced water from an oil and gas field operation was partly cleaned then pumped into an alluvial aquifer for a final cleaning and mixing before entering into a local water distribution district.</p> <p>There is abundant groundwater in bedrock aquifers that underly most of the county and flow paths may or may not conform to surface watershed boundaries. Water quality is generally poor in deeper parts, but may have better quality near aquifer outcrops or recharge areas below the water table.</p>	
Larry A.	<p>Legal Aspects</p> <p>All water well permits in Colorado are issued by the State Engineer/Division of Water Resources (DWR), including wells constructed on federal land. DWR maintains a database called Hydrobase that contains all permitted water wells in Colorado.</p> <p>The State Engineer has a policy specifying that all groundwater is tributary to surface water (unless proven otherwise). This implies that all groundwater will eventually flow into a stream(s), therefore, pumping of groundwater may have legal implications in surface water appropriations. Congress passed a law in 1877 authorizing states with exclusive authority over ground water in the United States and the Supreme Court confirmed that authority in California Oregon Power Co. v. Beaver Portland Cement Co. (1935; the ruling focused on USDA/Forest Service). Still, the federal government advocates establishing policies involving access to or utilization of groundwater resources on federal lands, including enhancing water quality.</p> <p>Kobi Webb, J.D., University of Denver School of Law, 2016</p>	Comment received and taken into consideration.
Karen S. – Citizens for Clean Air	<p>3.2.B AIR, Resource Assessment: As part of the strategic placement of PurpleAir monitors throughout the county, as stated in the draft RMP, we recommend locating PA monitors at schools throughout District 51. The data would assist school and county officials in observing when smoke from field burns and other sources becomes harmful to school children’s</p>	Comment received and taken into consideration.

	<p>health, especially children with existing illnesses such as asthma. Indoor and outdoor monitors placed in Dist. 51 schools would offer solid data that could help shape policies on burning, specifically within a defined radius around schools. In the 4th paragraph, the RMP states, “There are several resolutions and policies established by the BOCC regarding air quality in Mesa County. These include...funding for the replacement of wood stoves that do not meet EPA standards...” To be clear, funding was discontinued several years ago. The program no longer exists. The phrase should be deleted from the document</p>	
<p>Karen S. – Citizens for Clean Air</p>	<p>Clean air is essential to life. The following are challenges that need to be addressed aggressively if Mesa County wants to have a biologically and economically healthy community in the future: *Wildfires burning on federal lands create air pollution in spring, summer, fall and increasingly in the winter months. *Dust from roads, gravel pits, off-road vehicles, mountain bikes, and degraded rangelands can negatively impact air quality. *Vehicle traffic and other combustion-fueled engines such as power lawnmowers are huge contributors to the precursors that, combined with sunshine, create ozone. *Wood burning stove contribute to the pollution contained in wintertime inversions. *Outdoor open burning of all kinds creates a harmful smoke-filled atmosphere to surrounding homes, schools, hospitals, and other public facilities.</p>	<p>Comment received and taken into consideration.</p>
<p>Karen S. – Citizens for Clean Air</p>	<p>As the population in Mesa County increases and tourism becomes more essential to the local economy, it should become our responsibility to review our customary, old ways and begin to systematically change from a “resource management” perspective to a “resource stewardship” perspective. The air we breathe is often taken for granted, yet it is arguably the most precious resource we have. Mesa County has taken some steps to protect air quality in the past several decades including the creation of the Grand Valley Air Quality Advisory Committee, formerly the Grand Valley Air Quality Planning Committee. The county health department clarified and put further restrictions on residential open burning rules in 2018. An effective program once provided for the replacement of new, EPA-standard wood stoves and fireplace inserts for</p>	<p>Comment received and taken into consideration.</p>

	those who were unable to afford the costs. The program was overseen by the above-mentioned committee through 2011. Funding was distributed by the CDPHE and came from emissions violation settlements paid out by several companies, including the Louisiana Pacific Fiberboard Plant. There is no money currently available for a woodstove replacement program.	
Karen S. – Citizens for Clean Air	The health department air quality staff works with several other agencies to forecast problematic weather and wind conditions, issuing “No Burn” restrictions throughout the county when needed. Staff also works to educate individual residents and farmers on the dangers of outdoor burning when restrictions are disregarded. We should take heed that we have not always been good stewards of the air in the past: In the 1980’s the Fruita Gilsonite Refinery was found to be in violation of the Clean Air Act by the Colorado Air Quality Control Commission due to sulfur dioxide emissions. The refinery was issued a violation notice, ordered to install a bag house and take other measures to reduce air pollution. These improvements were not made, and soon after the refinery closed. It is our understanding that Mesa County failed to act, although there was an awareness of the violations at the highest level. Notably, when the coal-fired Cameo Plant, operated by Xcel Energy since 1957, was decommissioned fifty years later, air quality in the Grand Valley, specifically PM10, improved significantly. The plant closing gave way to natural gas, solar and wind supplied energy sources. Old, accepted ways of doing things are not always the safest ways. We believe the county, in partnership with city governments, now needs to do more to safeguard air quality in the region.	Comment received and taken into consideration.
Karen S. – Citizens for Clean Air	We support a more aggressive educational program to provide learning on best stewardship management practices for burning, especially agricultural burning. As our population increases and our summers become hotter and even drier, smoke from agricultural burning causes health problems, especially for children, the elderly and people with existing illnesses. There are viable alternatives and the county should assess them and work with area farmers to implement them.	Comment received and taken into consideration.



Karen S. – Citizens for Clean Air	We support more effective enforcement for area wood burning stoves and fireplaces that do not meet EPA standards. Smoke from any wood burning device produces harmful particulates, both indoors and outside. We also support funding for a new woodstove replacement program.	Comment received and taken into consideration.
Karen S. – Citizens for Clean Air	<p>We support the state measures to incentivize the purchase of electric vehicles and encourage the county to do so as well. Transportation is the largest contributor to greenhouse gasses in the country. Mesa County’s air quality, as seen at the height of the COVID-19 quarantine directive, improved dramatically when there were fewer, almost zero, vehicles on our streets. The widespread use of EVs would have much the same effect.</p> <ul style="list-style-type: none"> <li>• Emissions from oil and natural gas operations contribute to methane and volatile organic compounds in the air, the former with dramatic global warming effects, the latter with damaging health effects. We urge Mesa County to support state rulemakings by the COGCC and AQCC, especially when oil and gas operations are proposed within 2,000 ft. of neighborhoods, schools, retirement and assisted living facilities and other public places. Ideally, the county should encourage and support energy companies that rely on wind and solar as much or more than oil and gas, as these sustainable sources are the future of energy. Ensuring clean air is urgent due to increasingly obvious local climate changes resulting from global warming. Also of concern are the efforts of the EPA to undo important protections in the Clean Air Act. Large-scaleroll-backs such as these make it even more important to act locally - if every community does so it will make big improvements toward cleaner air, as noted during the COVID-19 shutdown. Considering what is at stake for children of the next generation and beyond, Mesa County should make determined efforts to protect air quality and other invaluable natural resources. <p>Thank you, Citizens for Clean Air</p> </li></ul>	Comment received and taken into consideration.
Karen S. – Citizens for Clean Air	3.2.B AIR, Resource Assessment: As part of the strategic placement of PurpleAir monitors throughout the county, as stated in the draft RMP, we recommend locating PA monitors at schools throughout District 51. The data would assist school and county officials in observing when smoke	Comment received and taken into consideration.

	<p>from field burns and other sources becomes harmful to school children’s health, especially children with existing illnesses such as asthma. Indoor and outdoor monitors placed in Dist. 51 schools would offer solid data that could help shape policies on burning, specifically within a defined radius around schools. In the 4th paragraph, the RMP states, “There are several resolutions and policies established by the BOCC regarding air quality in Mesa County. These include...funding for the replacement of wood stoves that do not meet EPA standards...” To be clear, funding was discontinued several years ago. The program no longer exists. The phrase should be deleted from the document. ENERGY RESOURCES 3.2.D: County officials should be made alert to the possibility of methane, volatile organic compounds and other chemicals emitting from unknown abandoned wells. Additionally, air pollutants resulting from the use of oil and gas products such as gasoline, may become a local challenge in future federal air quality assessments. Additionally, as electric vehicles become more popular, and solar panels replace gas and oil for heating, the county should become a resource to former oil and gas employees in transitioning to other occupations, especially those who may find it financially difficult.</p>	
Bill E. – GMUGNF	This seems to be more of a policy statement than a resource objective.	Comment received and taken into consideration. Changes made to the resource objective.
Bill E. – GMUGNF	Questioning of the "require" language in policy statement 4.	"Require" is inserted into this policy because the policy is reminding the agencies to follow the laws demarcated in the policy. Such a policy is within the scope and is consistent with the powers set forth in these plans.
Bennett B.	Comment : City of Grand Junction Conservation Efforts The City of Grand Junction has implemented a number of successful conservation programs, projects and initiatives over the years. The following is a list of some of the more notable examples: In 2006, the City of Grand Junction began researching a biogas project that would allow methane gas produced at	Comment received and taken into consideration.

	<p>the Persigo Wastewater Treatment Facility to be used as vehicle fuel. Currently, the facility produces approximately 120,000 cubic feet of gas in the anaerobic digestion process per day. Since plant startup back in 1984, only a small amount of the methane was used to fuel the boilers that heat the digestion process, with the vast majority of the gas being flared off. In 2011, the City began implementing a plan for the future by beginning to purchase Compressed Natural Gas (CNG) fleet vehicles and planning for construction of a fueling station for them. The first CNG solid waste trucks were delivered within days of the CNG fueling station being completed. In 2014, the City contracted with BioCNG, LLC to design a system to capture, collect and purify the digester biogas at the wastewater plant to a natural gas quality vehicle fuel. The project included a 5.7-mile pipeline which delivers the fuel to the existing CNG fueling site and is used as the primary source of fuel. The fueling station includes slow-fill stations for fueling City and County vehicles, as well as a public fast-fill station that is operated by a private contractor. Currently the equivalent of 400 gallons of gasoline is produced on-site daily and has offset the same volume use of diesel fuel. This has resulted in a carbon emission reduction of approximately 3 million pounds per year. Since the first purchase of CNG vehicles in 2011, the City (and in partnership with the County) have continued to add to the CNG fleet each year as vehicles come up for replacement. There are currently 62 CNG vehicles between the City and the County ranging from street sweepers to transit busses. The City has received international attention for the biogas project, which is believed to be the only one of its kind in the United States. The City has installed over 315 kilowatts (kW) of photovoltaic (PV) solar at several of our facilities, providing an average of 1,471 kW hours of electricity per day or over 537,000 kW hours each year.</p>	
Bennett B.	<p>In 2010 the City entered into a Performance Contract with Johnson Controls to complete \$\$2 million of energy efficiency projects at 14 facilities, saving an annual average of 516,000 kilowatt hours of electricity and 1,192 kilowatts of demand. The City is a subscriber to the 2 MW Community Solar Garden developed by Ecoplexus, purchasing 27% of the power produced. We are on track to save over \$\$90,000 per year based</p>	<p>Comment received and taken into consideration.</p>

	<p>on credits we are receiving from Xcel Energy for the power we are purchasing from the solar garden. In 2010, the Planning Commission and City Council adopted the Comprehensive Plan which discourages sprawl development. In 2015, City Council adopted an Economic Development Plan which encourages existing development and redevelopment of business and industrial areas. In 2006, the City adopted the Watershed Protection Ordinance and in 2007, watershed protection regulations were adopted to protect the City's watershed on the Grand Mesa. In 2017, Las Colonias Park along the Colorado Riverfront Trail is being developed and will green a former industrial site and former uranium mill tailings dump. An amphitheater, nature trails, a disc golf course and a future business park are just some of the amenities that will be there. The City purchased the former Jarvis salvage yard property on the Colorado River, at the confluence with the Gunnison River, and has developed a backwater pond for endangered fish and extended the Riverfront Trail through the property. In partnership with Mesa Land Trust and the Bureau of Land Management, the City took deed to the Three Sisters Open Space, preserving it as open space. The City supported Cooperative Planning Areas (Buffer Zones) between Grand Junction and Fruita and Grand Junction and Palisade. Grand Junction has been designated as a Bicycle Friendly Community, recognizing the commitment to trails and bikeways throughout the community. And we have been designated as a "Tree City USA" for more than 30 years indicating that 1% of the City's budget is dedicated to trees.</p>	
<p>Karen S. – Citizens for Clean Air</p>	<p>ENERGY RESOURCES 3.2.D: County officials should be made alert to the possibility of methane, volatile organic compounds and other chemicals emitting from unknown abandoned wells. Additionally, air pollutants resulting from the use of oil and gas products such as gasoline, may become a local challenge in future federal air quality assessments. Additionally, as electric vehicles become more popular, and solar panels replace gas and oil for heating, the county should become a resource to former oil and gas employees in transitioning to other occupations, especially those who may find it financially difficult.</p>	<p>Comment received and taken into consideration.</p>

USFWS	<p>Thank you for the opportunity to review and comment on Mesa County's draft resource management plan. The Western Slope Field Office, of Colorado Ecological Services, U.S. Fish and Wildlife Service, has reviewed the draft plan and provides the following comments. Our comments are focused on the wildlife section, particularly the policy statements that do not have an obvious link to the stated Resource Management Objective. The stated Resource Management Objective says "Threatened, Endangered, and Sensitive species are managed using credible quantitative data in coordination with the County and other stakeholders". We interpret this to mean in other words, State and Federal wildlife and land management agencies should use credible quantitative data and coordinate with the County and stakeholders. However, this does not read like an actionable objective of the County, rather an opinion of how State and Federal agencies should behave. Given that this document is to guide County decision making, we recommend clarifying the objective to emphasize the participation of the County in wildlife management. For example, a possible adjustment could read, "Continue County and stakeholder participation in Threatened, Endangered, and Sensitive species management through coordination with State and Federal agencies and maximize use of credible quantitative data for wildlife management". Therefore, subsequent policy statements would essentially support county and stakeholder participation and credible, quantitative data portions of the objective.</p>	Comment received and taken into consideration.
USFWS	<p>Comments on Policy statements: 1. Seems redundant with subsequent statements 2, 4, 5, and 7.</p>	Comment received and taken into consideration.
USFWS	<p>2. The recovery plan components (recovery criteria, actions, time and cost estimates) are all described in section 4(f)(1)(B) and repeated within this policy statement. We recommend either citing the appropriate section of the Endangered Species Act or simplifying the statement to direct the County towards ensuring the FWS is appropriately meeting the requirements of the ESA.</p>	Comment received and taken into consideration.
USFWS	<p>3. In some cases, a federal management plan that sets standards and guidelines for a single species can be beneficial in terms of positive</p>	Added clarifying language.

	management for a listed species as well as more efficient than redoing a management plan for a whole field office. Federal management plans are by law required to consider multiple use mandates. We are curious to learn more about why the county is opposed to management plans for single species.	
USFWS	5 (edited 7). It is unclear in this statement as to who should be providing full and specific explanations when decisions or rulemakings are inconsistent with county policies or RMP.	Added clarifying language.
USFWS	9 (11) . The Service agrees with and supports this statement, we believe that proactive and collaborative conservation can help prevent listing of species.	Comment received and taken into consideration.
USFWS	11. We recommend the county pursue management actions that would help improve species habitat and ensure protections that will contribute to reaching recovery objectives and ultimately delisting of species, rather than waiting until objectives have already been reached.	Comment received and taken into consideration.
USFWS	12. We support county participation in local solutions to prevent a listing determination, this statement seems contradictory to statement 8.	Comment received and taken into consideration.
USFWS	13. We are unclear how this statement supports the resource management objective and what the underlying motivation is. We would appreciate further information as to why predator or disease control should be prioritized, although weed and invasive species could be added.	Comment received and taken into consideration.
USFWS	14. Listing decisions and the analysis of threats affecting populations provide significant detail to encourage and implement conservation actions. We agree that the guidance provided within recovery plans describes more clearly the scope and magnitude of conservation and recovery actions, however the lack of a recovery plan should not hinder proactive conservation efforts to improve listed species populations.	Comment received and taken into consideration.
USFWS	16. We refer the county to our comments on policy statement 6 and the legal framework for designating critical habitat.	Comment received and taken into consideration.
USFWS	17. We are unaware of any wolf species being present in or near to Mesa County, therefore question the need for this policy statement.	Comment received. Mesa County policy per Mesa County Wolf Management Resolution (A Resolution of the Mesa County Board of

		County Commissioners Concerning Wolf Management in Colorado).
USFWS	18. We are unaware of any wolf species being present in or near to Mesa County, therefore question the need for this policy statement.	Comment received. Mesa County policy per Mesa County Wolf Management Resolution (A Resolution of the Mesa County Board of County Commissioners Concerning Wolf Management in Colorado).
USFWS	19. We are unaware of any wolf species being present in or near to Mesa County, therefore question the need for this policy statement.	Comment received. Mesa County policy per Mesa County Wolf Management Resolution (A Resolution of the Mesa County Board of County Commissioners Concerning Wolf Management in Colorado).
USFWS	20. We are unaware of any wolf species being present in or near to Mesa County, therefore question the need for this policy statement.	Comment received. Mesa County policy per Mesa County Wolf Management Resolution (A Resolution of the Mesa County Board of County Commissioners Concerning Wolf Management in Colorado).
USFWS	21. No comment.	Comment received and taken into consideration.
USFWS	The U.S. Fish and Wildlife Service, Ecological Services, Grand Junction Field Office provides this secondary, follow-up comment: We also recommend incorporating the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c) of 1940, as amended, and the Migratory Bird Treaty Act (16 U.S.C. 703-712) of 1918 as amended, as applicable laws that guide wildlife management in Mesa County.	Changes incorporated into the plan to incorporate and consider the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.
Karen S. – Citizens for Clean Air	3.4.A AGRICULTURE: Include language that advises county officials, farmers, and ranchers to transition from agricultural burning to soil enriching, best practices such as no-till farming and the use of cover crops to build up soil health and capture carbon. Additionally, the use of commercially produced biochar would open opportunities in the job market while replacing open field burning. Burning fields and tree trimmings is more than a nuisance, it is a public health issue, with spikes in particulate matter for residents living downwind of burning activities.	Comment received and taken into consideration.

	<p>Studies show that smoke from agricultural burning can create and exacerbate health problems, especially among children, older adults, and people with asthma and other respiratory and cardiopulmonary illnesses. As our population grows, more people will be affected by smoke-related issues, resulting in higher healthcare costs, loss of work and school days and loss of revenue for our outdoor and tourism industries. In the interest of sustaining our agricultural heritage while adapting to more sustainable farming methods, biochar offers tremendous opportunities. The RMP should not ignore increased evidence that proven biochar technologies, thousands of years old, can be adapted to present day farming and ranching practices. The technique has been shown to enhance the soil by holding carbon instead of releasing it into the atmosphere. Biochar can aid water and nutrient cycling, decrease greenhouse gasses, and provide a market for beetle-killed wood, tamarisk, and Russian olive tree branches. According to the CSU Extension office, “As the research and applications continue to develop, scientists, entrepreneurs and land managers will all play a critical role in determining the opportunities for biochar in Colorado.” The RMP should call attention to the possibilities of biochar by including language encouraging development of the technology.</p>	
Bill E. - GMUGNF	<p>Policy Statement 14. This is a short-sighted policy, as grass banks can be an excellent too to provide stability to range producers in periods of drought or fire; Are there any grass banks on federal grazing lands in Mesa County?</p>	<p>Changes incorporated into the plan to reflect the County's approval of appropriate grass banks.</p>
Residents of East Orchard Mesa near 34 and C Road	<p>34 and C Road ERMA-Allowable Use; closed to camping and overnight use from 11 PM to 5AM. We support the camping and overnight use closure but would recommend the hours of closure be from sunset to sunrise. There are no legitimate uses that occur during the “dark” hours that could be considered safe. There is a significant portion of the year (4 months) where darkness occurs inside of the proposed 11 PM to 5 AM closure. Aside from predator hunting, which requires a permit, and would not likely be issued for the ERMA, most other activities that occur involve social gatherings involving alcohol or drugs that have led to innumerable problems in the past. Use of ATV and vehicles on the existing terrain is</p>	<p>Comment received and taken into consideration.</p>



	<p>dangerous at night as well. Based on the specific management guidelines for ERMA's it would seem that the above uses would be considered "non-compatible uses, especially during the hours of darkness. While there is no restriction on predator hunting at night (a permit is required from CPW), it does not make sense to allow an activity that uses firearms at night in an area closed to firearms during the day. It becomes more of a safety issue at night because of limited visibility of the surroundings and residences. In addition there are plenty of areas outside of the 34 and C Road ERMA available for this activity. P2-135, Table 2.2, Allowable Use, Firearm Use: States that there is 1, 021,400 acres of BLM land open to discharge of firearms for recreational target shooting. Most of this same acreage is open to night predator hunting with the proper permits.</p> <p>Closing the ERMA and associated no shooting area would also help control resource damage (plants and soil) to the area caused by inadvertent or intentional off-roading in the darkness. Closure might also alleviate the amount of trash and litter currently being left by those frequenting the area after dark.</p> <p>Recommendation: 34 and C Road ERMA-Allowable Use: Closed to camping and overnight use from sunset to sunrise.</p>	
<p>Residents of East Orchard Mesa near 34 and C Road</p>	<p>The RMP states that the restriction is to protect visitor safety and by minimizing potential for accidental shootings and/or to protect sensitive resources (43 CFR 8364.1). The RMP fails to mention that it is also for the safety of the residents who live nearby on the lands immediately adjacent to the BLM. As previously noted residents continue to have bullets flying overhead and striking their homes. The implementation of a 600 acres no shooting area at this urban interface is a positive management action that we support. Of the 600 acres, 330 acres lies within the ERMA classed as Open Area. It is assumed that the 600 acre closure proposed is adequate. However, in looking at the location of the residences in relation to the no shooting area and the target shooting area, adequate protection is lacking in some instances. There are two locations southwest of the proposed "no shooting area" that need to be addressed to provide adequate protection for the residences of the 34 and C Road area. One area is the Comstock</p>	<p>Comment received and taken into consideration.</p>

	<p>residence located in the SW ¼ of Section 30 (Parcel Number 2941-303-01-001). This residence is surrounded by BLM to the east and south and is outside of the proposed “no shooting area”. This same residence has been the unfortunate recipient of several stray bullets (see attached reports and photos). While implementation of the proposed “no shooting area” provides some protection for this residence the BLM lands to the east and south are wide open to all activity including shooting. The shooting closure will push more shooters into this area increasing the risk for accidents not only for the Comstock residence but all of the residents to the north and south of this narrow strip of BLM land surrounded by private land that extends into the SE ¼ of Section 25. There is a Ute water tank located in this area and numerous residences adjacent to BLM lands north of this BLM strip. There are at least six residences that are within ¼ mile and a dozen or more beyond along C Road. This strip of land is atop a mesa which has no hillsides to stop bullets discharged from firearms making for a very unsafe situation.</p>	
<p>Residents of East Orchard Mesa near 34 and C Road</p>	<p>P2-135 Table 2-2 states that Allowable Use for firearms discharge is as follows: “The discharge of firearms for recreational target shooting is permitted on BLM lands, outside of areas with firearm use restrictions, provided that the firearm is discharged toward a proper backstop sufficient to stop the projectile’s forward progress beyond the intended target”. As mentioned there are no natural backstops (hillsides) to stop a bullet here. The addition of these lands to the “no shooting area” would be consistent with the rationale for the proposed “no shooting area”. In addition to the Comstock residence, the Wheeler residence located in the NE ¼ of Section 31 (Parcel Number 2941-311-00-209) lies near an unprotected area near to the proposed Target Shooting Zone of the ERMA. Again there is an area of BLM between the “no shooting area” and the “shooting area” that needs protection. Most of what needs to be protected lies below (west) the ridgeline of the proposed “shooting area” and in the small gulch below the same ridge.  Recommendation: In order to provide safety for the 34 and C Road residents near the open BLM lands in Section 25 and 30, it is</p>	<p>Comment received and taken into consideration.</p>

	<p>recommended that the current “no shooting” boundaries be adjusted to include those BLM lands located southwest and adjacent to the current ERMA; beginning along Wilson Blvd at the northernmost SW corner of the ERMA, extending southeast to the corner of the private property in Section 31, then west to encompass the narrow strip of BLM lying to the west of Wilson Blvd. In addition there is a triangle of open BLM land between the “no shooting area” and “shooting area” that should be adjusted to provide safety for the Wheeler residence. A portion of the proposed “shooting area” west and below the ridge including the small gulch should be included in the “no shooting area”</p>	
<p>Scott B. – Colorado Wildlands Project</p>	<p>RMP language (p. 42-43):  "Section 603(c) of the FLPMA requires that WSAs are managed to not impair their suitability for preservation as wilderness (this is referred to as the non-impairment standard) and strives to retain their primeval character and influence, without permanent improvements or human...."  CWP Comments:  Rocky Mountain Oil and Gas Association v. Watt actually found that mining and grazing would be subject to the non-impairment standard, but not mineral leasing activities. “we believe that Congress intended to limit existing mining and grazing activities to the level of physical activity being undertaken on the FLPMA's date of enactment, and to regulate post-FLPMA activities so as to prevent impairment of wilderness characteristics.” Rocky Mountain Oil and Gas Ass'n v. Watt, 696 F.2d 734, 749 (10th Cir. 1983) So to argue that FLPMA and subsequent case law on grandfathered uses was about mandating that BLM permit grazing with the same intensity as in 1976 is clearly not the intent of Congress. The intent of Congress, affirmed in the decision, was the non-impairment of wilderness characteristics. Further, the Utah v. Andrus ruling pertained to access to unpatented mining claims on federal lands, not grazing, so it appears to be an incorrect citation.</p>	<p>The courts, when interpreting FLPMA, have interpreted that the legislative intent of the act was to both prevent future impairment of wilderness characteristics and protect preexisting uses. <i>Utah v. Andrus</i>, 486 F. Supp. 995, 1004-05 (D. Utah 1979) ( stating that "It appears that the Senate and the House were concerned about devising a way to protect both existing uses and wilderness values present on tracts not subject to existing uses. As interpreted by the Solicitor, section 603(c) reflects that concern. The Secretary's authority to preserve wilderness is subject to existing uses which may not be arbitrarily terminated, nor regulated solely with a view to preserving wilderness characteristics. But the Secretary may continue to regulate such uses in order to prevent unnecessary or undue degradation. On the other hand, activity on lands with potential wilderness value which are not subject to existing uses may be regulated more stringently so as to preserve wilderness characteristics."). Thus, the intent of the</p>

		FLPMA was to both protect preexisting uses in wilderness areas and prevent impairment. Therefore, the agency cannot regulate or prohibit those uses existing before the enactment of FLPMA. Changes were made to the document to reflect that these rights are not only for grazing.
Residents of East Orchard Mesa near 34 and C Road	<p>We support the designation of the ERMA at the 34 and C Road under Alternative B but question whether the 500-acre figure given is correct. Elsewhere in the RMP document figures of 600 acres and 550 acres appear. On p 2-135,136 Table 2-2, Allowable Use: Firearms Use Restrictions: It states that there is 600 acres of lands identified at C and 34 Road where there will be a firearms closure. It is not clear if this referencing part of the ERMA or what the 600 acres is comprised of. Immediately following on p 2-137, Table 2-2 Action: Identify the following areas as separate ERMA's to specifically address local recreation issues. 34 and C Road Open Area is listed as 500 acres here. This figure appears to be incorrect. In Appendix K, Table 20, ERMA's, p K60, it states that there will be an Open Area of 330 acres and a Target Shooting Area of 220 acres. Apparently, the ERMA is supposed to be 550 acres. It would seem that the 600 acres refer to the area encompassed by the "no shooting closure", a portion of which is included in the ERMA Open Area (330 acres). This is not clearly stated.</p> <p>The use of varying figures and incomplete descriptions associated with these acreages in the RMP make it difficult to discern which actions are being applied to the different tracts of land.</p> <p>Recommendation: We suggest that the correct figures be given with a complete description of what activities can or cannot occur on the ERMA and surrounding lands at 34 and C Road.</p>	Comment received and taken into consideration.
Bill E. – GMUGNF	In general, I felt this version is a marked improvement from the draft we reviewed earlier in the summer. My edits in the document generally note grammatical, editorial, or a few factual suggestions. (See attached document).	Comment received and taken into consideration. Grammatical and editorial comments were addressed.

<p>Bill E. – GMUGNF</p>	<p>There is a distinct difference in tone between the Policy Statements in several sections. Whether they reflect different authors or the mood of a single author, they give the document a schizophrenic feel. Examples:</p> <ul style="list-style-type: none"> <li>* The Policy Statements in the Transportation, Land Acquisition &amp; Disposal, Special Management Area, Forest Management, and Stormwater sections have a heavy reliance on phrasing such as shall, ensure, will, must, and present a confrontational/adversarial tone between Mesa County and the land management agencies. Additionally, when using such phrasing, those policy statements are generally unenforceable.</li> <li>* Contrast those sections with the other 20 sections in the plan which have policy statements using action words such as support, encourage, should, work with, etc. These statements recognize the strong collaborative relationship between Mesa County and the land management agencies and encourage it to continue into the future.</li> </ul>	<p>Change language to more cooperative language. Check language on County resolutions, leave language as is.</p>
<p>Bill E. - GMUGNF</p>	<p>It appears the Climate Change section has been removed. I suggest this is a serious omission, as climate change and population growth of Mesa County are the two factors that will impact every land management decision over the coming decades. Mesa County's geography puts it at an ecological fulcrum point where small climatological changes will likely result in very noticeable changes to our landscapes and management options. While climate change discussions can be difficult to wrap our heads around and can be politically charged, ignoring them is a failure to plan (and thus planning to fail).</p>	<p>Comment received and taken into consideration.</p>
<p>Sherry S.</p>	<p>The Mesa Country Resource Management Plan document is disturbing and disappointing. In my opinion it doesn't reflect the values and beliefs of the people of Mesa County, but instead documents the goals of the current Mesa County Commissioners. I moved back to Mesa County in 2010 thinking this was the place I wanted to live during my retirement years. One of the strongest motivators I had for wanting to return to this area was the variety of public lands in the area and the many different opportunities these lands offered to be outside while enjoying rivers,</p>	<p>Comment received and taken into consideration.</p>

	<p>deserts, pinyon-juniper, aspen/pine forests, and montane lands. Public lands belong to all Americans. They are managed by Federal agencies but are open to all people for recreation of multiple types, experiences of the natural world, and connection to the parts of our earth we may not see when confined to town. Because I have lived here since 2010, I have had the opportunity to express my thoughts and opinions about Dominguez-Escalante Natural Conservation Area, and the Grand Junction Field Office Resource Management Plan . My questions were answered as those processes moved forward and my misperceptions were changed by factual information backed up by science, and at no time did I feel that my views were not given full consideration. The most recent Travel Management Plan for the GMUG National Forest offered the same opportunities for the exchange of thoughts, opinions and information. All 3 of these processes produced plan documents designed to provide high levels of care and management with clear goals and objectives for the public lands they were describing. The involvement of members of the public in the process of forming these documents was both necessary and appreciated. Thanks to an article in the Daily Sentinel I was aware that a Mesa County Resource Management Plan was being contemplated but did not see a need for such a document. Mesa County representatives were involved in the development of the three plans I mentioned above and the questions they had about aspects of the plan were either resolved during the formation of the plan or legally after the formal passage of the plan. The MCRMP was written by a relatively small group of people .</p>	
Sherry S.	<p>While I believe that small group contained representatives for many if not all of the Federal agencies involved and members of various groups who use public lands, I have strong reasons to question the document that was produced. As I read the document there doesn't seem to be much in the way of actual goals and objectives for the management of land in Mesa County that is not part of public lands or resources managed by federal agencies. The text often reads like it was copied from some other document so while this document contains a great deal of valuable and useful information, that information could be found elsewhere, and that</p>	<p>Comment received and taken into consideration.</p>

	<p>information is not presented in such a way that it can be used to guide the management of Mesa County lands. An exception is both the section on roads /rights of way and of water which are both expanded at a much greater level than the others. My training is not in law, but I certainly question the explanation given for RS-2477 application to roads and right of way. The agriculture section is also given expanded policy statements, many of which are outside of the legal role of the county but are part of the role of the federal agencies. The MCRMP seems a waste of time and money on the part of the County Commissioners. I don't know what the fee amount charged by the consultants was but can't see that paying those costs was valuable to the people of Mesa County. Thank you for your consideration of my thoughts related to the Mesa County Resource Management Plan.</p>	
Christine J.	<p>Mesa County Draft RMP Comments This document is a disappointment. I expected a county Resource Management Plan to discuss resource management goals and objectives throughout the county, regardless of land ownership or management. While the watershed management section does this, the rest of this document is a thinly veiled attempt to direct Federal land management by listing so-called county "policies" which are actually specific prescriptions or restrictions directed at management of Federal resources. Since these "policies" are all directed at Federal land and resources, there are no county-wide goals, objectives or desired future conditions for Federal agencies to coordinate with. The county has no authority over public land management; trying to dictate how this land is managed, at times contrary to Federal law and policy, is a waste of taxpayer funds. This RMP exceeds the authority to coordinate with Federal agencies in developing land management plans granted to the county by state statute (Colo. Rev. Stat. § 30-11-101(k)). This authority to "coordinate" does not include restricting or dictating Federal land management practices that are otherwise allowed by Federal law, regulation and policy. Coordination does not include restricting Federal agencies ability to close roads and trails for resource protection, retire grazing allotments when needed, rest areas from livestock grazing, dictate</p>	<p>Comment received and taken into consideration.</p>

	<p>that closed roads (that were closed through a public NEPA process) be re-opened or mandate which areas or how many acres be open for oil and gas leasing. Note that this authority makes no mention of road and trail management, mineral development, nor livestock grazing on Federal land as areas counties are authorized to address. Federal agencies all have regulations and policies that mandate that roads and trails be managed to protect natural resources as well as public health and safety. The Mesa County policy restricting road closures to public health and safety concerns is in direct conflict with responsible road and adjacent resource management. Since the county was involved in both the BLM’s Grand Junction Field Office RMP (2015) development and the most recent Forest Service Travel Management Plan for the GMUG National Forest, I can only surmise that the county road policies are an attempt to make an end-run around the final result.</p>	
Christine J.	<p>The requirement to coordinate with county and state governments does not mean that the county or state get to override legitimate Federal decisions, simply because the county disagrees with them. If Mesa County was truly interested in coordinating with the USDA Forest Service on forest management issues, they would have participated in the years-long cooperative planning efforts for the Spruce Beetle Epidemic-Aspen Decline Management Response developed for the GMUG National Forests. As a private citizen I have participated in this effort for the past 7 years. Although 6 other counties have provided county representatives at nearly every meeting and field tour, Mesa County has not participated when invited to do so. Setting forest management “policies” that are beyond the county’s authority does little to enhance cooperative management.</p>	Comment received and taken into consideration.
Residents of East Orchard Mesa near 34 and C Road	<p>Please accept our comments for your Resource Management Plan. This is what our neighborhood sent to the BLM when they put together their Resource Management Plan. Please add my name to your mailing list so I can be informed of future decisions. I would be happy to meet with people one on one (and maybe even out neighbor group) because things are getting dangerous out in the desert. (Report attached below)</p>	Comment received and taken into consideration.



<p>Residents of East Orchard Mesa near 34 and C Road</p>	<p>As residents near the 34 and C Road recreation area, we have seen the number of users and the locations used for shooting increase dramatically in the past 5-10 years to the point where the safety of local residents and of the shooters themselves is of a very real concern. There are documented instances (see attached Mesa County Sheriff and BLM reports/photos) of bullets whizzing overhead of resident’s homes and bullets hitting homes. Residents near 34 and C Road have met with BLM and the Mesa County Sheriff several times in the past year to discuss how to rectify these problems. Many ideas, including signs, educational brochures, news articles and management options by the BLM have been proposed. Knowing that the RMP was being revised we have been actively involved with BLM staff in trying to find a viable solution to the safety issue. Many of us own guns and hunt or target shoot as well and are not opposed to target shooting on BLM lands. We support designated shooting areas located where there is a safe shooting zone and where both residents and recreationist will not be impacted by flying bullets. We appreciate BLM staff meeting with us and listening to our concerns and addressing them in the revised RMP. We offer the following comments that pertain to the management of the area near 34 and C Road.</p>	<p>Comment received and taken into consideration.</p>
<p>CPW</p>	<p>Thank you for the opportunity to provide comments on the draft Mesa County Natural Resource Management Plan. Colorado Parks and Wildlife (CPW) has a statutory responsibility to manage all wildlife species in Colorado. This responsibility is embraced and fulfilled through CPW’s mission to perpetuate the wildlife resources of Colorado and to provide sustainable outdoor recreation opportunities that educate and inspire future generations. Providing for wildlife when adopting guidance documents is economically sound. Hunting, fishing, and wildlife watching generated the following estimated numbers in the Northwest Region of Colorado during 2017 alone:</p> <ul style="list-style-type: none"> <li>• A total economic output of \$536,000,000</li> <li>• State &amp; local taxes estimated at \$37,000,000</li> <li>• Supported approximately 4701 jobs</li> </ul>	<p>Comment received and taken into consideration.</p>

	CPW appreciates the opportunity to engage with Mesa County on this effort.	
Scott B. – Colorado Wildlands Project	Thank you for the opportunity to comment on this draft of the proposed Mesa County Resource Management Plan. Colorado Wildlands Project (CWP) is an advocacy project seeking to protect Western Colorado’s exceptional wildlands managed by the Bureau of Land Management (BLM). Public lands and natural resources are vital to Mesa County and its residents, and the county plays an important leadership role in influencing their management, stewardship and how the public perceives these resources. In recent years on the Western Slope, there has been an effort to diversify the economy and to look at public lands and natural resources through a broader lens, and to try to avoid the sharp economic booms and busts that have characterized extractive industry-centered economies in the region for more than a century, including coal, uranium, vanadium, and oil and natural gas. As the economy has diversified, attitudes towards public lands have shifted to value other important values including conservation, recreation and sustainable management of resources that consider impacts to climate change.	Comment received and taken into consideration.
Scott B. – Colorado Wildlands Project	I have appreciated the opportunity to participate in the process as a member of the public, attending most meetings of the advisory committee. In particular I appreciate the courtesy and professionalism of Mesa County staff members Amber Swasey and Todd Hollenbeck. I feel that my suggestions and inputs to the plan were graciously received and thoughtfully considered. They worked hard to accommodate the suggestions, edits and concerns of the advisory committee, and to reconcile them with a problematic draft plan and absentee consultants. However, this plan is fundamentally flawed by imported bias and should be discarded by the county. Mesa County would be better served by no RMP than the draft currently under review. County commissioner Rose Pugliese and various county staff have repeated that the RMP is mainly a way to assemble existing county public lands and natural resource policies in one easy to reference plan. However, this is not what the draft RMP represents. Instead, the RMP collects existing county policies but then	Comment received and taken into consideration.

	<p>adds many new ones that are of unknown origin and strongly biased ideologically. I believe that these biased new policies are imported from Falen Law Firm, subcontracted by Y2 consultants to assist in writing the plan. Falen Law Firm has a long history of ideologically-based legal work biased strongly towards a radical advocacy of private property rights and elevating extractive and consumptive uses of public lands and an antipathy towards conservation, public access and recreation. In short, I believe that the people of Mesa County are unwittingly being offered as a test case for Falen Law Firm to radically rewrite county policies to reflect their ideological commitments.</p>	
<p>Scott B. – Colorado Wildlands Project</p>	<p>Time and again during advisory committee meetings and in side conversations, I heard members question the antagonistic and biased tone of the RMP. The committee did what they could to soften the language and smooth some of the rough edges of the document. However, at the end of the day, the draft still does not reflect the collaborative and cooperative custom and culture that many of the advisory committee members associate with participation in public lands and natural resource management processes in Mesa County in recent decades. Many felt that the draft RMP had a confrontational approach inconsistent with “the Mesa County way.” The draft also contains many mistakes and seems to largely be a quick cut and paste template from another county. This made the task of editing, improving and correcting the document much more difficult and time-consuming for county staff as well as members of the advisory committee. They felt that any plan should reflect the level of sophistication and thoughtfulness of how these issues of public lands and natural resource management actually play out in Mesa County.</p> <p>Finally, the draft RMP is generally of poor quality and riddled with errors and omissions. In the sections that I have reviewed for this comment period (mainly transportation and special designations), there are incorrect legal citations (citing cases that are unrelated to the claim they allege to support), spelling and grammatical errors, and omissions of designated lands within the county. It reflects poorly on the work of the</p>	<p>Comment received and taken into consideration.</p>

	consultants, and the county should demand better performance as it seeks to wisely steward taxpayer dollars.	
Jason S.	This effort is a waste of our county taxes. Mesa County does not need it's own resource management plan that's what our federal tax dollars pay for. The BLM field office is made up of people who live and work in our county and they are the ones that write RMPs with county input. The commissioners use of Karen Budd-Falen as a consultant is a stab in the back for the people of Mesa County. She represents those who seek to take my public lands for their own use without compensation. Drop this unneeded RMP process and stop the waste of my tax payer dollars.	Comment received and taken into consideration.
Cody P.	By all appearances, hiring a law firm that as protected Cliven Bundy does not lead to a good faith planning effort. The Mesa County Attorney specified that the end goal is to merely exert leverage over other agencies, which is ridiculous. Considering the county routinely enjoys cooperating agency status and has a legacy of robust collaboration- having taxpayers foot a \$50,000 bill for a duplicative and unnecessary plan is questionable at best. I'm deeply concerned for the sustained economic and social health of our community (not to mention public land owners at large) in hiring firms that peddle land use planning to favor extraction and a boom bust cycle economy. Look no further than the severe economic distress experienced in Rangely, Colorado as the land use plan has done nothing to help the community. Recently a commissioner lauded the collaborative accomplishment between the county, communities and Federal agencies regarding the Palisade Plunge saying, "However, we were pleasantly surprised to see how efficient the process can be when all the county, municipal, state and Federal agencies are working together and pushing in the same direction to get a project to completion". I'd suggest the county dump this bogus affair altogether but in any event I sincerely hope recreation is prioritized in the process along with setting appropriate landscapes aside- off limits to extraction. As the county's position on wilderness and public land use in general is antiquated, short sighted and narrow.	Comment received and taken into consideration.

Sherry S.	It is a concern to me that all related agencies have representatives as part of the steering committee and that their input is given full consideration.	Comment received and taken into consideration.
Scott B.	I am submitting my op-ed for the paper so it's on the record: Planning for the Past GJ Daily Sentinel, April 4, 2020 By Scott Braden Given the coronavirus crisis, it seems awkward timing to be critical of Mesa County's public lands policies. But, as we consider the future and build our long term recovery, it is worth commenting on a bad idea reported by this paper and hoping that it is swiftly abandoned. Earlier this year, Mesa County commissioners kicked off a process to create a "resource management plan" (or RMP) for public lands in our county, and they seem to have hired Cliven Bundy's old lawyer to help them do it. The county hired Y2 Consultants out of Jackson, Wyoming to prepare the plan to guide county policy for "wise use" of natural resources on federal and state lands, lands over which the county has no direct authority. Y2 is partnering with the Falen Law Firm of Cheyenne, to help them. Falen Law Firm is owned by Karen Budd-Falen, who has made a name for herself representing renegade ranchers and other folks aggrieved by federal land managers. Her clients at one time included Cliven Bundy, who famously refused to pay grazing fees creating a long-simmering conflict with the BLM culminating with the armed standoff near his ranch in Nevada in 2014. She was appointed by President Trump as assistant at the Department of Interior, though she was rumored to be an early pick to lead the BLM. Falen's firm and Y2 have been peddling these "resource management plans" around the West the past few years, selling them as a way to exert more influence over federal land managers. Rural counties in eastern Oregon and in Montana, and even nearby Rio Blanco County, have completed them. Mesa County is the first time a larger metropolitan county has pursued one. Taxpayers will be footing the \$50,000 tab for this questionable process. The reality is that the county has long been at the table in local federal lands management. The county is routinely afforded "cooperating agency" status and already participates at a high level in every major land management process. Further, Mesa County has historically enjoyed a very good working relationship with land managers	Comment received and taken into consideration.

	<p>and other stakeholders, even hosting quarterly meetings to make sure information is shared and relationships maintained. I also think it's critical to remember that the Grand Valley has been a leader for economic change playing out in public lands adjacent communities around the West: focusing on promoting quality of life and access to the outdoors as cornerstones of their local economies. Rather than dependence on the boom-bust cycle of oil and gas extraction, we have sustainably diversified our economy, emphasizing the outdoors, in a way that has attracted new businesses and new workers to relocate here. These efforts will be even more important as we rebuild our economy after the acute crisis passes. I went to the kickoff meeting of the steering committee in early March, which assembled an impressive number of local stakeholders, most veterans of many local and federal planning processes. Commissioner Rose Pugliese, in her remarks, promised that the process would be both collaborative and transparent. But as young staffers from Y2 and Falen began to explain the plan, a sense of incredulity swept the room. They claimed that creating a county RMP would give the county more leverage with the feds against decisions "made on the coasts." The federal land managers present, who all live here in Mesa County, appeared to stiffen in their chairs. The Y2 staff said the RMP would help assure the "wise use" of natural resources, protect the "custom and culture" and the tax base of the county. These are buzzwords of the Sagebrush Rebellion. What she did not say was how the plan could help the county to continue to leverage its public lands to drive our remarkable economic , how to conserve and steward our public lands or how to nurture a sustainable outdoor recreation economy. In fact, if you look at the plans that were created for Rio Blanco and other rural counties by these firms, they are a blueprint to yesteryear - doubling down on oil and gas, mining and logging, while ignoring sustainable alternatives like outdoor recreation. So what? Why does this matter? Especially now? It matters because it illustrates county leadership that is out of touch with reality on the hard work and collaborative efforts between citizens, land managers and so many other stakeholders to steward our public lands, improve the health</p>	
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	<p>and quality of life, and diversify the economy. It demonstrates that our county commissioners are more interested in fighting in the same old, ideological clashes over who controls the lands and maximizing drilling of public lands, hiring the tired warhorses of the Sagebrush Rebellion. It shows that they either don't see or don't much value the amazing work that happens collaboratively in Mesa County such as the management of our two world-class National Conservation Areas (NCAs), Colorado National Monument, the planning and construction of the Palisade Plunge, and so many other natural assets. Mesa County's commissioners should admit this whole process is fatally flawed and call it off before even further embarrassment ensues. Why waste the time of the members of the steering committee? Why waste taxpayers dollars? As our region eventually pivots toward economic recovery from the COVID crisis, it is wise to focus on rebuilding a diversified and sustainable economy and cut out spending on wasteful ideological hobby horses. Scott Braden is director of the Colorado Wildlands Project, which advocates on behalf of Western Colorado's wild BLM public lands. He is maintaining social distance along with his family in Mesa County.</p>	
Cody P.	For a resource management plan, this process is unusually rushed.	Comment received and taken into consideration.
Rusty L.	<p>Under the following policy statement, riparian areas/forests should be included, "Rehabilitate forests and rangelands damaged by wildfires, including reseeded, planting, and salvage logging operations as soon as possible for wildlife habitat, to reduce the potential for erosion, watershed contamination, and introduction of invasive or noxious weeds." We are seeing more and more large, destructive wildfires in riparian areas and riparian forests in Mesa County, and those areas need resources for rehab and restoration equally to higher elevation forest and range lands.</p>	Comments received and taken into consideration. Changes made to the policy.
Karen B.- Colorado Geologic Survey	<p>I only have one specific comment but offer some additional resources you might want to consider using or referencing in the plan.</p> <p>Page 36 "Federal land managers shall properly manage water under, around, and above mapped landslides, when safe to do so, to</p>	The following policy statement was left out of this draft of the document. In response to this comment, staff recommends adding the

	<p>prevent/minimize new movement, especially where landslides could disrupt public transportation or threaten public safety. “ You may wish to expand this policy statement to include other land-use or land management activities. For example, improperly constructed cuts and fills can cause landslides. Right now a large parking lot and restroom are being constructed on Shirttail Point as part of the Palisade Plunge Bike Trail. The construction is taking place on landslide scarps. We are not sure if the land manager evaluated slope stability prior to construction. You may also wish to expand the policy statement to include other geologic hazards like rockfall and debris flows. CGS has some mapping of geologic hazards we can provide the county.</p> <p>There are some resources which may assist the county in your discussion of groundwater quality and quantity and development of policy statements. CGS completed an groundwater report for Mesa County that includes maps and a report. Here is a link to where you can download pdf maps and/or GIS data. <a href="https://coloradogeologicalsurvey.org/publications/geology-groundwater-resources-mesa-colorado/">https://coloradogeologicalsurvey.org/publications/geology-groundwater-resources-mesa-colorado/</a> This may help you determine where private wells are adjacent to and may be impacted by activities on public lands.</p>	<p>following policy statement #9 into Section 3.1(B) Transportation:</p> <p>“Federal land managers should properly manage water under, around, and above mapped landslides, when safe to do so, to prevent/ minimize new movement, especially where landslides could disrupt public transportation. In the event of a geologic hazard, rockfall and debris flow should be mitigated to prevent future damage, loss of life, and transportation delays.”</p>
Mesa County Animal Services	Looking over this plan I do not have any specific comments.	
Mesa County Clerk & Recorder	No comment	
Clifton Fire District	Clifton Fire has reviewed and has no comments at this time.	



Mesa County Stormwater Management	Mesa County Stormwater Division has reviewed draft; no comments at this time.	
Grand Valley Water Users Association	GVWUA has reviewed the draft and has no comments at this time.	
Mesa County Building Department	No comments.	
Mesa County Development Engineer	<p>Development Engineering Comments</p> <p>1. No comments on policy.</p> <p>2. General comments:</p> <p>Pg. 28 - Bureau of Reclamation - Under the Grand Valley Irrigation Project the Government Highline and Orchard Mesa systems are discussed. Related canal systems such as the Grand Valley Irrigation Canal and the Redlands Canal should also be mentioned (in this section or another) as they are also major canal systems in the County.</p> <p>Pg. 85 - Hydro Power; Orchard Mesa Irrigation District also produces electrical power.</p>	Comment received and taken into consideration.
Bill H.	I am a member of the Western Slope Group{WSG} of the Colorado Mountain Club(CMC) and have been a member since moving to GJ in 1978. The CMC was founded in 1912 and the WSG was founded in 1952 by Bob Beverly. I am the Conservation Chair for the WSG and as such, represent the members of the WSG and the 7000 members of the State CMC. We were founded to enjoy and explore the mountains of Colorado,	Added to mailing list.

	and other road less areas and most of our activities take place on public lands. I would like to be kept on you mailing address	
Mesa County Surveyor	<p>Page 17 - the second paragraph under Demographics indicates the table shows land area and management but it actually shows population data as indicated in paragraph 1. The referenced table is missing and/or the second paragraph is in the wrong place. The referred to table is on page 24.</p> <p>Page 20 - the word 'income' should be inserted after 'The median household' in line 3</p> <p>Page 27 - 1st line under Manti-La Sal heading, Mani-La Sal is an incorrect spelling</p> <p>Page 45 - in the last line McInnis Canyons is attributed as the location of the Old Spanish Trail, is this correct?</p> <p>Page 52 - Fire map could be updated to reflect the Pine Gulch fire</p> <p>Page 53/54 - Unaddressed is the potential loss and the preservation/restoration of boundary markers of private parcels, section corners and county boundaries which are incurred during fire and fire fighting events.</p> <p>Page 60 - last paragraph the statement that 'shares stay with the land and cannot be sold separately' may be only applicable to GVWU shares and is contradictory to Policy Statement 2 on Page 61</p> <p>Page 63 - line 2 states that 90% of the water exits the state but the 2020 Integrated Water Quality report indicates that 44% of the states water exits in the Colorado River (WQCD, 2020)</p>	<p>Map heading corrected in document.</p> <p>Page 20: corrected.</p> <p>Page 27: corrected.</p> <p>Page 45: According to the Old Spanish National Historic Trail Recreation and Development Strategy document and the BLM's eGIS map, it appears the trail went through the northern portion of the McInnis Canyons NCA.</p> <p>Page 52: information and map has been updated accordingly.</p> <p>Page 53/54: Wildfire Management History and Culture paragraph updated to include potential loss of boundary markers.</p> <p>Page 60: corrected.</p> <p>Page 63: will update accordingly.</p> <p>Page 95: corrected.</p> <p>Page 98: corrected.</p> <p>Page 99: corrected.</p>

	<p>Page 95 - The last sentence in the last paragraph is a repeat of the 4th sentence in the same paragraph.</p> <p>Page 98 - The last two sentences of the last paragraph are repeats of the preceding sentences.</p> <p>Page 99 - The growth rate for herds is reported as 25% whereas on Page 98 it is reported as 20%</p>	
Clifton Sanitation	Clifton Sanitation has no comments at this time.	
CDOT	<p>Thanks for the additional information you provided, that was helpful. It appears that local entities will have a process to chime in on any new or existing roads if changes are made, which is great. Obviously, between CDOT, the County and City, we all have various transportation plans that we have spent a lot of time/money on and abide by for planning and it's good to hear those plans will be considered for federal lands.</p> <p>CDOT has no comments on the management plan at this time. If any new roads tie into a CDOT highway, we need a permit and coordination.</p>	
Grand Valley Rural Power	GVP has no comments at this time.	
Steve D.	Notifications of public meetings please	Comment received and added to email list.
Grand Valley Irrigation District	The District has reviewed the Draft and has no comments.	

<p>USFWS</p>	<p>4. No comment.</p> <p>6. See proposed definition of “habitat” for FWS regulations (85 FR 4733) to implement section 4 of the ESA.</p> <p>7. It is unclear in this state as to who is responsible for the requesting a full economic analysis for critical habitat designations or species management plans. We recommend citing Section 4(a)(3) which requires the Service to take economic impacts into consideration of designating critical habitat.</p> <p>8. We are unclear about the county’s intent with this statement. For example, candidate conservation agreements (with assurances) and other proactive conservation planning for non-listed species can help prevent listing and provide private entities the assurances that if a species does become listed, they will not be held to a higher conservation standard. This is different than managing a species as if were listed when it is not. Additionally, this statement seems to contradict the subsequent statement.</p> <p>10. There are eleven listed species that have been identified in Mesa County, here are their current recovery plan statuses:</p> <p>a. Canada lynx was found to have no additional conservation benefit in completing a recovery plan and is currently proposed for delisting;</p> <p>b. Yellow-billed cuckoo is scheduled to have final critical habitat designated in fiscal year 2021, and the Service has a delisting petition to respond to, due to the time it takes to complete these actions and the extensive coordination needed for a species ranging over 10 states a recovery plan may not be completed within 18 months of the county adopting this plan;</p>	<p>6. Comment received and taken into consideration.</p> <p>7. Corrected for clarity.</p> <p>8. Comment received and taken into consideration.</p> <p>10. Table updated accordingly.</p> <p>15. Comment received and taken into consideration.</p>
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	<p>c. Mexican spotted owl final recovery plan was updated in 2012.</p> <p>d. Gunnison sage-grouse final recovery plan will be finalized by October 2020.</p> <p>e. Humpback chub, razorback sucker, Colorado pikeminnow, and bonytail chub all have final recovery plans and recovery is implemented in Mesa County through the Upper Colorado River Endangered Fish Recovery Program.</p> <p>f. Greenback cutthroat trout recovery outline was completed in 2019. Previous genetics analysis indicated that the greenback cutthroat trout, or a closely related “green lineage” cutthroat trout could be found on the west slope of Colorado. We have now determined that the federally threatened greenback cutthroat trout does not occur on the west slope and is not found in Mesa County. Our Information for Planning and Consultation (IPaC) website has been updated so greenback cutthroat trout range no longer includes Mesa County.</p> <p>g. DeBeque phacelia recovery planning is scheduled as part of the Service’s national work plan to have a draft recovery plan completed by 2022 and final in 2023.</p> <p>h. Colorado hookless cactus is scheduled as part of the Service’s national work plan to have a draft recovery plan completed in 2022 and final by 2023.</p> <p>15. When final critical habitat is designated, legal descriptions of the boundaries are published in the Federal Register. It is unclear if the county is making a request for critical habitat boundaries or guiding county employees to retrieve those legal descriptions.</p>	
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<p>USFS</p>	<p>Thanks for the opportunity to review the Mesa County DRAFT Resource Management Plan. I apologize for not getting my review completed within your original timeline, but as I mentioned previously, I have been working on wildfires much of the summer. I was unable to access the master document from the on-line location, so I have attached an edited copy of the version you provided me.</p> <p>In general, I felt this version is a marked improvement from the draft we reviewed earlier in the summer. My edits in the document generally note grammatical, editorial, or a few factual suggestions. Outside of those, there are two areas I would like to submit for your consideration:</p> <ol style="list-style-type: none"> <li>1. There is a distinct difference in tone between the Policy Statements in several sections. Whether they reflect different authors or the mood of a single author, they give the document a schizophrenic feel. Examples: * The Policy Statements in the Transportation, Land Acquisition &amp; Disposal, Special Management Area, Forest Management, and Stormwater sections have a heavy reliance on phrasing such as shall, ensure, will, must, and present a confrontational/adversarial tone between Mesa County and the land management agencies. Additionally, when using such phrasing, those policy statements are generally unenforceable.</li> </ol> <p>* Contrast those sections with the other 20 sections in the plan which have policy statements using action words such as support, encourage, should, work with, etc. These statements recognize the strong collaborative relationship between Mesa County and the land management agencies, and encourage it to continue into the future.</p> <ol style="list-style-type: none"> <li>2. It appears the Climate Change section has been removed. I suggest this is a serious omission, as climate change and population growth of Mesa County are the two factors that will impact every land management decision over the coming decades. Mesa County's geography puts it at an ecological fulcrum point where small climatological changes will likely</li> </ol>	<ol style="list-style-type: none"> <li>1. Comment received and taken into consideration.</li> <li>2. The Climate Change section was removed at the direction by the Board of County Commissioners. Issues such as drought and increased fire activity are addressed in the document.</li> </ol>
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	<p>result in very noticeable changes to our landscapes and management options. While climate change discussions can be difficult to wrap our heads around and can be politically charged, ignoring them is a failure to plan (and thus planning to fail).</p> <p>I'm headed to another wildfire assignment. Feel free to call if you would like to discuss any of this.</p>	
CPW	<ul style="list-style-type: none"> <li>• Page 89: CPW recommends adding the following language—Mesa County supports the protection of designated migration corridors and critical winter range within the county, including the development of over passes and under passes on state and federal highways.</li> <li>• Page 93: Please update “Colorado Division of Wildlife” to “Colorado Parks &amp; Wildlife”.</li> </ul>	<p>Page 89: Comment received and taken into consideration.</p> <p>Page 93: Changed in document.</p>
Larry A.	<p><b>LANDSLIDES AND UNSTABLE SLOPES</b> Landslides are a common landform in Mesa County because of poorly consolidated shales and mudstones that underly ridge and mesa forming sandstone and volcanic rocks. This combination can create slopes that are unstable. Management of slide areas require best management practice to mitigate damage to life and property and to minimize initiating new movement.</p> <p>Mapped landslides and unstable slopes in Mesa County (visually verified, not potentially unstable) is shown in Fig. . The data are gleaned from a wide-ranging array of geologic and engineering geologic maps, at different scales.</p> <p>Large scale maps (for example, 250K) are more generalized and will tend to show larger, homogenized landslide areas that may well contain other resources. At large scales the map should be used as a general indicator because specific boundaries are difficult to determine.</p>	<p>Comment received and taken into consideration.</p>

	<p>Small scale maps (24K) should be used for specific landslide locations as these maps outline landslide boundaries more exclusively.</p> <p>To access landslide maps and information go to <a href="http://coloradogeologicalsurvey.org">coloradogeologicalsurvey.org</a> and click on</p> <p>Hazards, then Landslides, Resources, CGS Statewide Landslide Inventory Map. Grid patterns will show 1:24,000 (24K) scale geologic map quadrangles. You can click on a map location and get citation information. You can access downloading links for those maps. You can also go to the U.S. Geological Survey (USGS) web site (<a href="http://USGS.gov">USGS.gov</a>) for 24K maps done in cooperation with the Colorado Geological Survey (CGS). Go to <a href="http://USGS.gov/core-science-systems/national-cooperative-geologic-mapping-program/">USGS.gov/core-science-systems/national-cooperative-geologic-mapping-program/</a>, click on Find Maps &amp; Reports, scroll down to Colorado Geological Survey, then search, click on 24K then in refine search, click on keyword(s), and in title enter Mesa for Mesa county.</p>	
Karen S.	<p>I have attached Jerry Nelson's "Monthly Means - Western CO" submission for the RMP review in both PowerPoint and pdf format, with confirmation from Jerry, who has provided his contact information within the text. I have also added a link to his professional credits, below.</p> <p>Please include me in your future correspondence about the RMP if you would!</p> <p>My contact information is below, also. Let me know if you need anything else, and thanks again.</p>	Report received and taken into consideration.
Sarah M.	<p>Please notify me when new information is posted, public meetings are scheduled and other opportunities to be involved are available.</p>	Email address added to email list.



Sarah S.	Outdoor recreation is a key economic driver in Mesa County-- it is the foundation of our thriving economy. Would love to see this reflected in our resource management plan.	Comment received and taken into consideration.
Scott B.; Colorado Wildlands Project	I'm generally interested in this process, with focus on conservation and special designations of BLM lands.	Comment received and taken into consideration.
Scott B.; Colorado Wildlands Project	Combine Policy Statements 2 and 3.	Comment received and taken into consideration.
Scott B.; Colorado Wildlands Project	RMP language (p. 44):  "Inventoried Roadless Areas (IRA) are portions of National Forest that were identified in the USFS 2001 Roadless Area Conservation FEIS as lands without roads that are worthy of protection. ..."  CWP Comments:  Colorado is one of two states that has a state-specific roadless rule. The 2012 Colorado Roadless Rule established a two-tiered system of roadless areas that are more commonly referred to as Colorado Roadless Areas (CRAs), rather than the IRAs which refer to the 2001 rule. More information can be found at <a href="https://www.fs.usda.gov/roadmain/roadless/coloradoroadlessrules">https://www.fs.usda.gov/roadmain/roadless/coloradoroadlessrules</a> .	Comment received and taken into consideration.
Scott B.; Colorado Wildlands Project	RMP language (p. 41): "The four characteristics that must be met for designation as a Wilderness Area or WSA are: " CWP Comments: These seem to be adaptations of the Wilderness Act, with some subjective	Changes made in the document to reflect actual wording in the Act.

	<p>interpretation that does not actually reflect criteria used by either the agencies or Congress in evaluating wilderness characteristics. We recommend that the county directly quote Section 2(c) of the Wilderness Act as it is authoritative:</p> <p>An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.</p> <p>Public Law 88-577 (16 U.S.C. 1131-1136)</p>	
CPW	<ul style="list-style-type: none"> <li>• Page 97: Includes a list of predators that cause damage. Badgers, muskrats, and beavers should be moved from the predator list to the pest list.</li> <li>• Page 113: Rocky mountain bighorn sheep, desert bighorn sheep, and mountain lion should be included in the list of available species for big game hunting.</li> <li>• Page 113: Lists kokanee salmon as present for anglers. CPW is unaware of any kokanee salmon populations in Mesa County and recommends removal of kokanee salmon from this list.</li> </ul>	<p>Page 97: Change made in document.</p> <p>Page 113: Change made in document.</p> <p>Page 113: Change made in document.</p>
Scott B.; Colorado Wildlands Project	<p>RMP Language (p. 34):</p> <p>As discussed earlier, an R.S. 2477 grant is self-executing and the right-of-way comes into existence “automatically” when the requisite state law elements are met. See Shultz v. Dep’t of Army, 10 F.3d 649, 655 (9th Cir.</p>	<p>Comment received and taken into consideration.</p>

	<p>1993). Thus, adjudication of R.S. 2477 rights is not a prerequisite to their existence unless the agency contests the existence of the grant. In cases where the federal agency contests the existence of an R.S. 2477 right-of-way, a claim against the United States would need to be made under the Quiet Title Act (28 U.S.C.A. § 2409a).</p> <p>CWP Comments: Here, the statement “adjudication of R.S. 2477 rights is not a prerequisite to their existence unless the agency contests the existence of the grant” is also misleading. While an R.S. 2477 right-of-way may come into existence without administrative formalities, merely alleging the existence of the right does not provide the purported holder the ability to manage the right-of-way in a manner that conflicts with federal management. See <i>Wilderness Soc’y v. Kane Cnty.</i>, 581 F.3d 1198, 1220-21 (10th Cir. 2009) (holding Kane County could not exercise management authority that conflicted with federal management before proving its R.S. 2477 claims in court) vacated on other grounds, <i>Wilderness Soc’y v. Kane Cnty.</i>, 632 F.3d 1162 (10th Cir 2011) (en banc); see also 28 U.S.C. § 2409a(b) (“The United States shall not be disturbed in possession or control of any real property involved in any action under this section pending a final judgment or decree”).’</p>	
<p>Scott B.; Colorado Wildlands Project</p>	<p>RMP language (p. 41):</p> <p>ACECs may be less restrictive than other management tools such as wilderness, but they also may compete with the natural-resource based businesses that are important to the County’s economy, like tourism, grazing and mining.</p> <p>CWP Comments:</p> <p>ACECs do not necessarily compete or prohibit these activities. We recommend dropping this editorial statement. ACEC designation does not specifically prohibit any of these activities. In fact, the BLM Grand Junction Approved Resource Management Plan does not prohibit tourism in any</p>	<p>No change to language, the Commission believes this is a factual statement.</p>

	<p>ACEC. The only ACEC closed to grazing and limited human access is the 1,300 acre Pyramid Rock ACEC, which is carefully managed to preserve habitat for rare plant species and to protect irreplaceable paleontological and cultural resources. The County would be wise to research the actual BLM RMP and fact check before making sweeping and incorrect claims.</p> <p>Additionally, Figure 2 on page 42 incorrectly omits the following designated ACEC1s:</p> <p>Pyramid Rock Badger Wash Dolores River Riparian Mt. Garfield South Shale Ridge</p>	Added in missing ACEC's as identified.
<p>The following comments were received at the November 5, 2020 Mesa County Planning Commission (MCPC) hearing. Please refer to the official minutes for more information.</p>		
MCPC	<p>The wolf reintroduction did pass, will that be written into this or how does it affect this document?</p>	That information will need to be looked into and added into the document.
MCPC	<p>Concerning Mr. Braden's comment regarding WSA characteristics, is that different than stated in the presentation received by the MCPC?</p>	Changes have been made to the document to reflect the actual wording in the Wilderness Act.
MCPC	<p>Are the public comments going to be a part of the official record?</p>	Yes, they will be included in the Appendices.
MCPC	<p>The statements by the USFS concerning words such as "ensure", "will", "must" and present an adversarial tone.</p>	In discussions with the Steering Committee, we did work to eliminate words such as "shall", however, some of the policy statements are based on Resolutions already in place.

MCPC	Believes the document needs another review. Identified issues concerning Table 1: demographics.	
MCPC	In regard to Wildlife Corridors, if we establish Wildlife Corridors, it more or less locks us in to establishing those, even if circumstances around them change. He sees no reason to incorporate that into this plan.	Comment received and taken into consideration.
MCPC	Would like Amber's opinion of the document, how it will be used, overall quality of it, level of detail, etc.	This document will be helpful to staff as all policies will be in one clear, concise document. Its also helpful that the Steering Committee was involved as they have decades of knowledge of natural resources in Mesa County. This will allow Mesa County to provide more efficient comments to our federal partners.
MCPC	This is a new document for Mesa County and not a plan revision?	No, this plan is brand new for Mesa County.
Sean N. MCPC Comment	Yes, this is a working document with a few grammatical errors. The time frame has been interesting with everything going on this year. Sean has been involved for years with planning in Mesa County and in all of the years of work with BLM and Sage Grouse, etc., Mesa County has not been able to provide one document that would be something that the agencies didn't have to filter through thousands of pages and multiple plans. Believes this should be passed on to the Commissioner for their approval.	Comment received and taken into consideration.
Jacque B., MCPC Comment	<ol style="list-style-type: none"> <li>The document should refer to "federally managed lands" rather than "federal lands" for consistency.</li> <li>In reference to Table 3, Lands with Wilderness Characteristics, add "Area" to Bangs, Unawweep, and Maverick" to provide consistency to the document.</li> </ol> <p>She is really excited that the County is doing this, believes that brining this into one document is not reinventing the wheel but putting all policies,</p>	Changes made to the document as identified.

	Resolutions into one starting place. The Steering Committee was great and all came together to work together to create a good working document.	
Scott B., MCPC Comment	<p>Resident and Director of Colorado Wildlands Project, advocating for conservation and recreation on public lands of the BLM. Appreciates professionalism of staff and Steering Committee and being able to participate in process.</p> <p>Has reservation on the plan, doesn't believe its compilation of existing policies and worries that it could change relationship of Mesa County with public land managers. Believes we need balance and thoughtfulness in how we approach our public lands managers. Public lands are important to many people's jobs, variety of recreation economies. Has given his family quality of life and access to public lands was a reason they chose to make Mesa County their home, and is driving economic diversification and is improving the health of our economy.</p> <p>Main concern is that it adopts many policies (280) that he isn't able to find original County policies or Resolutions. Would like to know how many of the 280 policies are new and how many are existing policy? Urges caution and asks that Commission and Commissioners really consider what this plan is for, why we need it. Believes that the plan takes on a lot of controversial legal opinion.</p>	Comment received and taken into consideration.
Karen S., MCPC Comment	<p>Citizen and Chair of Citizens for Clean Air.</p> <p>Believes the plan contains a lot of good information for reference.</p> <p>1. Please remove mention of funding available for wood stove replacement in Section 3.2.B.</p>	<ol style="list-style-type: none"> <li>1. Information regarding funding for wood stove has added to clarify that funding is no longer available.</li> <li>2. The mission statement of the COGCC has been added in place of the statement of concern.</li> </ol>

	2. The statement in Section 3.2.D Oil and Gas Regulatory Framework has a statement that appears to be the mission statement of the COGCC. The statement is not in agreement with the COGCC's new mission statement.	
MCPC	If we use the sample motion, assuming these comments will be a part of the recommendation and included in the document.	Yes, that is correct.
MCPC	The document still has polishing that needs to be done. The substantive work is great and thinks it's a solid body of work.	Comment received and taken into consideration.
MCPC	This document should be a living document with and will have continued evaluation for the document and can be used in the future for conflict resolution and should be looked at from that stand point as well.	Comment received and taken into consideration.
MCPC	In respect to wildlife corridors in Garfield County, they seem to have resulted in fewer animal mortalities since corridors were developed. For us to do that responsibly, he believes that we need to find out where the migratory paths are and make sure that it is safest for the motorists and animals. Enthused that it will be included in the Master Plan.	This document will not be a part of the Master Plan, rather, it will be a stand alone plan.  Staff will work to get more information/ mapping for proposed wildlife corridors.
MCPC	Public lands are for all public and public interests and this document either directly or indirectly applies that sediment.	Comment received and taken into consideration.
MCPC	In regard to Mr. Braden's comment about the percentage of policy statements of the 280 in the plan are from current Mesa County policy, do we have an idea of what that number is? Ultimately, if the Board of County Commissioners approves this, then 280 policies came from the Board.	Staff does not have a percentage of which policy statements are current policy but believes we can determine if policy is held from Resolution. Policies from NEPA comment letters would be more difficult.
MCPC	If we approve this plan, is there still an opportunity to incorporate the comments that have been brought here tonight? Is it something that they can continue to change?	The MCPC is only recommending to the BoCC This hearing is very much a part of the public comment process and everything being said at the hearing, it will be a part of the document.

	After the County Commissioners adopt this can they continue to make changes?	We know this document will need to be re-evaluated and receive comment on it as needed.
MCPC	<p>Would you envision this body would be approving those changes? Or, I would be in favor of giving the Planners the authority to make those changes. Setting parameters for those changes would be a good idea.</p> <p>Will there be a place for public comment continuously on the website?</p>	<p>Revisions to the plan will go through a similar process as this adoption.</p> <p>Once the document is adopted by the Board, the comment period is effectively closed. We don't anticipate having a website comment portal to but as issues and concerns are brought to our attention, we will certainly address it.</p>
MCPC	I would not like to see any natural resource targeted to be eliminated. Today we have attitudes on certain things and what will it be like in twenty years? Those things change with life and progression and I don't want to see us put a cap on anything out there.	Comment received and taken into consideration.