



RIO ARRIBA COUNTY COMPREHENSIVE PLAN

ADOPTED JANUARY 24, 2008

AMENDED AND ADOPTED JULY 29, 2010

AMENDED AND ADOPTED DECEMBER 23, 2014

AMENDED AND ADOPTED _____, 2025

PREPARED BY:



2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



PLACEHOLDER FOR RESOLUTION

DRAFT

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



PLACEHOLDER FOR RESOLUTION

DRAFT

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



PLACEHOLDER FOR ACKNOWLEDGEMENTS

DRAFT



Table of Contents

INTRODUCTION.....	6
RIO ARRIBA COUNTY VISION.....	8
COMMUNITY PROFILE.....	10
HISTORY	11
IMPACT OF COVID-19	15
DEMOGRAPHICS	18
LAND BASE	20
ECOREGIONS.....	21
ENVIRONMENTAL CHANGES	25
NATURAL RESOURCES.....	28
SOIL	29
WATER.....	31
AIR.....	33
PLANTS & ANIMALS.....	34
HUMAN ENVIRONMENT.....	36
NATURAL RESOURCE GOALS & STRATEGIES.....	39
LAND USE.....	45
TRADITIONAL USE	46
REGULATIONS.....	48
HEADWATERS CRITICAL MANAGEMENT AREA.....	49
RIPARIAN/FLOODPLAIN CRITICAL MANAGEMENT AREA.....	49
IRRIGATED AGRICULTURAL LAND CRITICAL MANAGEMENT AREA	50
LAND USE GOALS & STRATEGIES.....	51
ECONOMIC DEVELOPMENT	57
GROSS RECEIPTS TAX.....	58
INCOME.....	59
EDUCATION.....	60
EMPLOYMENT.....	61
EMPLOYMENT BY ECONOMIC SECTOR	62
OIL AND GAS	66
TOURISM	67
SHORT-TERM RENTAL MARKET	69
FILM	71
CANNABIS	72
ECONOMIC DEVELOPMENT INITIATIVES/CHALLENGES	76
ECONOMIC DEVELOPMENT GOALS & STRATEGIES	78

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



HOUSING	83
AFFORDABILITY	86
HOMEOWNERSHIP	87
HOUSING GOALS & STRATEGIES	89
COMMUNITY FACILITIES & INFRASTRUCTURE	94
WATER	95
TRADITIONAL ACEQUIA INFRASTRUCTURE	97
WASTEWATER	97
ENERGY.....	98
TELECOMMUNICATIONS	100
SOLID WASTE	100
COMMUNITY FACILITIES.....	101
PUBLIC SAFETY	103
HEALTHCARE	106
PUBLIC SCHOOL DISTRICTS	107
COMMUNITY FACILITIES & INFRASTRUCTURE GOALS & STRATEGIES	108
TRANSPORTATION	113
TRANSPORTATION GOALS & STRATEGIES	117
HAZARD MITIGATION	121
INTRODUCTION TO HAZARD MITIGATION.....	122
EMERGENCY MANAGEMENT CYCLE	124
HAZARD MITIGATION IN RIO ARRIBA COUNTY	124
WILDFIRE	124
DROUGHT	127
FLASH FLOODS	128
DAM FAILURE.....	129
HUMAN-CAUSED HAZARDS	129
OTHER HAZARDS	130
HAZARD MITIGATION GOALS & STRATEGIES FROM 2025 HAZARD MITIGATION PLAN	132
IMPLEMENTATION	158
COMPREHENSIVE PLAN ADMINISTRATION, AMENDMENT AND UPDATE	159
IMPLEMENTATION STRATEGY PRIORITIES	161
APPENDICES	165
APPENDIX A (TREATY OF GUADALUPE HIDALGO)	165
APPENDIX B (TREATY OF GUADALUPE HIDALGO PROVISIONS)	165
APPENDIX C (PUBLIC INVOLVEMENT OVERVIEW)	165
APPENDIX D (STAKEHOLDER INTERVIEWS OVERVIEW)	165
APPENDIX E (PUBLIC WELFARE POLICY STATEMENT).....	165



INTRODUCTION

DRAFT

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



The 2024 Rio Arriba County Comprehensive Plan serves as a dynamic policy document designed to guide the future development and well-being of the County and its residents. By establishing a clear vision and identifying long-term goals, the Plan sets forth strategies for achieving a thriving, sustainable community. It reflects the values, aspirations, and needs of residents, business owners, property owners, and other stakeholders who have contributed to shaping the future direction of the County.

As a guiding document, the Comprehensive Plan does not create or change any existing laws or regulations. Instead, it provides recommendations and suggests policy changes to existing tools used for managing growth and development. The Plan acts as a framework for decision-making by the Board of County Commissioners and other elected officials, ensuring that Rio Arriba County remains on a course that reflects the community's values.

The Comprehensive Plan identifies major challenges and opportunities related to growth, development, and sustainability, addressing key areas that affect the County's future. Seven key elements are outlined: Natural Resources, Land Use, Economic Development, Housing, Community Facilities & Infrastructure, Transportation, and Hazard Mitigation. Each element contains a set of goals and strategies that will guide the County's policies and initiatives over the next 5–20 years.

This "living" document is meant to be regularly updated and amended, adapting to changes in conditions, priorities, and opportunities within the County. As new programs are implemented and regulations evolve, the Comprehensive Plan will remain a relevant and valuable tool in shaping Rio Arriba's future.

The Rio Arriba County Comprehensive Plan was originally funded by a planning grant from the Local Government Division of the New Mexico Department of Finance and Administration. Updates to the Plan were adopted in 2010, 2015, and now in 2025, ensuring that Rio Arriba County continues to be positioned for growth, development, and potential funding opportunities at the state and federal levels.



RIO ARRIBA COUNTY VISION

DRAFT

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Rio Arriba County is a unique rural area where generations of families have chosen to live, preserving a deep connection to land-based traditions while welcoming new neighbors into the community. By promoting quality education and diverse economic opportunities, we will enhance and strengthen our traditional land-based communities, customs, and cultures, thereby improving the quality of life for all.

We are committed to a community-focused development process that supports sustainable economic growth, housing development, education, and a business-friendly environment. This approach will foster prosperity and create a bright future for our youth, ensuring that future generations can thrive within their own community.

Central to our vision is the promotion of social justice and safety. We will work to address issues such as homelessness, economic disparity, and public safety through a coordinated effort involving residents, government agencies, and local organizations. By improving coordination among entities, including land grants, tribal entities, acequia associations, and state and federal agencies, we will create stronger partnerships that foster regional harmony and enhance the delivery of critical services.

Through these collaborations, we will continue to protect our water, recharge critical groundwater supplies, and maintain lush riparian areas. Irrigated agriculture, the restitution of land grants, and partnerships with key entities will ensure that our County's natural resources support the livelihoods of its people, crops, and fiber industries.

We are also dedicated to creating greater economic opportunities by supporting local talent and industries. By encouraging local youth, businesses, artists, and entrepreneurs, we will ensure that Rio Arriba's cultural and economic assets are leveraged to benefit the local community, rather than neighboring regions.

As we move forward, we envision a future where our children and grandchildren can carve their own paths, perhaps walking alongside the acequias, and feel the same sense of belonging and connection to the land that we cherish today. Together, we will build a future that honors our past while embracing new opportunities for growth and prosperity.



COMMUNITY PROFILE

DRAFT



HISTORY

In prehistoric times, Rio Arriba County was home to people who relied on the natural game, fish and the rivers of the region. Some prehistoric settlement sites are associated with mining Cerro Pedernal for chert which was used to make arrow points and other tools. These settlements, believed to be Paleo-Indian, are 10,000 to 11,000 years old. The Anasazi people of New Mexico cultivated corn as early as 3000 BC, and squash, beans and melons by 1000 BC. By 1200 AD, the Anasazi were developing settlements of cliff dwellings and Great Houses on the mesas and cliffs of the Pajarito Plateau. Around 1500 AD, drought and other factors caused them to move permanently into the river valleys, where they irrigated their crops with surface water. There, village life began to flourish in communities known today as Pueblos. The Pueblo communities of Santa Clara and Ohkay Owingeh (formerly San Juan Pueblo) are located within Rio Arriba County's boundaries today.

The 1500s marked great change for the Pueblo Indians. Jicarilla Apache bands who had settled in the Platte and Arkansas River Valleys of Colorado in the 1200s or 1300s moved south into the mountainous areas of northern New Mexico, while the first Spanish explorers and colonists occupied the region.

In 1598, Don Juan de Oñate established the territory's first capitol at the village of Yunque Yunque, located at the confluence of the Rio Chama and Rio Grande near present-day Ohkay Owingeh, and renamed it San Gabriel. From there, he and his men launched numerous expeditions in the area. In these early, and later years, the Spanish captured nomadic Plains Indians, Navajos, Apaches, Utes, and later, Comanches, to create peripheral settlements that buffered the Spanish from attack by nomadic tribes. Known as *genizaros*, these detribalized Indians became permanently integrated into northern New Mexico's communities and cultures over time. The communities of Abiquiu and Ojo Caliente were thus established in the mid-1700's. The Pueblo Indians experienced the negative effects of colonization on their culture during the first near century of Spanish rule. In 1680, Popay, a medicine man from Ohkay Owingeh, organized the Pueblo Revolt, uniting all the Pueblos in the territory to drive the Spanish from New Mexico.

Within this legacy of conquest, the Spanish participated in cultural exchange with the Pueblos, introducing new crop varieties, the adobe brick, and technologies that included surface irrigation systems or *acequias*. However, it was not until *la reconquista* or the reconquest of 1692 and the Spanish implementation of the more progressive *nevas leyes de las indias*, that a more equitable and synergistic relationship emerged. After 1692, Mexican families, rather than Spanish



conquistadores, were recruited to settle in the territory in exchange for *mercedes* or land grants provided by the government. Dictated by town design in the Laws of the Indies, the physical layout of land grants was ingenious for its arrangement of land uses. A central plaza served as the center of commerce and economic activity, and was surrounded by adjoining homes, which doubled as defensive walls. The plaza's only openings were solid wooden gates that could be closed and fortified in case of raids by nomadic Indian tribes. Outside of the plaza, land was divided into narrow strips of common land, which began at the river and stretched into the mountains. The intent was to provide families with all of the necessities for survival – irrigated land for crops; dry land for homes; grasslands for grazing; and mountainous areas for hunting, gathering and timber. It was from this integrated system of land use that northern New Mexico's pastoral traditions, including grazing and timber harvesting, flourished.

The settlers' success at survival was aided by the social and political structures underpinning their communities. The settlers formalized irrigation systems into political organizations known as *acequia* commissions. *Acequias* were viewed as community owned infrastructure and were managed by the commissioners. The ditches themselves were maintained by a *mayordomo* (ditch boss) and the *parciantes* (irrigators). As a result of this history, *acequia* commissions are recognized as political subdivisions of the State of New Mexico to this day. Within the context of the *acequias* and land grants, many of Rio Arriba County's communities were founded in the 1700s, including Chimayo, Truchas, Canjilon, Vallecitos and Cañon Plaza.

In 1776, Francisco Antanasio Dominguez passed from Santa Fe through Rio Arriba County with Francisco Garces and Silvestre Velez de Escalante to establish a route between the older settlements of New Mexico and the new ones on the west coast. They traveled north from Santa Fe, through what would become southwest Colorado and from there they went west toward Monterey. They did not make it to the west coast and returned to Santa Fe. So, while no direct link was established, the West had at last been explored and chronicled. The Dominguez-Escalante expedition would become invaluable to those who would follow, opening what would be called the Old Spanish Trail 40 years later, between Santa Fe and California.

The 1800s witnessed an explosion of new communities in Rio Arriba County, some due to construction of the railroad, which began in the 1860s. Gallina and La Madera were settled in the early 1800s, Tierra Amarilla and Española were established in the middle of the century, and Brazos, Chama, Dulce, Velarde, El Rito, Cebolla, Lumberton and the coal-mining town of Morrero followed from 1860 through 1890. Political turmoil also characterized this period. In 1821, Mexico won its independence from Spain following



the eleven-year Mexican War of Independence. New Mexico came under the rule of the Mexican government, although few changes were made to the status or government of the territory. In 1846, the U.S. declared war on Mexico after Mexico attempted to defend the territory of Texas, which the U.S. annexed in 1845. The U.S. won the war in 1848, and Mexico's sparsely populated northern territories, including New Mexico, fell to the U.S. The Treaty of Guadalupe Hidalgo, which established the terms for ending the war, allowed those living in the territories to become U.S. citizens, but did not commit to recognizing Spanish and Mexican land grants. As a result, it is estimated that only 13% of New Mexico's land grants were validated by the U.S. Court of Private Land Claims. The Pueblos of New Mexico, including those in Rio Arriba County, had their land grants recognized by the U.S. government, although many grants were considerably reduced in size. The Jicarilla Apache Tribe negotiated with the U.S. for its own reservation, which was established by Executive Order in 1887. Today, these reservation lands represent 20.88% of Rio Arriba County and are held in trust for the Pueblos and Tribes.

The Homestead Act of 1862 led to the development of a different settlement pattern in the western half of the County. The Act provided incentives as a method to spread population westward by granting land for farming to anyone who would improve or cultivate the land and build a permanent shelter. The western part of Rio Arriba County witnessed a population increase in the middle 1870's as settlers from several eastern states came to New Mexico. The Western part of the County, a portion of the San Juan Basin, arid and known for its rugged topography, became home to several farmer~ and ranchers. Settlers found the land fertile, but with no surface water available and difficult access to groundwater, crop success was contingent on weather. The settlers of the San Juan Basin developed cultivation techniques that accommodated their environment and were able to survive independently. As oil and gas reserves were discovered in the area, presenting new economic opportunities, crop cultivation began to be practiced less, However, limited ranching and grazing activities have continued to this day along with oil and gas development.

Under U.S. law, most of the land designated as "commons" under the land grants were set aside as forest reserves and national forests. This included most grazing and forest land. In Rio Arriba County, today's Santa Fe and Carson National Forests were established as forest reserves in 1892 and 1906, respectively. To the land grant heirs of Rio Arriba County, the federalization of former land grants remains a difficult and controversial issue that is being addressed through the judicial and legislative systems. It is hoped that traditional livelihoods on communal grazing and timber lands can be restored to bring a higher level of social and economic stability to the area. Rio Arriba



County experienced several economic shifts after 1850. The timber and mining industries prospered in the late 1800s and the early 1900s, due to the arrival of the Denver and Rio Grande Western Railroad (D&RGW) to the area. Chama became home to the timber industry in the 1920s, and by the 1930s, two coal mines operated in Monero. The economy of the western half of the County, which encompasses a portion of the San Juan Basin, was also dependent upon the production of raw materials; in this case, oil and gas. Early oil and gas exploration dates to 1906 in the San Juan Basin, a geologic basin with oil and gas reserves of national significance, but it was not until 1921 that oil and gas production started to dominate the economy of this region. Large mineral reserves and continually improving drilling technology have allowed the basin to sustain a prosperous oil and gas industry for over 50 years. The commercial center of the oil and gas industry in the San Juan Basin is the City of Farmington in San Juan County, but many small communities in Rio Arriba, such as Lindrieth, which were originally homesteading communities, have sustained themselves with a mix of ranching and oil and gas development for over 50 years. Today there are over 11,000 oil and gas wells in the western part of the County which contribute to the economic sustainability of these communities as well as the County and the State.

By the 1960s, mining and timber-harvesting declined as resources became depleted. In 1909, the Spanish American Normal School was founded in El Rito and eventually became a community college. A fiber arts program was established there in the 1930s, and the strong sheep-ranching traditions of the area have sustained fiber arts as a major local industry, concentrated today in Tierra Amarilla, Española and Chimayo. The El Rito fiber arts program was initiated at the Northern New Mexico Community College, which established a branch campus in El Rito in the 1990s. Northern New Mexico Community College opened the doors of its main branch in Española in 1970, and today has evolved into an accredited four-year college.

Over time, the residents of Rio Arriba County have become increasingly dependent on wage labor, secured through work in state and federal government agencies, as well as in the local school district and institutions of higher education. Established during World War II to produce nuclear technology for the war, Los Alamos National Laboratories (presently Los Alamos National Security) is one of the largest employers in northern New Mexico. Despite these radical changes to the economy, Rio Arriba County retains strong ties to its agricultural roots. Tens of thousands of acres remain under agricultural production, and agriculture and livestock remain important components of the local economy. As an encouraging testament to the strength of Rio Arriba's traditions, culture and history, the protection of irrigated farms and grazing land continues to be a top priority for residents of the County.



IMPACT OF COVID-19

A major historical event that will impact Rio Arriba County for decades is the COVID-19 pandemic. This global pandemic has had profound and lasting effects on the County. The virus first emerged in Wuhan, China, in December 2019, and by March 11, 2020, the World Health Organization officially declared it a pandemic. The impacts of COVID-19 continue to unfold, and we are now navigating the post-COVID era. The social, economic, and cultural effects of the pandemic are likely to reshape Rio Arriba County's future, influencing its economy, social dynamics, and cultural practices for years to come, if not permanently.¹

The impacts of COVID-19 on Rio Arriba County influence comprehensive planning. The pandemic affected key areas such as public health, economic development, housing, social services, and community resilience. These impacts need to be considered in the County's comprehensive planning process for long-term recovery and preparedness. Below are some of the specific areas of impact:

Public Health and Safety

Healthcare Infrastructure: COVID-19 exposed gaps in healthcare access, especially in rural areas like Rio Arriba County. The strain on local hospitals, clinics, and healthcare professionals highlighted the need for improved healthcare infrastructure and services, particularly in underserved communities. Comprehensive planning must consider expanded healthcare facilities, emergency preparedness, and access to telemedicine.

Public Health Response: The pandemic underscored the importance of coordinated public health responses at the County level. The need for better communication and cooperation among public health agencies, tribal health services, and local governments became clear, requiring future planning to emphasize public health capacity building.

Economic Development

Business Closures and Economic Decline: The pandemic led to widespread business closures, particularly in sectors like retail, hospitality, and tourism, which are vital to Rio Arriba's economy. Comprehensive planning should address economic diversification, provide support for small businesses, and create more resilient economic structures that can withstand future crises.

¹ British Academy (2021) The COVID Decade: understanding the long-term societal impacts of COVID-19



Tourism: Rio Arriba County's tourism sector, which is integral to its economy, suffered greatly during the pandemic due to travel restrictions and shutdowns. Recovery planning should focus on reinvigorating tourism, promoting local attractions, and creating a more sustainable tourism model that can adapt to future challenges.

Housing

Housing Instability: Many residents faced housing insecurity due to job losses and financial hardships. Affordable housing development must be a priority in future comprehensive planning, along with policies to support renters and homeowners during economic disruptions.

Homelessness: COVID-19 increased the risk of homelessness, with many families unable to maintain stable housing. This further highlights the need for comprehensive planning to include supportive housing solutions and safety net services for vulnerable populations.

Education and Workforce Development

Disruption of Education: School closures and the shift to remote learning disproportionately affected students in rural areas with limited internet access. Comprehensive planning should prioritize investments in broadband infrastructure and digital literacy to bridge the education gap and support remote learning capabilities in future emergencies.

Workforce: The pandemic led to widespread unemployment, which emphasized the need for workforce development programs in the County. Planning efforts must focus on creating retraining programs, supporting local job creation, and promoting industries that are less vulnerable to future disruptions.

Social Justice and Equity

Disparities in Impact: COVID-19 disproportionately impacted marginalized communities in Rio Arriba County, including low-income households, Native American populations, and those with limited access to healthcare. Comprehensive planning should address these social disparities by prioritizing equity in healthcare, housing, and economic policies, ensuring that all residents have access to resources and opportunities.

Mental Health and Substance Abuse: The stress of the pandemic worsened mental health and substance abuse issues, which were already significant challenges in Rio Arriba County. Comprehensive planning should focus on expanding mental health services, addressing substance abuse, and improving social services for those in need.



Infrastructure and Technology

Broadband Access: The pandemic highlighted the critical need for reliable broadband access for education, healthcare (telehealth), and economic activities. Future comprehensive plans must include strategies to expand digital infrastructure across the County, especially in rural and underserved areas.

Transportation: COVID-19 disrupted public transportation, making it harder for residents to access essential services. Comprehensive planning should incorporate improvements to transportation systems, ensuring that residents can safely and reliably travel, especially during emergencies.

Community Resilience

Emergency Preparedness: The pandemic underscored the need for stronger emergency preparedness and disaster response planning. Future comprehensive plans should include strategies for improving the County's capacity to respond to pandemics, natural disasters, and other crises, focusing on public safety, supply chain security, and community support systems.

Coordination Among Entities: The pandemic revealed the importance of better coordination between local, state, and tribal governments. Rio Arriba County's comprehensive plan should focus on enhancing these relationships to ensure effective collaboration and resource sharing during future crises.

Cultural and Environmental Preservation

Cultural Preservation: COVID-19 affected Rio Arriba County's cultural events and traditions, which are central to its identity. Planning efforts should support the preservation of these cultural assets while adapting to new realities, such as virtual events or socially distanced gatherings.

Environmental Impact: The pandemic temporarily reduced environmental degradation due to less human activity, but it also shifted attention away from long-term environmental initiatives. Comprehensive planning must balance recovery efforts with ongoing environmental protection, particularly regarding land use and water resource management.



Key Considerations for the Comprehensive Plan

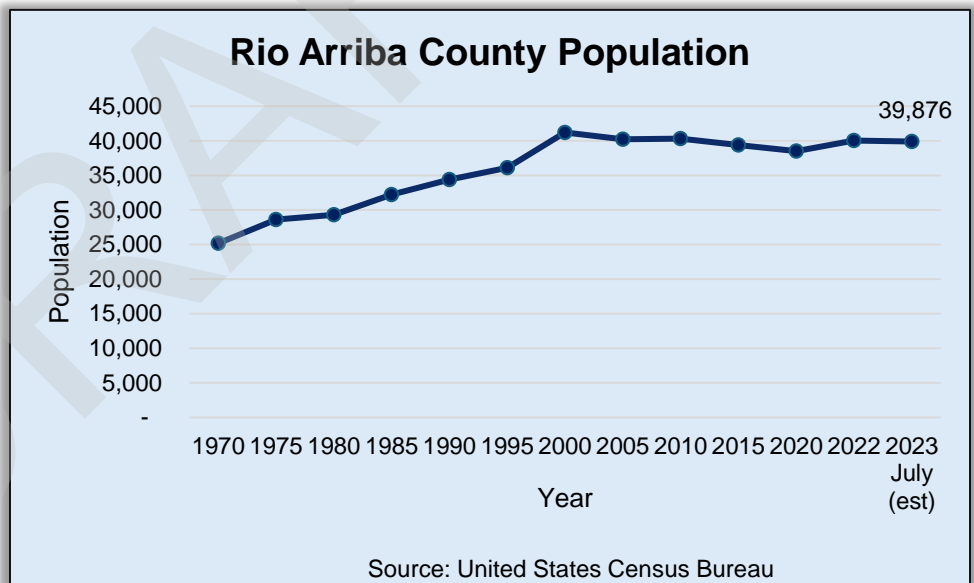
As Rio Arriba County plans for the future, COVID-19 has made it clear that resilience, equity, and flexibility are essential components. The County's comprehensive plan will need to:

- Strengthen public health infrastructure and emergency preparedness.
- Promote economic diversification to protect against future shocks.
- Ensure affordable housing and social services are accessible to all residents.
- Expand digital infrastructure to bridge educational and economic divides.
- Prioritize equity in all aspects of planning to address disparities exacerbated by the pandemic.
- Support cultural and environmental preservation as key assets to the community's identity and sustainability.

By addressing these COVID-19-related impacts, Rio Arriba County can build a stronger, more resilient community that is prepared for future challenges while honoring its unique heritage and traditions.

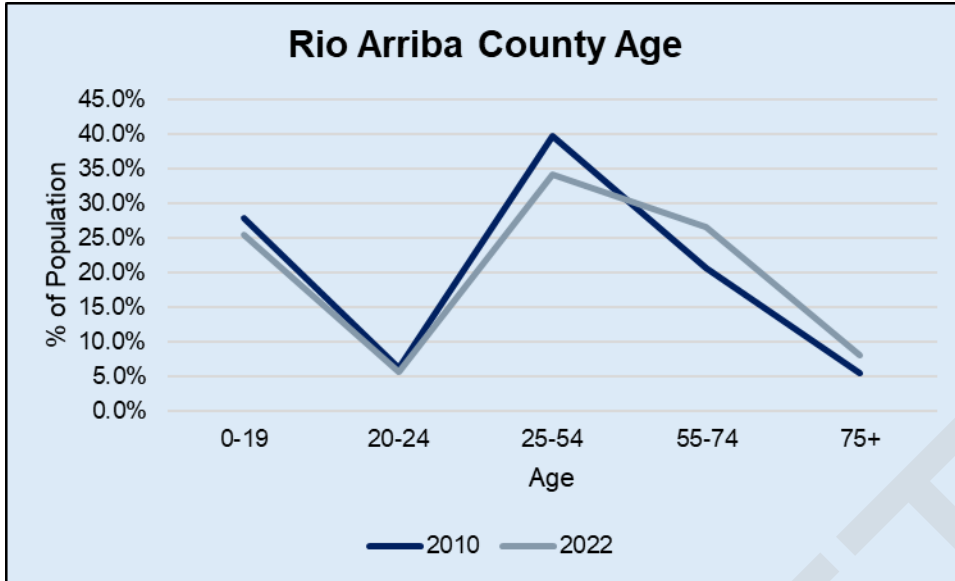
DEMOGRAPHICS²

In 2023 (July), the U.S. Census Bureau estimated the population of Rio Arriba County to be approximately 39,876. Although Rio Arriba County had an average annual population increase of 1.5% from 1970 through 2003, this pattern began to shift toward the end of 1999. From 2000 through 2023 (July estimate), the County experienced a 3.2% annual loss in population.



² 2022 American Community Survey-United States Census

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



A review of the population changes in Rio Arriba County between 2000 and 2022 shows that the median age has increased by 7.2 years (2000 - 34.5, 2022 - 41.7). The percentage of residents between the ages of 25-44 has dropped 6.6%, while the percentage of

residents between the ages of 45-64 years of age has increased 3.4%. Retirees (age 65+) have increased 9.3%. In essence, the number of residents in their working prime has dropped significantly in the last 12 years. The decline of working age adults has a significant impact on the economic wellbeing of the County. The increase in residents over the age of 64 as a percentage of the total population has increased significantly (9.3%). This will have a significant fiscal impact on the County as these older residents will need additional social and medical services.

Age					
Rio Arriba County					New Mexico
Year	2000	2010	2022	Change 2000-2022	2022
Median Age	34.5 years	38.6 years	41.7 years	+7.2 years	39.4 years
Under 18	28.6%	24.9%	22.9%	-5.7%	23.3%
18-24	8.9%	8.7%	8.4%	-0.5%	7.90%
25-44	28.8%	24.6%	22.2%	-6.6%	26.0%
45-64	22.9%	27.8%	26.3%	3.4%	23.6%
65+	10.9%	14.0%	20.2%	9.3%	19.2%

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Rio Arriba County Race	2010	2022
Hispanic or Latino (Any Race)	71.2%	71.3%
Not Hispanic or Latino	28.8%	28.7%
American Indian	13.8%	14.0%

There has been little change in the overall ethnic mix (percentage of Hispanic/Latino, Non-Hispanic/Latino and American Indian) since 2010 in Rio Arriba County.

Median Household Income				
Rio Arriba County			New Mexico	
2010	2022	2022*	2022	Inflation Rate 2010-2022**
\$ 41,437	\$ 52,031	\$48,450	\$59,726	34.2%

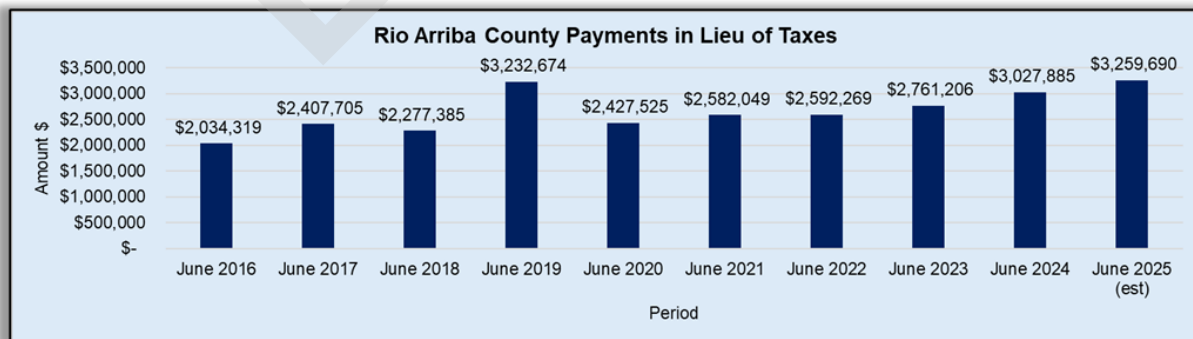
*Adjusted for inflation 2010-2022
 **Bureau of Labor Statistics

In 2022, the median household income in Rio Arriba County was \$52,031. When adjusted for inflation

(34.2% between 2010 and 2022), this value drops to \$48,450, reflecting a decline of \$4,581. Additionally, this income is \$7,695 lower than the state median income for New Mexico. In 2023, approximately 15.9% of families in Rio Arriba County were living below the poverty line. This highlights significant economic challenges within the County, including declining purchasing power and a higher-than-average poverty rate.

LAND BASE³

Rio Arriba County covers approximately 5,895 square miles (3.772 million acres) and includes 80 rural unincorporated communities. Elevations range from 5,000 feet near La Mesilla to 13,064 feet at Truchas Peak in the Sangre de Cristo Mountains. The County has two incorporated municipalities: Española (population 10,240 in 2010) and Chama (population 1,042 in 2010). About 22.3% of the land is privately owned, while 77.6% is managed by federal, state, or tribal entities. This places pressure on private lands for growth, as federal lands are tax-exempt. In 2024, the Payments in Lieu of Taxes (PILT) program contributed \$3,259,690 to offset lost property tax revenue from these exempt lands, a 60.2% increase over the past decade. These funds support essential services like firefighting, police protection, education, and infrastructure.

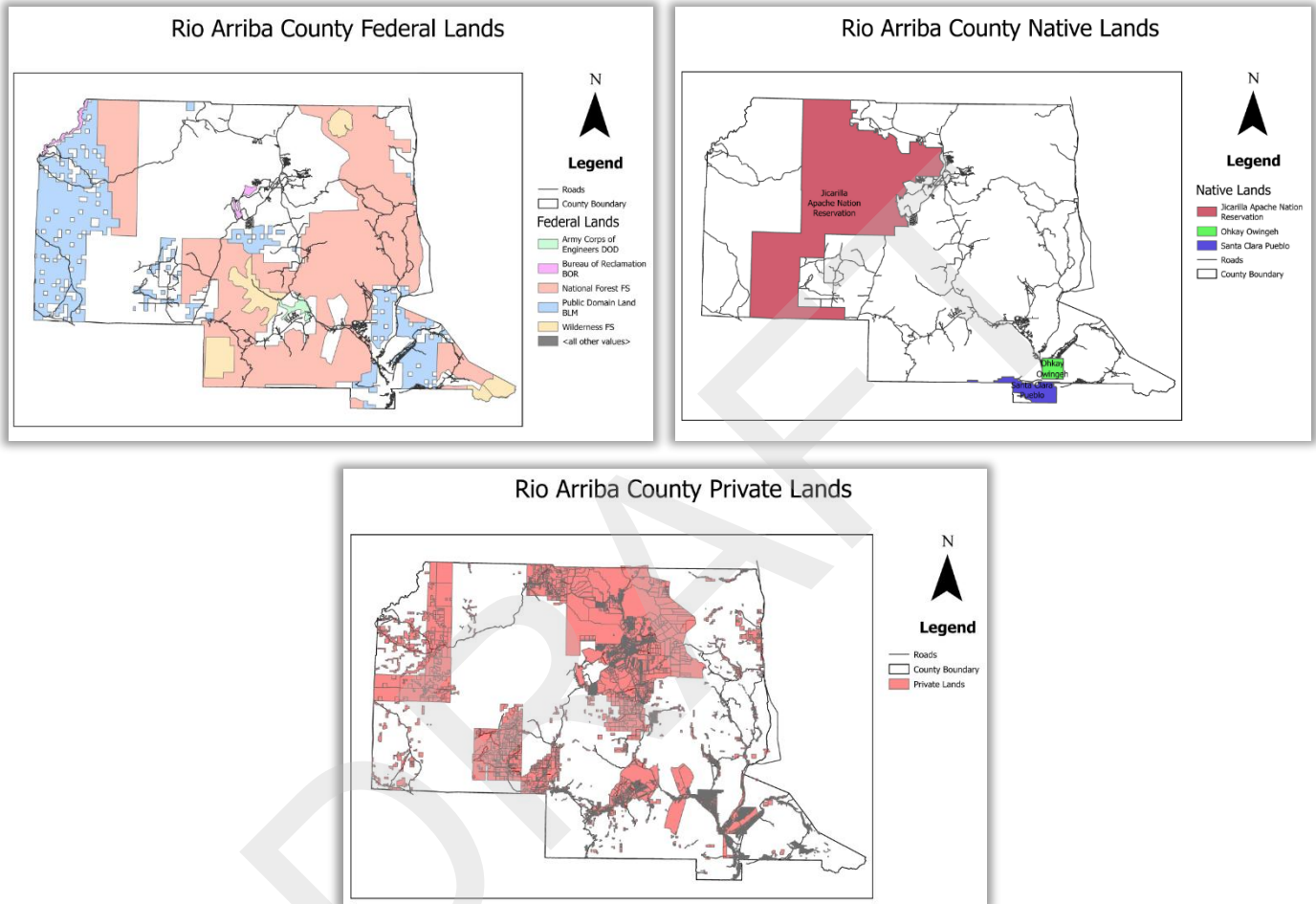


³ 2015 Rio Arriba Comprehensive Plan (Adopted December 2014)

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Additionally, through Title I and II funds of the Secure Rural School Act within the U.S. Department of Agriculture provides and ensures that counties across the country can continue to count on stable payments that provide funding for schools and roads, make additional investments in projects that enhance forest ecosystems, and improve cooperative relationships.



ECOREGIONS

Rio Arriba County, New Mexico, is home to a variety of eco-regions, each with distinct characteristics, flora and fauna, natural resources, and human activities. Below are the key eco-regions within the County:

Montane Conifer Forest

Found in the high elevations of the Sangre de Cristo Mountains in the eastern part of the County and the Jemez Mountains in the southwest. This eco-region includes dense coniferous forests in areas with rugged terrain, higher elevations, and cooler climates.



Main Flora: Dominated by Ponderosa pine, Douglas fir, Engelmann spruce, aspen, and blue spruce.

Main Fauna: Elk, mule deer, black bears, mountain lions, bobcats, and birds like woodpeckers, hawks, and eagles.

Natural Resources: Timber is a key resource, and snowmelt provides vital water for both wildlife and human use.

Human Activities: Logging, hiking, camping, and hunting are common. The region also supports grazing and tourism activities in the mountains, including visits to cultural sites like the Bandelier National Monument.

Pinyon-Juniper Woodlands

Common in the foothills and slopes of the Jemez Mountains and throughout the mid-elevations of the County, especially in the northern and central areas around El Rito and Abiquiu. These woodlands are defined by a mix of pinon pine and juniper trees, covering mid-elevation areas.

Main Flora: Pinyon pine, juniper, sagebrush, yucca, and various grasses.

Main Fauna: Mule deer, elk, coyotes, rabbits, and birds like jays, woodpeckers, and hawks.

Natural Resources: Pinyon nuts and juniper firewood, along with grazing land for cattle and sheep.

Human Activities: Livestock grazing is the predominant land use, with hunting and firewood collection also common. Some areas are important for outdoor recreation and cultural tourism, including areas near Abiquiu Lake.

Shrublands

Found in the lower elevations of the County, especially in areas such as the Tierra Amarilla region, the Chama Valley, and near Dulce. Arid regions with sparse vegetation, characterized by erosion and canyons cut by rivers.

Main Flora: Sagebrush, yucca, cacti, and grasses.

Main Fauna: Prairie dogs, coyotes, rabbits, and bird species like larks, sparrows, and hawks. Prairie dog colonies attract eagles and falcons.

Natural Resources: Grazing land, oil, gas, and uranium deposits.



Human Activities: Livestock grazing, energy extraction (oil and gas drilling), and mining are common. Outdoor activities like hiking and wildlife observation are also popular in areas like the Chama River Canyon Wilderness.

Riparian Zones

Found along major waterways such as the Rio Grande, Rio Chama, and Rio Puerco, as well as streams and smaller tributaries throughout the County. These eco-regions occur along rivers and streams, providing essential water resources and lush vegetation in an otherwise arid landscape.

Main Flora: Cottonwoods, willows, and shrubs, with invasive species like Salt Cedar and Russian Olive.

Main Fauna: Beavers, river otters, fish, and a wide variety of migratory birds and amphibians.

Natural Resources: Water is the critical resource, supporting agriculture and wildlife.

Human Activities: Irrigated farming, especially in the Rio Grande and Rio Chama Valleys, as well as recreational activities like fishing, birdwatching, and camping.

DRAFT



Wetlands

Scattered and rare throughout the County, but most notably found in the San Luis Valley in the northern part of Rio Arriba County, near Colorado's border. Wetlands are critical habitats in this otherwise arid region, supporting waterfowl and aquatic species.

Main Flora: Cattails, rushes, sedges, and aquatic plants.

Main Fauna: Waterfowl, amphibians, and aquatic species such as frogs and fish. Migratory birds also rely heavily on these wetlands.

Natural Resources: Water storage and filtration are key functions, supporting agriculture and flood control.

Human Activities: Wetlands are important for farming and irrigation, as well as birdwatching and wildlife conservation efforts in areas such as the San Luis Valley wetlands.

Desert and Semi-Arid Zones

Found in the lower elevations of northwest Rio Arriba County, particularly in areas like the Bisti/De-Na-Zin Wilderness and parts of Dulce. These zones are characterized by minimal rainfall, hot summers, and sparse vegetation.

Main Flora: Cacti, yucca, creosote bush, sagebrush, and drought-resistant grasses.

Main Fauna: Jackrabbits, coyotes, reptiles, and birds like roadrunners and hawks.

Natural Resources: These areas contain mineral resources, including oil, gas, and potential mining opportunities.

Human Activities: Livestock grazing, energy extraction, and limited agriculture using irrigation. Recreational activities include off-road driving, hiking, and wildlife observation.

Agricultural Lands

Primarily found in the Rio Grande, Rio Chama, and San Juan River valleys, where irrigation supports farming and ranching. These lands are largely used for agriculture, supported by irrigation systems fed by the County's rivers.

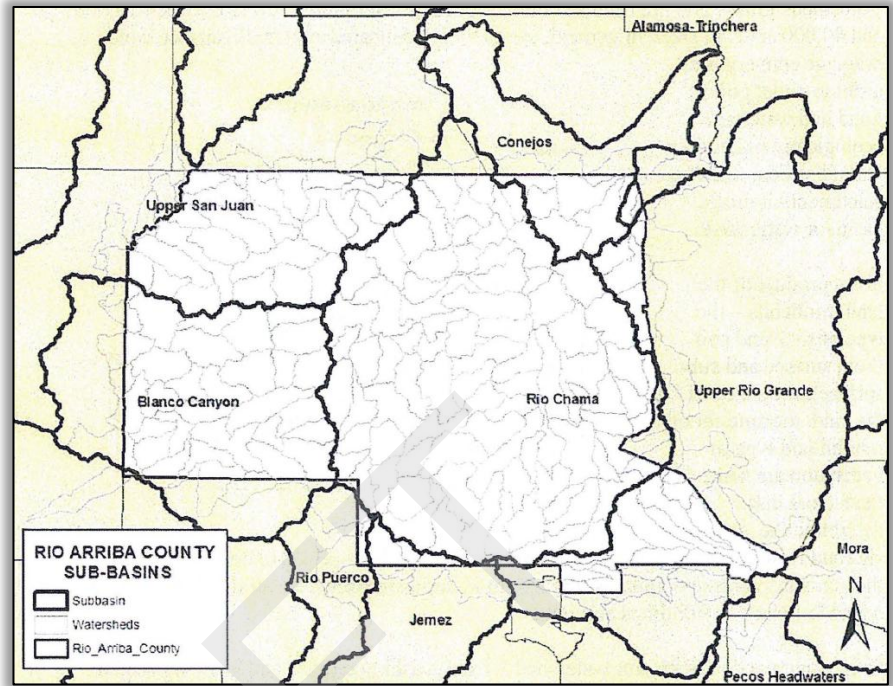
Main Flora: Cultivated crops like alfalfa, corn, and hay, as well as grasses for livestock grazing.



Main Fauna: Domestic livestock (cattle, sheep), and wildlife like birds, rodents, and insects attracted to farmland.

Natural Resources: Water from rivers and reservoirs is the critical resource for sustaining agriculture.

Human Activities: Farming and ranching are the dominant activities in areas such as Española, El Rito, and Velarde. The region supports both small-scale family farms and larger commercial operations, contributing to the County's agricultural economy.



The eco-regions of Rio Arriba County are as diverse as its landscapes, ranging from high mountain forests to arid desert zones. Each eco-region plays a vital role in the County's environment, economy, and culture, supporting distinct flora and fauna, natural resources, and human activities. Sustainable management and protection of these eco-regions are essential for maintaining the balance between economic development and environmental conservation in Rio Arriba County.

ENVIRONMENTAL CHANGES

An excerpt from "Climate Change and Its Implications for New Mexico's Water Resources and Economic Opportunities".⁴

"Over the past 20 years, Rio Arriba County has had 14 disasters declared by the County, most of which related to Fire incidents. 60% of Rio Arriba County has a moderate or higher wildfire hazard potential, while its 38% average earthquake risk score is moderate. The average summer temperature is expected to rise by 2.3

⁴ "Climate Change and Its Implications for New Mexico's Water Resources and Economic Opportunities" (2008) Authors: Respectively, Associate Professor (bhurd@nmsu.edu), Department of Agricultural Economics and Agricultural Business, New Mexico State University, Las Cruces, New Mexico 88003, and Associate Professor (jcoonrod@unm.edu), Department of Civil Engineering, MSC01 1070, University of New Mexico, Albuquerque, New Mexico 87131.



Fahrenheit degrees by 2100. Under current climate there is virtually no spare water in New Mexico. Imagine a very plausible future, as this study attempts to, of significantly less water and at the same time significantly more people. Though improvements in water-use efficiency will be increasingly important to adopt and use—and will likely be further stimulated by economic prices that are allowed to signal increasing scarcity—this assessment puts light on the likely need to reorganize patterns of water use or else risk significant disruption in some of the important services provided by the state's water resources.....In this case, the results indicate the most expedient and least economically disruptive adaptation is to transfer water from agriculture as needed to maintain urban uses, growth, and economic development.

As described previously, agriculture's real value—and the real loss to New Mexico's residents, tourists, and wildlife—may not be so much in the market value of its agricultural produce but in the auxiliary services that agriculture provides to the environment and to quality of life. Losses and transfers—amounting to perhaps more than 30% of current water use levels—will dramatically and deleteriously affect agricultural systems, communities, and environments across the region.....Absent this sentiment and action, rural communities, including farmers, pueblos, tribes, and acequias—along with their political allies and representatives—will most certainly fight to defend their way of life and their legal and constitutional rights to use and control water for their own benefit.

The following summarizes most of the key points developed in this assessment:

- Climate change scenarios result in less snowpack, earlier snow melt, and higher evaporative demands. The resulting change in runoff will affect vegetative cover in the watershed and habitat for various species.
- Substantial and transformational disruption to New Mexico's agricultural and rural economy can be expected in the future as climate changes.
- These economic estimates almost surely understate the severity and extent of economic, social, and ecological disruption that is likely to result from moderate-to-severe changes in climate. For example, water transfers are likely to entail significant transactions costs because of unsettled water right issues, including protracted litigation, water right adjudication, and transfer approval procedures that must protect against adverse effects on third-parties and the public welfare.
- Values that are not reflected include the expansive ecological and social services that agriculture provides, additional ecological and environmental services by flowing water in riparian systems, and further erosion and loss of



cultural values and services from historical acequias and community irrigation systems.

The report highlights the challenges that Rio Arriba County will face in the coming years. The County's social, economic, and environmental systems are highly vulnerable to environmental change. Climate change is predicted to cause water supply disruptions. The County will need to work at every level and in every sector to begin considering strategies for making better use of their water resources."

DRAFT



NATURAL RESOURCES

DRAFT



Rio Arriba County, New Mexico, is renowned for its rich and varied natural resources, which are fundamental to the local economy, environment, and cultural heritage. The County's natural wealth includes diverse soils, water bodies, plant life, wildlife, and clean air. The human environment has long interacted with these resources, shaping the County's development.

SOIL

Rio Arriba County features a wide variety of soil types, shaped by its diverse geography that spans from river valleys to mountainous terrains. Soil composition and fertility vary greatly based on elevation, climate, and land use. In the river valleys of the Rio Chama and Rio Grande, loamy and sandy soils support highly productive agricultural lands that have been cultivated for centuries by Indigenous peoples and settlers for traditional crops. In contrast, the higher elevations of areas like Carson National Forest contain more acidic soils, which are better suited for coniferous forests rather than farming.



AI generated visualization of the variety of soil types found in Rio Arriba County, which range from sandy and loamy soils in the valleys to clay-heavy and rocky soils at higher elevations.

Soil erosion is a significant concern in Rio Arriba, driven by factors like deforestation, flooding, forest fires, overgrazing, and poor land management. The County's arid climate exacerbates this issue, as wind and water erode unprotected topsoil. Conservation strategies such as reforestation, controlled grazing, and enhancing soil organic matter are vital for maintaining soil health. Effective soil management must go beyond nutrient replenishment to consider factors like aggregate stability, infiltration rates, and organic matter, ensuring long-term agricultural sustainability.

Flooding is a regular challenge in Rio Arriba County, particularly during the monsoon season. While floods can help replenish soil moisture, they also contribute to erosion, leading to the loss of valuable topsoil and nutrients, thus decreasing soil fertility.

Forest fires also pose a recurring threat to soil health in the County. Fires can strip vegetation from the land, exposing the soil to erosion and causing the loss of topsoil and organic matter, both essential for soil fertility and structure.

Soil health refers to the soil's ability to function effectively and provide ecosystem services sustainably (Doran and Parkin, 1994). One critical ecosystem service is supporting crop production, which is vital for human and animal subsistence. Healthy soils are less prone to erosion and can sustain crop



production over time. This concept integrates the chemical, physical, and biological properties of soil, emphasizing their interdependence for optimal and sustainable functioning.

Given the importance of soil in natural ecosystems, careful management is essential for maintaining its productivity. While conventional farming has long focused on managing soil nutrients to ensure crop yields, scientists now recognize that this approach alone may not lead to sustainable production. Factors like soil structure, infiltration rates, salinity, and organic matter must also be addressed to promote long-term agricultural sustainability (Idowu et al., 2008).

Organic matter plays a central role in soil health by supporting biological activity and nutrient cycling. In New Mexico, where soils typically have low organic matter, this is a critical factor in preventing degradation and erosion. Without sufficient organic material, soils require higher fertilizer inputs to ensure crop growth. Therefore, soil management strategies should focus on maintaining or improving organic matter to boost soil productivity and biological activity (Carter, 2002).

Most New Mexico soils are prone to degradation due to their low organic matter content. In addition to higher fertilizer needs, these soils may experience imbalances that reduce biodiversity and harm overall soil health. Physical properties like color, texture, structure, drainage, and depth also reflect the complex interaction between parent materials, climate, vegetation, and topography, which influence soil formation over time.

Finally, while fertilizers are widely used in agriculture and landscaping, improper use can negatively impact soil health. Excessive runoff can contaminate groundwater and damage aquatic ecosystems, while nutrient imbalances from overuse can reduce soil biodiversity and fertility. Careful management is essential to ensure that fertilizers benefit the soil without causing long-term harm.



WATER

Water resources are critical to Rio Arriba County, where the semi-arid climate creates increasing demand from agriculture, industry, and domestic use. The Rio Grande and Rio Chama rivers are essential for agriculture, supporting extensive irrigation systems, including traditional acequias used by Hispanic communities for centuries. These rivers also serve recreational purposes, such as fishing, rafting, and tourism, and sustain local wildlife ecosystems.

Groundwater is particularly important for rural communities that rely on wells. However, issues like over-extraction and contamination from agriculture and the oil and gas industry threaten this resource. Over the past decade, groundwater levels have significantly declined due to excessive use for agriculture and other economic activities, straining the region's aquifers. This reduction impacts both human consumption and environmental needs. Conservation measures, such as rainwater harvesting and sustainable groundwater management, are critical for ensuring future water security.

The County's unique mix of cultures and landscapes reflects a deep agrarian tradition. Fertile valleys and expansive rangelands have long supported residents who value the region's quality of life, climate, and retirement opportunities. The Rio Grande and Rio Chama Valleys, home to both old and new communities, support agriculture, light industry, and tourism, all competing for water resources. These resources must also meet the needs of Native American tribes and pueblos, whose acequias are integral to the survival of four-hundred-year-old Hispanic communities. Additionally, the Rio Grande is home to endangered species like the silvery minnow and provides refuge for migratory birds in riparian bosques.

The Rio Grande and the aquifers it feeds are the principal water sources for cities and farms from southern Colorado through New Mexico and into Texas. These users face significant challenges, especially with climate and hydrologic changes, as they depend on a single, over-allocated water source. The river often runs dry for 180 miles after users in New Mexico and Texas draw from it, reflecting the high demand on this resource.

New Mexico's low annual average precipitation, combined with a state



AI generated visualization of water resources in Rio Arriba County, showing the Rio Chama River and an acequia system integrated into the landscape. This image emphasizes the connection between natural water bodies and traditional irrigation systems, essential for agriculture in the area.



population increase of about 16% between 2000 and 2024, puts immense pressure on water resources. Although Rio Arriba County's population decreased by approximately 6.5% during this period, population growth and development statewide, along with prolonged drought, heightened the need for effective water management. With water resources fully appropriated, sustainable practices like drip irrigation and watershed management are increasingly important to mitigate the effects of competition and climate change.

Rio Arriba County receives an average of 10 to 14 inches of annual precipitation, depending on location, with places like Abiquiu Lake Dam receiving about 10.1 inches and El Vado Lake Dam around 14.1 inches. Precipitation patterns are heavily influenced by monsoonal activity, contributing to variability in yearly totals. The region's diverse topography, from mountains to river valleys, further contributes to this variability, and recent years have seen more pronounced droughts due to climate change.

Rio Arriba County Precipitation Overview: 2013 - 2022	
Year	Description
2013	Below-average precipitation due to ongoing drought conditions
2014	Continued dry conditions with slightly improved rainfall during monsoon season
2015	Above-average precipitation due to a strong El Niño event
2016	Near-average precipitation with typical seasonal variations
2017	Slightly below-average rainfall; drought conditions began to re-emerge
2018	One of the driest years in recent history, significant drought
2019	Improved precipitation levels thanks to robust winter snowpack and monsoon rains
2020	Below-average precipitation; intensified drought
2021	Continued dry conditions with minimal relief from monsoon rains
2022	Slight improvement, but overall below long-term average

Sources: National Oceanic and Atmospheric Administration Climate Data Online
Western Regional Climate Center Rio Arriba County Climate Summaries

Irrigators control about 90% of the state's surface water rights, making agriculture the dominant user. Other stakeholders must consider agricultural interests when seeking surface water for municipal, industrial, recreational, or environmental purposes. Native American tribes hold significant surface water rights, with many dating back to "time immemorial." The Navajo Nation, for example, holds substantial rights from the San Juan River, part of the Colorado River system. The Aamodt and Abeyta settlements also secured significant water rights for Pueblo tribes.

Major cities like Albuquerque and Santa Fe hold significant surface water rights



as well, with Albuquerque using water from the Rio Grande for municipal supply, while Santa Fe sources from the Santa Fe River. The federal government, through agencies like the Bureau of Reclamation, manages water projects such as the San Juan-Chama Project, which diverts water from the Colorado River Basin into the Rio Grande Basin.

Out-of-state entities, particularly in Texas, hold some water rights in New Mexico through interstate river compacts like the Rio Grande Compact and the Pecos River Compact, which govern water-sharing agreements with Texas and Colorado. While these agreements allocate large portions of surface water to neighboring states, direct ownership of water rights by out-of-state entities remains limited. However, New Mexico must deliver significant amounts of water downstream, especially to Texas, impacting how much remains for local use.

Most of New Mexico's fresh water is stored as groundwater in aquifers, with over 78% of New Mexicans relying on groundwater for drinking water. Groundwater accounts for nearly half of the state's water withdrawals for agriculture, industry, and domestic use. Protecting and managing groundwater is vital to maintaining agricultural productivity and ensuring water availability for future generations.

Adequate supplies of uncontaminated groundwater are essential not only for public health but also for the growth of agriculture and industry in Rio Arriba County.

AIR

Air quality in Rio Arriba County is generally good, thanks to its rural setting, low industrial activity, and expansive natural landscapes. However, the County faces some air quality challenges. Wildfire smoke, especially during the dry season, can significantly degrade air quality. Dust storms and particulate matter, caused by dry and windy conditions, are also seasonal issues. In addition, the oil and gas industry in parts of the County contributes to air pollution, releasing volatile organic compounds (VOCs) and methane, which can contribute to smog and negatively impact public health and the environment. Continuous monitoring and regulation of these emissions are essential to protect air quality.



AI generated visualization representing air quality in Rio Arriba County, New Mexico. The image shows the natural landscape with clear skies, but it also reflects the potential effects of wildfire smoke in the distance, which can impact air quality in the region, especially during fire season. This highlights the interplay between the natural environment and environmental challenges like wildfires that affect air quality.



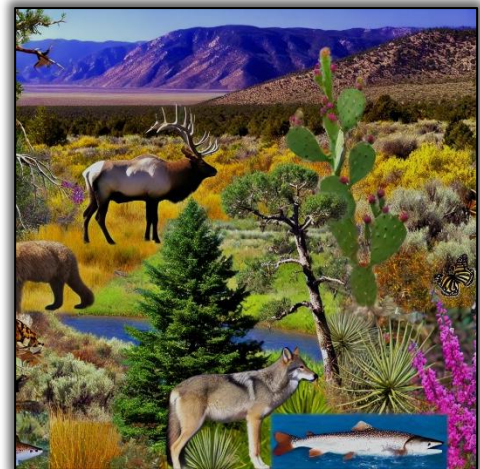
Rio Arriba County is known for its beautiful skies, which are largely a result of its clean air. Clean air is vital for the health of plants, animals, and humans. Protecting air quality and alerting residents to hazardous conditions are crucial for maintaining a healthy environment. The impact of air pollutants on health and ecosystems depends on the type and concentration of the pollutants, the duration of exposure, and an individual's health status. Air pollutants can also indirectly affect health by contaminating drinking water and entering the food chain, where they bioaccumulate in the food humans consume.

Some of the challenges to air quality come from natural occurrences such as smoke from catastrophic wildfires. The smoke from burning trees and debris contains hazardous substances, posing serious health risks, especially to vulnerable groups such as the elderly, children, and individuals with respiratory conditions.

Over the past decade, air quality in Rio Arriba County has generally been rated as "good" on the Air Quality Index (AQI), with typical AQI values ranging between 40 and 60. This places the region within a range that suggests air quality is acceptable, though there may be concerns for individuals who are particularly sensitive to pollutants. Based on its number of poor air quality days, Rio Arriba County has better air quality than 63% of counties in New Mexico. However, specific issues, such as dust storms, wildfires, and human activities like emissions from oil and gas wells, have occasionally resulted in spikes in particulate matter (PM2.5 and PM10), temporarily raising the AQI to less favorable levels. For example, wildfire smoke has been a significant contributor to increased particulate levels, particularly in dry seasons when fires are more prevalent. Similarly, emissions from transportation and industrial activities contribute to localized pollution, impacting air quality intermittently.

PLANTS & ANIMALS

New Mexico's wildlife and plant life are exceptionally diverse, with the state's size, varied terrain, and climate contributing to its status as one of the most biologically rich regions in the U.S. More than 4,500 species of plants and animals inhabit the state. In Rio Arriba County, life zones range from alpine tundra and subalpine coniferous forests in the north and southeast, to woodlands and desert



An AI-generated visualization of the rich biodiversity of plants and animals found in Rio Arriba County, New Mexico. This image showcases the different ecosystems, such as desert shrublands and alpine forests, featuring a variety of wildlife including elk, mule deer, black bears, and trout, along with diverse vegetation like sagebrush, juniper, and ponderosa pine.



shrublands, with riparian areas along the Rio Grande and Rio Chama river valleys.

Rio Arriba County is home to drought-resistant plants and trees, such as juniper, cottonwood, Douglas fir, Russian olive, blue spruce, and ponderosa pine. Lower-growing plants include Russian thistle (tumbleweed), sagebrush, and prickly pear cactus, which are well-adapted to the arid conditions.

New Mexico's wildlife is as diverse as its landscape. Common species include elk, deer, and antelope, as well as smaller mammals like white-tailed rabbits, gray squirrels, and gray foxes. Predators such as wolves, coyotes, mountain lions, and bobcats also inhabit the region. The state animal, the black bear, was officially recognized in 1963.

New Mexico supports a wide range of bird species, including the American goldfinch, crow, chipping sparrow, cactus wren, hummingbird, great blue heron, and common raven. The roadrunner, adopted as the state bird in 1949, is also commonly found.

The cutthroat trout became the state fish in 1955. However, species such as the shovelnose sturgeon and American eel have been lost due to river diversions and droughts.

The Rio Grande Valley supports a rich variety of animal species, many of which have been present since before the arrival of Coronado in 1540. The valley is home to three species of turtles, nine species of lizards, and 13 species of snakes. Over 60 mammal species, primarily rodents, inhabit the area, along with 11 species of bats and over 200 bird species that use the valley as a habitat or mating ground. Across New Mexico, there are more than 1,100 species of amphibians, reptiles, mammals, birds, invertebrates, and fish.

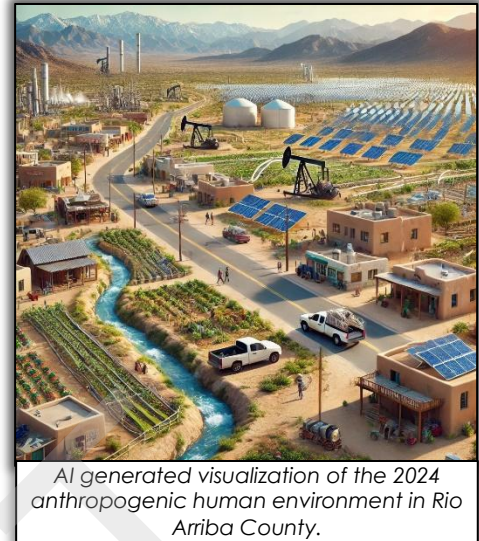
The table to the right of taxonomic groups and species specific to Rio Arriba County further highlights the region's biodiversity.

Rio Arriba County Summary of Species	
Taxonomic Group	# of Species
Fish	33
Amphibians	11
Reptiles	25
Birds	249
Mammals	90
Mollusks	22
Crustaceans	2
Ephemeroptera; mayflies	20
Odonata; dragonflies	14
Orthoptera; grasshoppers & crickets	62
Coleoptera; beetles	1
Lepidoptera; moths & butterflies	156
Spiders	9
Miscellaneous arachnids	7
Total	701



HUMAN ENVIRONMENT

The human environment (anthropogenic⁵) in Rio Arriba County is deeply connected to the land, with Native American tribes, Hispanic communities, and modern settlers relying on the area's natural resources. However, human activities inevitably impact the environment, particularly through the use of technology, which can create order but often increases environmental disorder or entropy. The development of transportation networks, factories, buildings, and dams has led to the depletion and disruption of natural systems.



AI generated visualization of the 2024 anthropogenic human environment in Rio Arriba County.

Inefficient land use and energy consumption exacerbate environmental degradation, increasing disorder. Monitoring and managing urban sprawl and land conversion in vulnerable areas are critical for preserving ecosystem services. The future of natural resources and ecosystems depends on recognizing the effects of global changes, including land use, atmospheric composition, biological diversity, and climate change.

Economic development and technological advances have led to increased consumption of natural resources, resulting in intensified land use and the conversion of natural vegetation to agricultural lands, often in areas with marginal farming potential. Although global food and fiber production is expected to increase, this has significant impacts on ecosystems. Water availability is already a major issue and will become more pressing as agricultural, industrial, and urban demands compete with the need to maintain river flows for conservation and waste management.

In Rio Arriba County, various anthropogenic activities affect local ecosystems and sustainability:

⁵ Anthropogenic activity refers to human actions or processes that impact the natural environment. This includes activities like agriculture, industrial production, deforestation, urbanization, and the burning of fossil fuels. These actions can lead to environmental changes such as pollution, climate change, habitat destruction, and biodiversity loss. Anthropogenic activities are a primary driver of global environmental issues like greenhouse gas emissions, air and water pollution, and land degradation, significantly influencing ecosystems and the Earth's climate system.



Agriculture and Livestock

Crop Production: The fertile valleys of the Rio Grande and Rio Chama support crops such as alfalfa, chile, and heirloom fruits and vegetables. The traditional acequia system plays a key role in irrigation, but extensive water use strains the region's limited water resources.

Livestock Farming: Meat and poultry production, along with forage crops, contribute to soil degradation and water use. Overgrazing can lead to erosion, particularly in arid areas.

Oil and Gas Industry

Extraction: The County participates in oil and gas extraction, especially in the San Juan Basin, which boosts the economy but poses environmental risks like air and water contamination.

Fracking: Hydraulic fracturing (fracking) raises concerns about groundwater contamination and increased seismic activity.

In 2010, Rio Arriba County placed a temporary moratorium on oil and gas extraction primarily due to concerns about environmental impacts such as water contamination, air quality degradation, and the preservation of the County's cultural and historical resources. The moratorium gave the County time to study the potential effects of oil and gas development on its communities and environment before allowing further extraction. It also allowed local authorities to develop more stringent regulations to manage oil and gas activities, particularly in sensitive areas, reflecting widespread community support for greater oversight of extraction activities in the region. The moratorium had a significant impact on Rio Arriba County by improving environmental protections, empowering local communities, and leading to more sustainable oil and gas practices. Although it temporarily slowed economic activity in the sector, the long-term benefits of protecting natural resources, cultural sites, and public health likely outweighed the short-term costs. The strengthened regulatory framework and increased community engagement that emerged during the moratorium period continue to shape oil and gas operations in the County today.

Mining

Sand, Gravel, and Hard Rock Mining: Mining for construction materials, along with historical mining for uranium and gold, has led to habitat destruction and contamination from legacy mining sites.



Deforestation and Urban Development

Urban Expansion: New infrastructure projects, including roads and housing, contribute to deforestation, habitat loss, and increased pressure on local resources.

Energy Production

Coal and Natural Gas: The County has coal mining and natural gas production activities, which contribute to air pollution, greenhouse gas emissions, and landscape alteration.

Transportation

Roadways and Railways: Infrastructure such as highways and the Cumbres & Toltec Scenic Railroad facilitates economic activity but also leads to land use changes, air emissions, and wildlife habitat disruption. While essential for connecting the County's rural and urban areas, maintaining and improving transportation infrastructure remains a challenge, especially in remote regions.

Water Usage

Groundwater and Surface Water: Agriculture, industry, and residential use place heavy demands on local water sources, which are already stressed during droughts. This reduces water availability for ecosystems and communities.

Tourism and Recreation

Outdoor Activities: Hunting, fishing, hiking, and camping bring economic benefits but also increase human activity in sensitive environments like forests and river valleys.

Waste and Pollution

Waste Management: Improper disposal of industrial and household waste contaminates land and water, while emissions from transportation and energy sectors contribute to air and soil pollution.

These human activities in Rio Arriba County present both economic opportunities and environmental challenges. Sustainable management of land, water, and resources is essential to balance growth with conservation and ensure long-term environmental health.



NATURAL RESOURCE GOALS & STRATEGIES

DRAFT



County-Led Strategies are initiatives where the County takes responsibility for leading efforts, allocating resources, and ensuring successful implementation. These strategies reflect the County's leadership role in addressing critical needs, from developing infrastructure to implementing programs.

County-Supported Strategies are initiatives led by external organizations, community groups, or other governmental entities, where the County plays a supporting role. In these efforts, the County may provide resources, advocacy, or technical assistance to help achieve shared objectives, while leadership and execution are carried out by partner entities.

Goal 1: Protect, Maintain, and Strengthen Relationships with Land and Water

County-Led Strategies:

- Acquire water rights within the County and apply them to beneficial uses in the watershed of origin.
- Utilize the Rio Arriba Natural Resource Advisory Board to gather data, assess policies, and develop recommendations for sustainable resource management.
- Introduce legislation to encourage return-flow credits for agricultural activities, promote acequia banking, and reform the "use it or lose it" water policy.
- Provide incentives for sustainable agricultural measures, such as drip irrigation and laser leveling, in partnership with USDA, County Soil and Water Conservation Districts, and NMSU Cooperative Extension Service.
- Work with watershed groups to identify and prioritize uses, such as agricultural storage, ranching, recreation, and municipal supplies.
- Advocate for riparian restoration and re-vegetation to enhance water recharge capacity and protect water quality.
- Create a Rio Arriba County Food Council to collaborate with agencies, analyze data, and recommend natural resource policies to benefit the County's communities.

County-Supported Strategies:

- Partner with community organizations like the Northern Rio Grande National Heritage Area and the New Mexico Acequia Association to develop preservation strategies for agrarian, historical, and cultural resources.



- Support conservation easements and programs through collaborations with land trusts and encourage charitable donations to reduce tax burdens for landowners.
- Work with the Office of the State Engineer (OSE) and New Mexico Environment Department (NMED) to protect water resources and ensure safe, effective delivery systems.

Supporting Traditional Water and Land Practices in Rio Arriba County:

Rio Arriba County recognizes the importance of preserving traditional water and land practices while supporting the cultural heritage of its communities. While the County will not take direct action, it fully supports several initiatives aligned with these values.

The County encourages and supports the adjudication of water rights for all acequias, recognizing their historic uses, customs, and practices as protected under the Treaty of Guadalupe Hidalgo. Acequia associations are encouraged to adopt water rights transfer bylaws, uphold transfer authority, and ensure water rights remain within their original watersheds to sustain traditional agricultural practices.

Additionally, the County advocates for productive uses of land and water to protect and enhance the viability of agricultural lands within Rio Arriba. Recognizing the significance of cultural patrimony, the County supports the use, restoration, or preference for traditional place names in its operations and regional promotion, while ensuring updated place names are maintained for emergency services when necessary.

These efforts reflect Rio Arriba County's commitment to honoring and preserving its rich cultural and agricultural heritage.

Goal 2: Inventory and Map Natural Resources

County-Led Strategies:

- Continuously update maps of irrigated agricultural parcels, acequias, and water rights at risk of loss.
- Acquire and maintain inventories of critical natural resources, including aquifers, wildlife corridors, scenic views, and recreation sites.
- Develop and implement an escarpment protection ordinance based on slope data to discourage development on steep areas.



County-Supported Strategies:

- Collaborate with federal and state agencies, universities, and environmental organizations to monitor natural resource conditions.
 - Identify and map state, federal, and tribal lands suitable for community development and potential land swaps.
-

Goal 3: Protect Critical Management Areas

County-Led Strategies:

- Designate and protect Critical Management Areas for wildlife reproduction and habitat conservation.
- Collaborate with the Department of Game and Fish to establish conditions minimizing the cumulative impact of development on wildlife.
- Promote sustainable land management practices, including reclamation of disturbed lands.

County-Supported Strategies:

- Work with federal and state agencies to fund and implement riparian restoration and fencing projects in sensitive areas.
 - Advocate for invasive species management and support watershed groups in developing restoration action strategies.
-

Goal 4: Protect and Manage Water Resources

County-Led Strategies:

- Coordinate ground and surface water planning with the Rio Arriba County Regional Water Plan, the New Mexico State Water Plan, and relevant federal and state agency plans.
 - Pursue funding from the Water Trust Board, NM Legislature, and NM Finance Authority for groundwater studies, watershed protection, and restoration projects.
 - Update County flood maps in collaboration with FEMA to address unstudied areas.
-



- Collaborate with the Office of the State Engineer to complete Rio Arriba County's 40-year water plan to strengthen water rights protection.

County-Supported Strategies:

- Advocate for state legislation to manage invasive species and protect watersheds.
- Support the establishment of local watershed restoration groups and promote their access to funding sources like EPA 319 grants.
- Support high-elevation snow retention through watershed management practices like thinning and limiting development.:

Support for Sustainable Land and Water Management

Rio Arriba County supports efforts to restore and protect its natural resources, emphasizing sustainable practices and collaborative approaches. While the County will not take direct action, it fully supports several initiatives aligned with these values.

The County encourages property owners to reclaim disturbed or degraded lands, such as unused roads, to restore their natural functions. It also advocates for the designation of critical water management areas, working closely with upstream municipalities like Chama to reduce pollution and safeguard watersheds. Additionally, the County supports holding more water rights locally, limiting transfers and sales to promote sustainable water management. Finally, the County promotes watershed and forest restoration initiatives to improve water retention and build resilience against climate change impacts.

Goal 5: Promote Sustainable Grazing and Habitat Restoration

County-Led Strategies:

- Encourage managed grazing practices and habitat restoration through partnerships with ranchers and conservationists.
- Work with property owners to return disturbed lands to their natural function.

County-Supported Strategies:

- Collaborate with the NM Game and Fish Department to manage elk and cattle populations through adaptive programs and controlled hunting.
- Advocate for federal and state management of wild horse populations to protect traditional grazing areas.



Goal 6: Enhance Community Engagement and Stewardship

County-Led Strategies:

- Sponsor community clean-up events and road corridor improvement programs.
- Host a County fair focused on natural resource stewardship and sustainable practices.
- Pursue funding to mitigate urban wildland fire risks and improve fire response infrastructure.

County-Supported Strategies:

- Partner with schools, 4-H, and nonprofits to integrate environmental education into local communities.
- Support programs that engage youth and seniors in natural resource conservation and emergency preparedness.

Goal 7: Improve Infrastructure and Public Safety for Natural Resources

County-Led Strategies:

- Collaborate with state and federal agencies to trim trees near power lines and reduce fire hazards.
- Enhance infrastructure for water and wastewater systems with funding from state and federal sources.
- Explore whether the County should serve as a backstop or establish a rescue fund to support mutual domestic water systems.

County-Supported Strategies:

- Advocate for local control of natural resources by working with federal and state agencies.



LAND USE

DRAFT

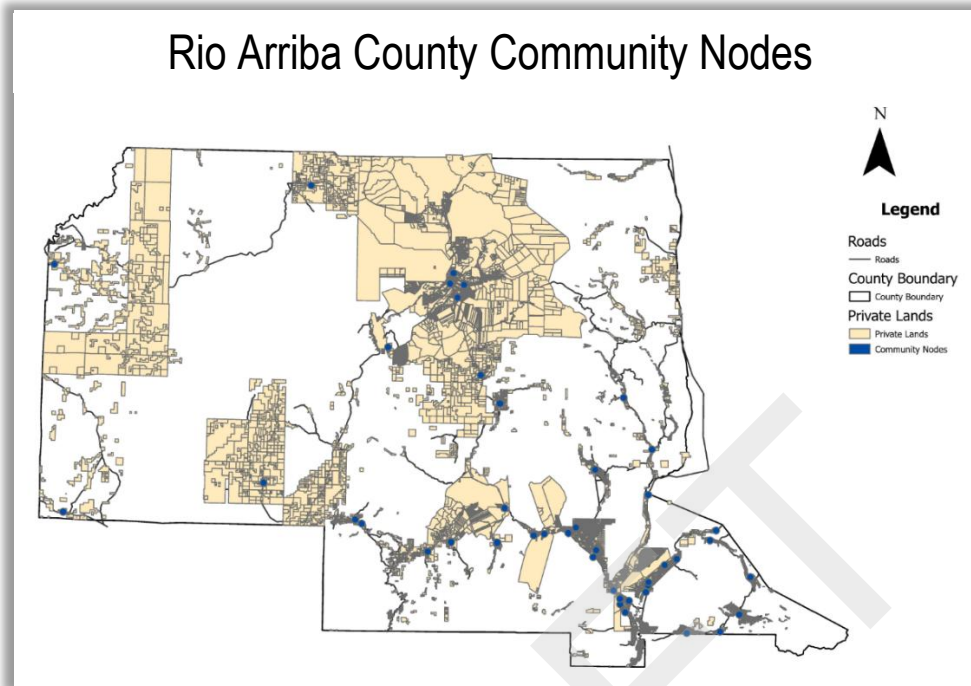


TRADITIONAL USE

The layout of communities and land use in Rio Arriba County is deeply rooted in the historical settlement patterns from the 1700s and 1800s, when the region was under Spanish and Mexican rule. These settlements followed the Laws of the Indies, which required a central plaza surrounded by homes that shared walls, creating a hub for economic and commercial activities. Beyond the plaza, the land grant system allocated long, narrow parcels called lineas that extended from river valleys into the mountains, offering essential resources like irrigated land for crops, dry land for homes, grazing pastures, and forests for hunting and timber. The acequia system was vital for irrigation, diverting river water to support agriculture. This arrangement allowed communities to mix residential, commercial, and public uses in central areas, while preserving agricultural, grazing, and forest lands to sustain the community's economy.

The land grant system collapsed in the late 1800s and early 1900s due to the U.S. government's failure to recognize communal lands as private property. As a result, these lands were federalized and converted into forest reserves and national forests, placing millions of acres of forest and grazing lands under U.S. management. With population growth, the demand for agricultural land increased, and this land now serves multiple purposes, including residential, grazing, and business uses. After World War II, the traditional barter system ended, and by the 1880s, local people began seeking wage labor to purchase machinery and housing materials, many working seasonally in Colorado mines due to the rise of industrial development.

After the establishment of Los Alamos National Laboratory, state and federal roads were upgraded, facilitating the movement of people and goods and ultimately disrupting traditional land use patterns rooted in the Laws of the Indies. Today, some communities in Rio Arriba County, like Abiquiu, Chimayo, Cordova, and Truchas, have retained elements of their traditional plazas. However, most areas have shifted to low-density, single-family housing, now prevalent throughout the County. Agricultural lands frequently sit adjacent to residential areas, and commercial businesses have largely relocated from traditional plazas to highway corridors.



The Northern Rio Grande National Heritage Area (NRGNHA) was established on October 12, 2006, through U.S. Congress Public Law 109-338. This designation allows Rio Arriba County to participate in regional planning with Taos and Santa Fe Counties and support local community development. The NRGNHA acknowledges the unique cultural continuity in North Central New Mexico over centuries. Managed by Northern Rio Grande National Heritage Area, Inc., the entity is tasked with creating a Management Plan for conservation, funding, and cultural promotion. The plan also provides an inventory of resources and recommends educational programs, coordinating with local, state, federal, and tribal governments.

The NRGNHA Management Plan was approved by the Department of the Interior, releasing federal funding for heritage projects and local economic development. Key strategies include supporting cultural preservation, fostering partnerships, and promoting heritage tourism. These are aligned with Rio Arriba County's goals, such as protecting natural resources, supporting cultural businesses, promoting sustainable agriculture, and enhancing tourism.

To fulfill this mandate, NRGNHA developed a grant program for projects within the Heritage Area, targeting areas like film, media, indigenous languages, and entrepreneurship. For example, a project is underway to complete a commercial kitchen at Los Luceros Historic Site. Eligible applicants for grants include counties, tribes, local governments, and non-profits.



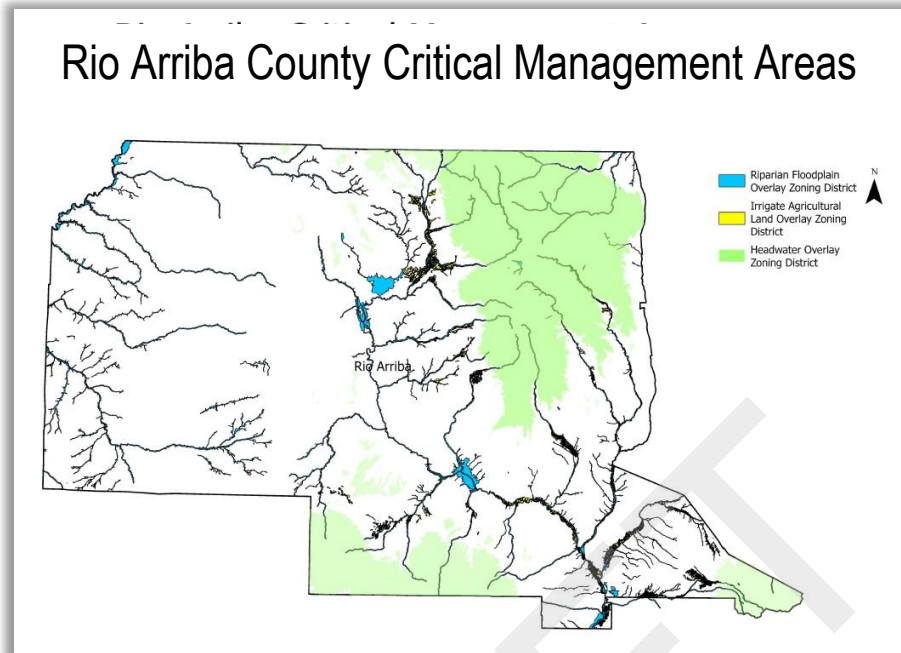
The Planning and Zoning Department Director represents Rio Arriba County on the NRGNHA Board of Directors, participating in board meetings and outreach events. The County plans to establish a formal agreement with NRGNHA, joining Santa Fe County in shared funding and staff resources to support the work of the Heritage Area.

REGULATIONS

Rio Arriba County's first land use regulation, the subdivision ordinance titled Land Development Regulations, was adopted in 1973 and revised in 1982 and 1986, with amendments in 1986 and 1987. Subdivision review and approval started in 1993 with the creation of the Planning and Zoning Department. In 1995, the County adopted its first zoning ordinance, the Design and Development Regulation System, which introduced a performance-based approach focusing on mitigating site-specific impacts (e.g., traffic, parking, use intensity) rather than segregating land uses geographically. This system established a single, County-wide zone called the County Residential Agricultural District (CRAD), where agriculture and single-family residential uses are permitted, and other uses, like mixed-use, industrial, and commercial developments, require a Use Permit obtained through a public hearing.

In addition to CRAD, overlay zones regulate land identified as Critical Management Areas (CMAs) for their ecological and economic importance, including irrigated agricultural land, riparian habitats, floodplains, and headwaters. Special permits are also required for activities such as oil and gas production, communication towers, and mining. During the 2014 community hearing, residents of older, traditional communities expressed interest in establishing local zoning for smaller lots typically found in those areas, and permanent Euclidian-style zoning was suggested for traditional villages with non-conforming lot sizes, building developments, and land uses.

The 2010 Comprehensive Plan identified CMAs and overlay zoning districts for these sensitive areas to protect streams, rivers, irrigated farmlands, floodplains, and wildlife habitats. This was formalized into the Design and Development Regulation System in 2012 by Ordinance 2012-001. The Land Use Regulations have seen little change in the past decade, except for Ordinance 2022-04, which regulates commercial cannabis activities in the County. Signed into law in March 2022, this ordinance governs the permitting of cannabis cultivation and sales, along with personal use, public consumption, and its impact on water usage, land, and agriculture in Rio Arriba County.



HEADWATERS CRITICAL MANAGEMENT AREA

The Headwaters CMA (Critical Management Area) outlined in this plan aims to safeguard aquatic ecosystems located at elevations of 8,500 feet or higher, receiving 24 to 50 inches of annual precipitation from rain and snow. These areas consist of subalpine forests and wetlands, such as springs, streams, and lakes, which serve as the origin of much of Rio Arriba County's water supply. They provide habitats for aquatic species like fish, reptiles, and amphibians, as well as critical terrestrial habitats like elk breeding grounds.

The resources within the headwaters offer significant economic and social value through recreation, tourism, and seasonal harvesting. Mountain snow, crucial to the region, functions like a natural reservoir, feeding creeks, streams, rivers, acequias, and recharging aquifers, supporting both local communities and broader water systems.

Given the sensitivity of these environments, the County proposes using fish and aquatic macro-invertebrates as indicators to monitor ecosystem health. Special attention is given to the Rio Grande Cutthroat trout, which still thrive in the headwater regions, with continued protection against future threats.

RIPARIAN/FLOODPLAIN CRITICAL MANAGEMENT AREA

The Riparian/Floodplain Conservation Management Area (CMA) in Rio Arriba County is designed to protect groundwater, wildlife habitats, food production, land development, and water quality. This area encompasses a 300-foot buffer along



watercourses and includes FEMA-designated floodplains. It serves critical functions such as aquifer recharge and maintaining biodiversity. Limiting development within this buffer helps reduce the risk of flooding, soil erosion, and ecological degradation.

By preserving riparian buffers, which naturally filter water, the CMA enhances water quality and protects aquatic ecosystems. These areas are considered a best management practice by state and federal agencies. Additionally, the fertile soils within floodplains support both human food production and wildlife. The importance of this regulation is amplified because much of Rio Arriba County's irrigated lands are located within or near these floodplains, making them vital for agriculture.

Ecological changes, such as loss of these buffers, can severely disrupt the balance of riparian ecosystems. Increased flooding, erosion, and sediment build-up not only degrade water quality but also harm wildlife and reduce the productivity of agricultural lands. By maintaining riparian buffers, the County helps safeguard these critical zones, ensuring that they continue to support biodiversity, water purification, and sustainable agriculture for future generations.

IRRIGATED AGRICULTURAL LAND CRITICAL MANAGEMENT AREA

The 2011 Comprehensive Plan emphasized the protection of irrigated lands, which are vital to Rio Arriba's traditional farming systems that have supported local economies for generations. These irrigated areas, often located near riparian and floodplain zones, are crucial for water storage and aquifer recharge, providing a hydrologic function for domestic wells. The 2012 Zoning Ordinance (Ordinance 2012-001) established development limits, restricting construction on irrigated land to no more than 30% of the irrigated area, to preserve both agricultural productivity and hydrological benefits.



LAND USE GOALS & STRATEGIES

DRAFT



County-Led Strategies are initiatives where the County takes responsibility for leading efforts, allocating resources, and ensuring successful implementation. These strategies reflect the County's leadership role in addressing critical needs, from developing infrastructure to implementing programs.

County-Supported Strategies are initiatives led by external organizations, community groups, or other governmental entities, where the County plays a supporting role. In these efforts, the County may provide resources, advocacy, or technical assistance to help achieve shared objectives, while leadership and execution are carried out by partner entities.

Goal 1: Foster Compact, Sustainable, and Culturally Compatible Development

County-Led Strategies:

- Incentivize small commercial, mixed-use, and light industrial developments within community nodes through updates to the development code.
- Promote infill development by incentivizing the reuse of existing buildings and infrastructure.
- Develop plans for community nodes to secure water, wastewater, and energy infrastructure.
- Establish community districts within identified nodes to align future development with local culture and traditions.
- Require the use of compatible architectural styles in new developments to reflect existing community character.
- Amend the development code to incentivize clustered, walkable, and sustainable developments, incorporating water conservation measures.

County-Supported Strategies:

- Encourage partnerships to provide resources and expertise for water and wastewater infrastructure development in community nodes.



Goal 2: Optimize the Use of Existing Infrastructure and Resources

County-Led Strategies:

- Create incentives for new developments to utilize existing facilities, buildings, and infrastructure.
- Conduct and maintain an inventory of existing infrastructure, buildings, and dilapidated structures, identifying opportunities for retrofitting or demolition.
- Provide comprehensive mapping resources for businesses interested in relocating to Rio Arriba County.

County-Supported Strategies:

- Support initiatives that repurpose unused water rights and agricultural land for purposes such as wineries, small breweries, and local food industries.
-

Goal 3: Promote Green Building and Energy Efficiency

County-Led Strategies:

- Ensure all new County buildings meet energy efficiency standards and conduct energy audits on older facilities.
- Incentivize the use of green building materials and energy-efficient designs in private developments through updates to the development code.

County-Supported Strategies:

- Advocate for state legislation providing tax credits for green building practices and energy-saving technologies.
-

Goal 4: Protect Critical Management Areas and Sensitive Lands

County-Led Strategies:

- Amend ordinances to require large-scale developments in critical management areas to assess cumulative environmental impacts and mitigate habitat fragmentation, erosion, and water quality issues.
 - Establish large-lot zoning districts to protect farms, ranches, and forests from fragmentation.
-



- Require new developments in critical areas to cluster infrastructure, minimizing road and surface disturbance.

County-Supported Strategies:

- Collaborate with the New Mexico Department of Game and Fish to map and protect wildlife migration corridors and habitats.

Goal 5: Promote Responsible and Sustainable Development

County-Led Strategies:

- Amend subdivision regulations to require site-specific information on soil suitability, wastewater systems, and drainage for proposed developments.
- Develop ordinances requiring adequate environmental liability insurance for heavy industrial uses.
- Require resource extraction developments to provide detailed reclamation plans, phase their activities, and include water monitoring systems.
- Update the Oil and Gas Ordinance to require Frontier District applicants to provide a hydrographic survey assessing water resources and potential contamination before field development.
- Require new oil and gas developments to map potential contaminant pathways and provide plans to prevent contamination, including remediation if needed.

County-Supported Strategies:

- Advocate for the expansion of renewable energy initiatives, including wind and solar, through incentives and partnerships.
- Support collaborations among community water and wastewater systems for cost-sharing and efficient maintenance.

Goal 6: Encourage Accessible and Affordable Housing

County-Led Strategies:

- Regulate short-term rentals to prevent displacement of long-term residents and mitigate rising housing costs.



- Incentivize renovations of vacant housing to increase affordable housing options.

County-Supported Strategies:

- Partner with Los Alamos National Laboratory to develop workforce housing for lab employees in Rio Arriba County.
-

Goal 7: Preserve the County's Rural and Historical Character

County-Led Strategies:

- Conduct an analysis of the County parcel map to identify areas suitable for development while preserving rural character.
- Prioritize growth in traditional communities by focusing on housing restoration and infrastructure improvement.

County-Supported Strategies:

- Collaborate with state and federal programs to support the Rio Grande Trail and other recreational developments along waterways.
-

Goal 8: Enhance Community Infrastructure and Accountability

County-Led Strategies:

- Develop impact fees to ensure large-scale developments contribute to public infrastructure maintenance and upgrades.
- Require developers to commit to ongoing infrastructure maintenance through enforceable agreements.
- Amend development codes to incentivize the donation of land for community facilities, such as fire stations and parks.

County-Supported Strategies:

- Support development projects that incorporate public service components, such as training or education, into their operations.
-



Goal 9: Consolidate County Code Enforcement

County-Led Strategies:

- Consolidate all County code enforcement activities, including animal abuse, into a single County division.
- Ensure the consolidated County Code Enforcement division has adequate staffing.

DRAFT



ECONOMIC DEVELOPMENT

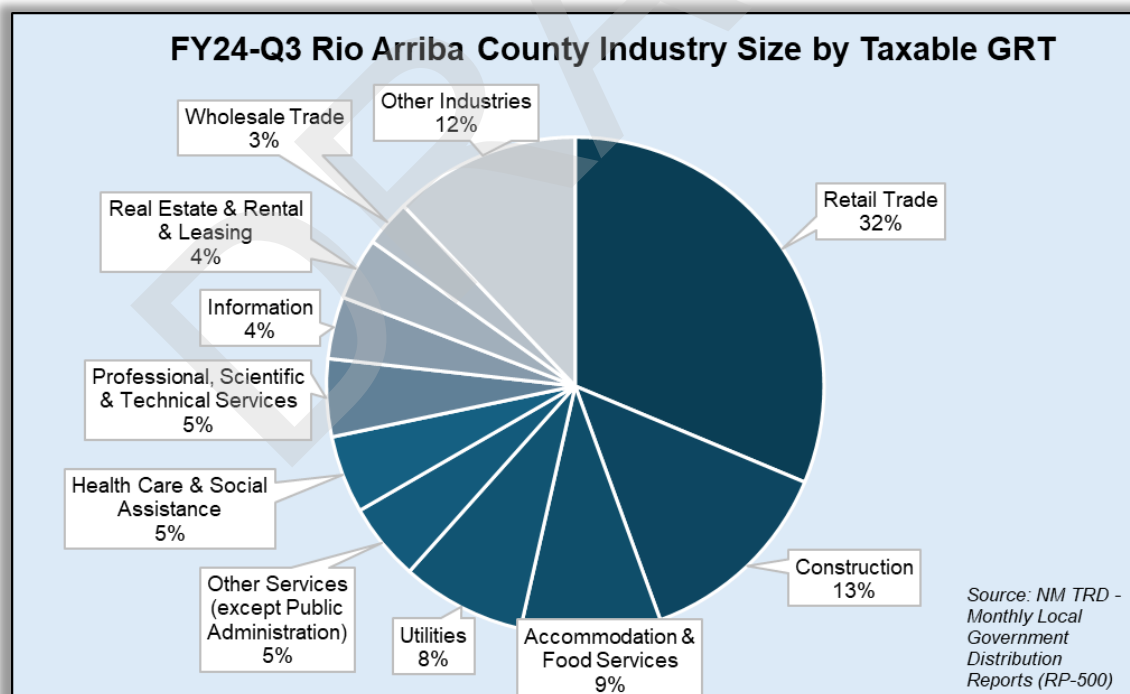
DRAFT



Rio Arriba County is a sparsely populated area facing economic challenges due to limited access to major highways, which hampers shipping and development opportunities. The County's primary revenue sources include gross receipts taxes from local businesses and income from the oil and gas sectors. This revenue is closely tied to economic development initiatives. To drive effective economic growth, the County must focus on enhancing its infrastructure, including reliable electricity, internet access, and a skilled workforce. Analyzing the distribution of gross receipts taxes by industry is essential to overcoming these obstacles and fostering sustainable development.

GROSS RECEIPTS TAX

The most recent Gross Receipts Tax (GRT) data⁶ provides a snapshot of the Rio Arriba economy. Nearly one-third (31%) of the County's gross receipts tax (GRT) revenue comes from the retail trade sector, likely driven in large part by businesses like Walmart and Lowe's in Española. The next largest contributors are construction (13%) and other industries (12%), followed by accommodation and food services at 9% combined. Together, these four sectors account for approximately two-thirds of the GRT generated in the County.



⁶ New Mexico Taxation and Revenue

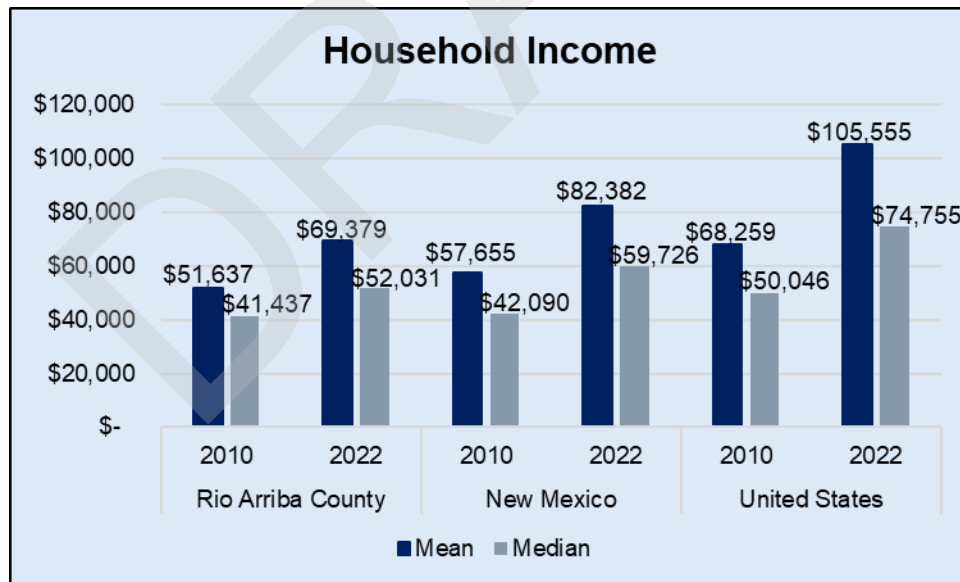


INCOME

Economic development initiatives directly influence income levels for residents. In Rio Arriba County, economic conditions fall behind both state and national averages in terms of median and mean income.⁷ The mean household income in Rio Arriba County is \$69,379, according to the U.S. Census 2022 data. Over the past 12 years (2010-2022), the County's mean household income has increased by 34.4%, a significantly slower growth rate compared to New Mexico (41.9%) and the United States (54.6%). This indicates that income growth in the County has not kept pace with inflation and lags behind both state and national trends.

% Change in Household Mean Income 2010-2022		
Rio Arriba County	New Mexico	United States
2010	2010	2010
34.4%	41.9%	54.6%

Household Income						
Statistic	Rio Arriba County		New Mexico		United States	
	2010	2022	2010	2022	2010	2022
Mean	\$ 51,637	\$ 69,379	\$ 57,655	\$ 82,382	\$ 68,259	\$ 105,555
Median	\$ 41,437	\$ 52,031	\$ 42,090	\$ 59,726	\$ 50,046	\$ 74,755

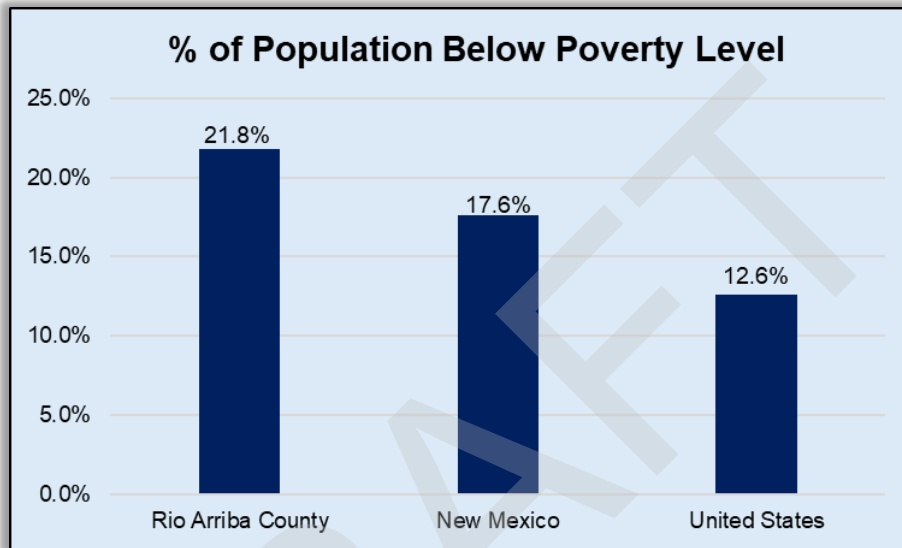


⁷ 2022 American Community Survey-United States Census Bureau



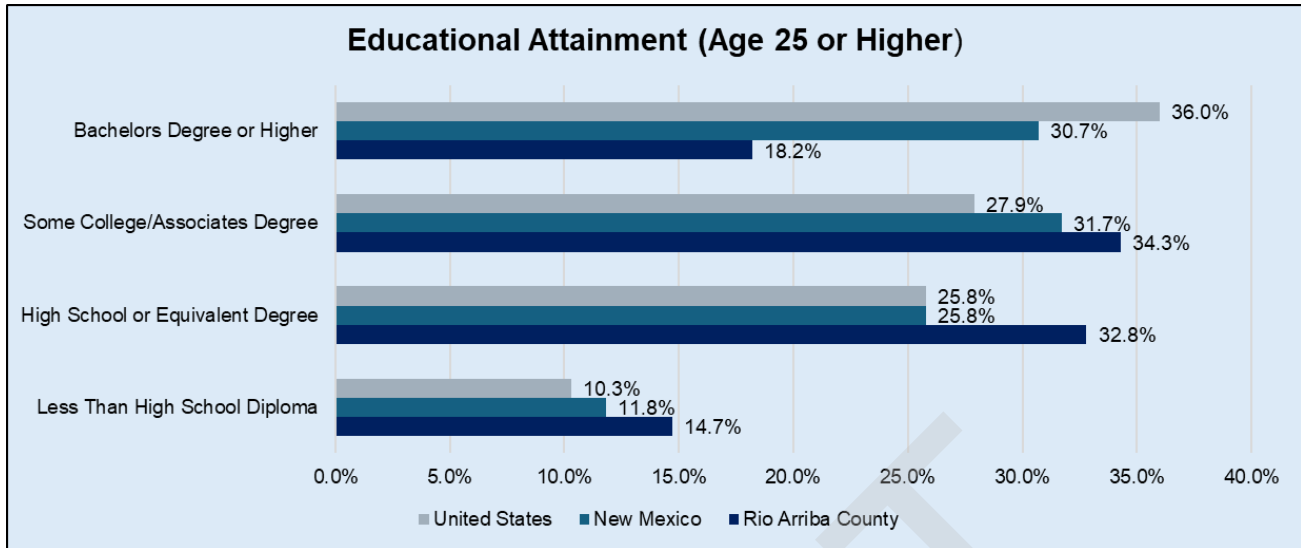
Nearly 22% (21.8%) of Rio Arriba County's population lives below the poverty level, compared to 17.6% in New Mexico and 12.6% in the United States.

% of Population Below Poverty Level		
Rio Arriba County	New Mexico	United States
21.8%	17.6%	12.6%



EDUCATION

Education levels among residents play a crucial role in attracting businesses to Rio Arriba County. A skilled, educated workforce is essential for encouraging companies to set up operations in the area. However, Rio Arriba County lags behind both New Mexico and the national average in educational attainment. Only 18.2% of Rio Arriba County residents hold a bachelor's degree or higher, compared to 36% of U.S. citizens. Additionally, 14.7% of County residents lack a high school diploma, in contrast to just 10.3% of the U.S. population. This educational gap significantly affects income and poverty levels within the County, compared to state and national figures. Coupled with a shrinking working-age population, this issue poses a significant challenge for the County's future growth and development.



EMPLOYMENT⁸

The unemployment rate in Rio Arriba County stands at 4.2%, a significant decrease from the ten-year peak of 9.5% in July 2020 during the COVID-19 pandemic. This rate is lower than both the national average and New Mexico's state average of 4.8%.

Unemployment				
Statistic	Rio Arriba County		New Mexico	United States
	July 2020	June 2024	June 2024	June 2024
Labor Force	16,469	17,120	981,949	169,007,000
Employment	14,904	16,405	935,129	161,774,000
Unemployment	1,565	715	46,820	7,233,000
Unemployment Rate	9.5%	4.2%	4.8%	4.3%

⁸ 2022 American Community Survey United States Census



In 2022, the U.S. Census reported 32,295 Rio Arriba County residents over the age of 16 as either employed or unemployed. Of these, 16,558 were employed. This represents a 25.7% increase in the total number of residents over 16, compared to 2010, including those not actively in the workforce.

Rio Arriba County Potential Civilian Workforce Over 16 Years Old*			
Statistic	2010	2022	% Change
Population	31,296	32,295	3.2%
Total Employees	19,159	16,558	-13.6%
Not in Labor Force	12,137	15,737	22.9%
Unemployment Rate	38.8%	48.7%	25.7%

*U.S. Census: Over 16 classified as either employed or unemployed

EMPLOYMENT BY ECONOMIC SECTOR

More than half (55.4%) of Rio Arriba County residents are employed in three key sectors:

1. Educational services, health care, and social assistance (24.9%)
2. Professional, scientific, administrative, management, and waste management services (19.3%)
3. Arts, entertainment, recreation, accommodation, and food services (10.2%).

Nearly a quarter (24.9%) of all civilian employees work in educational services, health care, or social assistance, reflecting a 3% increase since 2010. This growth is likely due to the expansion of health services in the County, such as the health commons, and the overall increase in social services. The impact of the COVID-19 pandemic also likely contributed to the rise in healthcare employment.

Around 19.3% of civilian employees are in professional, scientific, administrative, management, and waste management services, a 3.5% increase over 2010. This growth is significantly influenced by the presence of Los Alamos National Laboratory and the County's implementation of a comprehensive waste management strategy during this period.

Employment in arts, entertainment, recreation, accommodation, and food services stands at 10.2%, a decrease of 2.2% since 2010. This decline is likely due to the effects of the COVID-19 pandemic, which adversely affected local restaurants and tribal casinos in the area.

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Public administration and construction sectors experienced decreases in employment, with reductions of 3.6% and 2.4%, respectively, since 2010. Meanwhile, there was a notable rise in "other services" (excluding public administration), which nearly doubled from 3.3% to 6.5%, likely reflecting a broader trend toward self-employment.

Rio Arriba County Civilian Employment as a % of Population (Over 16 Years Old*)			
Employment Category	2010	2022	% Change
Educational services, and health care and social assistance	21.9%	24.9%	3.0%
Professional, scientific, and management, and administrative and waste management services	15.8%	19.3%	3.5%
Arts, entertainment, and recreation, and accommodation and food services	12.4%	10.2%	-2.2%
Retail trade	8.2%	9.1%	0.9%
Public administration	12.5%	8.9%	-3.6%
Construction	11.0%	8.6%	-2.4%
Other services, except public administration	3.3%	6.5%	3.2%
Agriculture, forestry, fishing and hunting, and mining	2.4%	3.6%	1.2%
Transportation and warehousing, and utilities	4.4%	3.2%	-1.2%
Finance and insurance, and real estate and rental and leasing	4.0%	3.0%	-1.0%
Manufacturing	2.2%	1.1%	-1.1%
Wholesale trade	0.7%	0.8%	0.1%
Information	1.2%	0.6%	-0.6%

*U.S. Census: Over 16 classified as employed

Projections from 2016 suggested that by 2030, 10.5 million individuals in the United States would transition to self-employment. However, this shift occurred much faster than expected, with 30% of American workers already engaged in freelance work by the end of 2019.⁹

Rio Arriba County, like much of the United States, is experiencing a shift toward self-employment and freelancing. The national trend shows about 9.68 million self-employed individuals as of June 2024, representing a small increase from previous years but still fluctuating significantly due to economic conditions.¹⁰

Freelancing and gig work are becoming increasingly common, with an estimated 76.4 million freelancers making up 36% of the U.S. workforce. This growth reflects a broader move toward independent work driven by economic pressures such as inflation and the ongoing impacts of the COVID-19 pandemic.¹¹ In Rio Arriba County, this trend could be particularly relevant as local economic challenges, including limited infrastructure and opportunities for traditional employment, might encourage residents to pursue self-employment.

⁹ Forbes Magazine April 2023 "Future Of Work: Self-Employment Trends And Evolving Career Landscapes Unveiled" Steven Cristol

¹⁰ <https://www.oberlo.com/statistics/how-many-americans-are-self-employed>

¹¹ <https://explodingtopics.com/blog/number-of-freelancers>



Solopreneurs¹² are also on the rise. More than half of these entrepreneurs started their businesses after 2020, often due to economic necessity and the flexibility provided by digital technology like e-commerce and social media. In Rio Arriba County, where access to major economic hubs and industries is limited, this trend towards solopreneurship could offer new avenues for economic development and resilience.¹³

As these independent work models continue to grow, Rio Arriba County might benefit from investing in infrastructure improvements, such as reliable internet and business support services, to help local freelancers and solopreneurs thrive. This focus on self-employment could be a key component in addressing the County's economic challenges and creating more diverse income opportunities for its residents.

AGRICULTURE¹⁴

Agriculture has long been a cornerstone of social and cultural life in Rio Arriba County. However, national and global consolidation in the agricultural sector has created significant challenges for small farmers and ranchers, making it increasingly difficult for them to remain competitive. Compounding these issues is the decreasing interest among younger generations in continuing the agricultural traditions of the County.

As of 2022, Rio Arriba County had 1,285 farms, marking a significant decline of 32.1% from 2012, when there were 1,892 farms. Agricultural land occupied nearly 1.4 million acres in the County, which is a 6% decrease from 2010. This trend reflects a pattern of consolidation, with fewer but larger farms. The average farm size in 2022 was 1,048 acres, a 38.4% increase compared to 2012, indicating that smaller farms are merging into larger operations. Agricultural activities still account for over one-third of the County's total land area.

The 2022 agricultural census data shows that Rio Arriba County had 987 farms managing 60,052 acres, with 829 farms working on 17,740 acres of harvested cropland—a 19.1% decrease from 2012. Additionally, the number of farms with irrigated land fell by more than 30.4%, and irrigated acreage decreased by 27% since 2012, highlighting the challenges with water availability in the region.

The economic value of land and buildings in Rio Arriba farms rose sharply to nearly \$1.8 million, over a 200% increase since 2012, with an average per-acre value of \$1,689. The market value of agricultural products sold in the County surpassed \$23 million in 2022, with crops (including nursery and greenhouse crops) accounting for

¹² Self-employed individuals operating without additional employees.

¹³ <https://quickbooks.intuit.com/r/small-business-data/self-employment-trends-2024/>

¹⁴ 2022 Census of Agriculture U.S. Department of Agriculture's National Agricultural Statistics Service



\$12.3 million—a 74% increase over 2010, largely driven by inflation. However, despite these numbers, net income for farmers in the County remains a challenge, with a collective net loss of \$3.1 million in 2022, averaging to a loss of \$2,410 per farm.

Livestock farming also faced significant declines. In 2022, there were 542 cattle farms in Rio Arriba County, a 39.3% decrease from 2010. The total number of cows and calves dropped by 31.4% over the same period, reflecting difficulties in maintaining profitability in the livestock sector due to low prices and rising costs.

The aging population of farmers, the scarcity of water, and the increasing value of land make it tempting for some to sell their properties, posing further risks to the preservation of traditional agriculture. Young people are increasingly leaving the County to seek better employment opportunities, and fewer are choosing to enter farming or ranching.

To address these challenges, Rio Arriba County can leverage support from the NMSU Agricultural Extension Service, which plays a vital role in promoting agricultural education and youth involvement through programs like 4-H clubs and agri-tourism initiatives. Encouraging the development of value-added farm and ranch products, such as using commercial kitchens to create marketable goods, is another key strategy to boost farm revenues.

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Rio Arriba County - Census of Agriculture - USDA, National Agricultural Statistics Service			
Ten Year Comparison 2022-2012	2022	2012	% Change
Farmsnumber	1,285	1892	-32.1%
Land in farmsacres	1,346,191	1,432,897	-6.1%
Average size of farm acres	1,048	757	38.4%
Estimated Market Value of Land and Buildings			
Average per farmdollars	\$ 1,769,725	\$ 548,193	222.8%
Average per acredollars	\$ 1,689	\$ 724.00	133.3%
Farms by Size:			
Farmsnumber	1,285	1,892	-32.1%
1 to 9 acres	398	757	-47.4%
10 to 49 acres	319	443	-28.0%
50 to 179 acres	218	275	-20.7%
180 to 499 acres	146	147	-0.7%
500 to 999 acres	79	112	-29.5%
1,000 acres or more	125	158	-20.9%
Lands in Farms According to Use			
Total croplandfarms	987	1,358	-27.3%
.....acres	60,052	66,760	-10.0%
Harvested croplandfarms	829	1,213	-31.7%
.....acres	17,740	21,995	-19.3%
Irrigated land Farms	870	1,250	-30.4%
Irrigated land Acres	21,304	29,199	-27.0%
Market Value of Agricultural Products Sold			
Market value of agricultural products sold	\$ 23,095,000	\$ 18,979,000	21.7%
Crops, including nursery and greenhouse crops	\$ 12,360,000	\$ 7,113,000	73.8%
Government paymentsfarms	192	275	-30.2%
	\$ 2,620,000	\$ 1,277,000	105.2%
Total income from farm-related sources farms	260	394	-34.0%
	\$ 6,194,000	\$ 3,182,000	94.7%
Net Income			
Net cash farm income of the operationsfarms	1,285	1,892	-32.1%
Net cash farm income of the operations	\$ (3,096,000)	\$ (3,389,000)	-8.6%
Average per farmdollars	\$ (2,410)	\$ (1,791)	34.6%
Livestock and Poultry			
Cattle and calves inventoryfarms	544	896	-39.3%
.....number	17,943	26,164	-31.4%
Hogs and pigs inventory farms	9	9	0.0%
.....number	34	24	41.7%
Sheep and lambs inventory farms	78	139	-43.9%
.....number	4,636	2,861	62.0%
Layers inventoryfarms	160	160	0.0%

OIL AND GAS

Rio Arriba County hosts over 11,068 oil and gas wells in the San Juan Basin, primarily located on federal and Native American lands. The County ranks fourth in New Mexico for Barrels of Oil Equivalent (BOE) production as of May 2024.¹⁵

¹⁵ Oil and Gas Revenue to the State of New Mexico Jennifer Faubion, Economist Presented to the Legislative Finance Committee June 11, 2024.

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Historically, oil and gas production in the western half of Rio Arriba County has generated substantial revenue for both the state and local governments. Between 2003 and 2007, County oil revenues nearly doubled, increasing from \$5.5 million to just over \$14 million. However, a downturn in the industry led to declining oil and gas revenues, with gross receipts falling to a low of about \$4.5 million in FY21, significantly impacting the County's budget.

Recently, there has been a positive shift, with the most recent complete fiscal year (FY23) showing gross receipts for oil, gas, and mining reaching nearly \$68 million, representing about 10% of Rio Arriba County's total gross receipts. However, this upward trend may be at risk as oil and gas prices experienced a decline in the first two quarters of 2024, which could influence future revenue stability for the County.

Rio Arriba County continues to experience limited growth in service industries related to oil and gas development, as most of these businesses are concentrated in neighboring San Juan County. Despite this, some communities in Rio Arriba, like Lindrieth, have developed primarily due to the presence of oil and gas production, which has supplemented traditional ranching activities since the 1950s. As of December 2024, the oil and gas industry in Rio Arriba County directly supported 127 jobs.

While the total number of wells and permits in the County has increased, the number of producing wells

Rio Arriba County Oil & Gas Activity Statistics				
Category	Last Year Value	Current Year Value	YoY Trend	YoY % Change
Total Wells	11,059	11,068	Up	0.08%
Total Producing Wells	7,877	7,721	Down	-2.0%
Percentage of Wells Producing	71.0%	70.0%	Down	2%
Active Producers	38	33	Down	-13%
TOAL Permits	4	30	Up	650%
Average Well Depth	5,889	5,889	Flat	0%
Average BOE per well	8	7	Down	-13%

has declined by nearly 2% (1.98%). This trend indicates a potential shift in production dynamics, which could impact future economic contributions from the oil and gas sector to the local economy.

TOURISM

Rio Arriba County holds significant potential as a tourist destination, offering some of the most unique and engaging recreational experiences in the Southwest. Although tourism is not currently a major industry in the County, it has the capacity to become one.

The County's key tourism hubs are concentrated in four communities. The largest is Chama, where the Cumbres & Toltec Scenic Railroad stands as the cornerstone of



local tourism, attracting over 50,000 riders annually. Chama also features a visitors' center and, in FY 2022 (July 2022 - June 2023), generated \$82,546 in lodger's tax revenue.

Ojo Caliente is another important destination known worldwide for its natural mineral springs, resort amenities, accommodations, and restaurant. The area's reputation as a wellness retreat draws many visitors seeking relaxation and therapeutic experiences.

Chimayó is a notable Catholic pilgrimage site, centered around El Santuario de Chimayó. This historic church is famous for "el pocito," a small pit of holy dirt believed to have healing properties. Situated on the High Road to Taos, Chimayó plays a significant role in the County's cultural and religious tourism.

Abiquiú, most famous as the home of the iconic artist Georgia O'Keeffe, is another significant draw for visitors. O'Keeffe's residence there from 1949 until her passing in 1986 has turned the area into a destination for art enthusiasts and those interested in the stunning landscapes that inspired her work.

Additionally, two Native American tribes contribute significantly to the tourism landscape in Rio Arriba County. Santa Clara Pueblo operates The Santa Claran Hotel and Casino in downtown Española, the Black Mesa Golf Club, and Puye Cliffs, a major cultural and historic site. Similarly, the Ohkay Owingeh Pueblo manages the Ohkay Hotel Casino, providing moderately priced accommodations. While tribal enterprises do not contribute to the County's gross receipts tax, they bring a steady flow of visitors who can support non-tribal businesses in surrounding communities.

As of FY 2024 (July 2023 - June 2024), Rio Arriba County's tourism-related revenue reached \$149,354, representing an 188% increase from FY 2014. This growth can be attributed to factors like an increase in the lodger's tax rate from 3% to 5%, inflation, and the addition of new lodging options within the County. These developments highlight the County's growing potential as a tourism hub, emphasizing the need to capitalize on this momentum to further boost local economic development.¹⁶

Chama and Española are the primary contributors to lodger's tax revenue in Rio Arriba County. Chama's contributions nearly match the total revenue of the entire County, while Española accounts for about half of the County's overall lodger's tax income. This revenue is crucial for funding tourism development and promotional activities

¹⁶ New Mexico Department of Finance and Administration-Local Government Division and Rio Arriba County Treasurers Office



throughout the County, helping to enhance and market its unique attractions and support economic growth.

Lodgers' Tax*			
Municipality	FY2024	FY2022	FY2014
Rio Arriba County	\$167,579	\$149,354	\$ 59,150
Chama		\$168,435	\$ 82,546
Española		\$ 79,446	\$ 62,690
Total	\$167,579	\$397,235	\$204,386

*New Mexico Department of Finance and Administration

Rio Arriba County offers some of the best hiking, fishing, and outdoor recreational opportunities in New Mexico, presenting a prime opportunity for development and promotion. With its existing attractions and natural beauty, the County has a solid foundation for becoming a vibrant tourist destination. By focusing on key tourism anchors and exploring the potential for agri-tourism and recreational tourism, the County could significantly expand its appeal to visitors. However, achieving this vision will require strategic planning, investment, and targeted marketing efforts to unlock the full potential of its tourism industry.

SHORT-TERM RENTAL MARKET

Short-term rentals (STRs) have emerged as a significant trend in the global travel and tourism industry, reshaping the way people experience destinations and providing new opportunities for homeowners and investors. Originally popularized by platforms like Airbnb, STRs have grown rapidly, offering travelers affordable and unique lodging options while creating new revenue streams for communities. For regions like Rio Arriba County, STRs present both opportunities and challenges, influencing local economies, housing markets, and community dynamics.

Rio Arriba County, known for its cultural heritage, natural beauty, and traditional land-based communities, stands at a crossroads in managing the impact of STRs. While the potential for economic growth and tourism expansion is evident, there are also concerns about the effects on housing affordability, community cohesion, and resource management. Understanding both the positive and negative implications of STRs is crucial for developing policies that balance economic benefits with the preservation of the County's unique character and the well-being of its residents.

Rio Arriba County has implemented regulations for short-term rentals (STRs) that require property owners to register their rentals, obtain a business license, and pay a 5% lodgers' tax in addition to the gross receipts tax. In nearby Santa Fe County, new regulations have been put in place to limit non-owner-occupied STRs to between 3%



and 7% of the housing stock in specific communities, aiming to maintain the local character while accommodating vacation rental demand. Given Rio Arriba County's housing shortage and its proximity to Santa Fe, managing the impact of short-term rentals on the local housing market has become a growing priority.

Potential Positive Impacts

Economic Benefits: Short-term rentals (STRs) have the potential to boost Rio Arriba County's economy by generating income for property owners and creating additional revenue streams for local businesses. The income from STRs supports ancillary services like cleaning, maintenance, and hospitality, and contributes to the growth of the tourism sector.

Tourism Growth: STRs offer a variety of lodging options for visitors seeking unique and budget-friendly accommodations, which can enhance the County's appeal as a tourist destination. This is especially beneficial in areas like Rio Arriba County, where traditional lodging options are very limited and cultural attractions and natural beauty draw visitors looking for authentic experiences.

Support for Local Culture: With the rise of themed and unique rentals, such as adobe-style homes or historic properties, STRs in Rio Arriba County can highlight and monetize the area's rich cultural heritage. This approach helps to preserve local traditions and attract visitors interested in the County's history and artistic influences.

Remote Work Opportunities: The increase in remote work has led to longer stays in STRs, providing a steady influx of visitors who contribute to the local economy year-round. Rio Arriba County can capitalize on this trend by catering to remote workers seeking a peaceful and scenic environment for extended stays.

Potential Negative Impacts

Housing Affordability and Availability: Non-owner-occupied STRs can reduce the availability of long-term rental housing, driving up property prices and making it more difficult for residents to find affordable homes. In Rio Arriba County, this could exacerbate existing housing challenges and push lower-income families out of their communities.

Community Disruption: STRs in residential areas may lead to disruptions in local neighborhoods, including issues related to noise, parking, waste management, and increased traffic. This can strain community resources and diminish the quality of life for permanent residents.



Impact on Traditional Communities: In Rio Arriba County, where many communities have deep-rooted cultural traditions, the influx of transient visitors through STRs could potentially dilute the cultural fabric and sense of community, leading to concerns about preserving the County's identity.

Regulatory and Compliance Challenges: Ensuring that STR owners comply with local regulations can be a challenge for Rio Arriba County. The cost of monitoring and enforcing regulations, such as safety standards, tax collection, and permit compliance, could place additional burdens on the County's resources.

Environmental Concerns: Increased short-term rental activity can contribute to environmental issues, including higher water usage, waste generation, and pressure on natural resources. These effects may be particularly concerning for Rio Arriba County, where water and land preservation are critical to the community's well-being.

Balancing these positive and negative impacts will be crucial for Rio Arriba County as it develops strategies to manage and regulate the short-term rental market in a way that maximizes economic benefits while protecting the interests of local residents and preserving the County's unique character.

FILM

The film industry in Rio Arriba County has significant potential for growth, supported by several key factors. By focusing on developing local vendors and film workers through targeted communication and training programs, the County can generate new jobs and stimulate local businesses. New Mexico's competitive tax incentives, offering rebates of up to 25-35%, continue to attract filmmakers and production studios to the region. The state is committed to the industry's expansion through investments in workforce development, infrastructure, and efforts to streamline incentive applications.

Major studios like Netflix and NBCUniversal have already established production hubs in New Mexico, which increases confidence in the region's ability to support large-scale projects. Training programs at local universities are building a skilled workforce, which Rio Arriba County can leverage to position itself as an attractive destination for film productions. The adoption of new technologies, such as virtual production and AI, is making the filming process more efficient and flexible, further enhancing New Mexico's appeal to the film industry.

However, the rise of AI technology also presents challenges, such as the potential to replace traditional location shooting with virtual sets. This trend is a concern for the



state's film office, which is closely monitoring AI's impact on the demand for real-world filming locations. It will be essential for Rio Arriba County to address these challenges by staying adaptive and ensuring that its natural landscapes remain competitive and appealing to filmmakers.

Rio Arriba County has a unique opportunity to become a key player in New Mexico's growing film landscape. Streamlining the permitting process and expediting approvals will be crucial to attracting filmmakers. Training County staff to understand the film industry's specific needs can improve communication and efficiency, creating a more supportive environment for productions. Recognizing that the film industry is fundamentally a business, the County should focus on cost-effectiveness to attract more projects and maximize economic benefits. This combination of proactive strategies and knowledgeable personnel could significantly boost local film production and contribute to sustainable economic growth in the region.

CANNABIS

The legalization of cannabis in New Mexico has opened significant economic opportunities statewide. For Rio Arriba County, this emerging industry offers potential for job creation, increased tax revenues, and stimulation of ancillary businesses. To fully harness these benefits, the county must implement strategic policies that balance economic growth with public health, safety, and environmental sustainability, particularly concerning water resources.

Statewide Economic Impact of Cannabis Legalization

Since the commencement of adult-use cannabis sales in April 2022, New Mexico's cannabis market has experienced rapid growth. By March 2024, combined medical and recreational cannabis sales surpassed \$1 billion, with adult-use sales contributing over \$678 million. This burgeoning market has generated substantial tax revenues, with more than \$75 million collected in cannabis excise taxes, benefiting both the state general fund and local communities.¹⁷

Local Economic Opportunities in Rio Arriba County

Rio Arriba County stands to gain from the expanding cannabis industry through several avenues:

¹⁷ <https://hightimes.com/news/legal-weed-sales-in-new-mexico-top-1-billion/>



Agricultural Development: The county's agricultural sector can diversify by incorporating cannabis cultivation, potentially increasing farm incomes and promoting sustainable farming practices.

Establishment of Dispensaries: Opening cannabis dispensaries can stimulate local economies by creating retail jobs and attracting consumers, including tourists from neighboring regions where cannabis remains illegal.

Support for Ancillary Businesses: The cannabis industry can stimulate growth in related sectors such as transportation, security, and real estate, further diversifying the county's economic base.

Policy Framework and Regulation

To effectively integrate the cannabis industry into the county's economic development strategy, Rio Arriba County has enacted specific regulations:

Commercial Cannabis Ordinance: Adopted in 2022, this ordinance aims to regulate the commercial cannabis industry, encouraging economic growth and job creation while safeguarding public health and safety.¹⁸

Zoning and Land Use: The county has established zoning regulations to manage the location and operation of cannabis-related businesses, ensuring compatibility with community standards and minimizing potential adverse impacts.¹⁹

Water Rights and Usage

Given the arid climate of New Mexico, water rights, availability, usage, and cleanliness are critical considerations for cannabis cultivation:

Legal Water Rights: Cannabis producers must demonstrate a legal right to a commercial water supply sufficient to meet their operational needs. This can be evidenced by documentation from the Office of the State Engineer (OSE) of a valid water right or a letter from a water provider confirming compliance with their rules.²⁰

Prohibition on Domestic Wells: Using water from domestic wells for commercial cannabis cultivation is prohibited. Producers must acquire valid irrigation rights for outdoor cultivation or commercial water rights for indoor cultivation.²¹

¹⁸ https://www.ri-arriba.org/pdf/departments_and_divisions/planning_and_zoning/cannabis_ordinance__passed_3/29/22.pdf

¹⁹ https://www.ri-arriba.org/departments_and_divisions/planning_and_zoning/codes_and_ordinances.html

²⁰ <https://www.ose.nm.gov/WR/cannabis.php>

²¹ https://www.ose.nm.gov/WR/documents/OSE%20Cannabis%20FAQ_v9_021822.pdf



Acequia Water Rights: Transfers of water rights from acequia systems may be subject to bylaws that limit or prohibit such transfers. Producers should consult with the relevant acequia commission before acquiring these rights.²²

Challenges and Considerations

While the cannabis industry offers economic benefits, several challenges must be addressed:

Federal Enforcement Actions: Despite state legalization, federal agencies have conducted enforcement actions against state-licensed cannabis businesses, leading to significant financial losses and creating uncertainty within the industry.²³

Public Health and Safety: The county must implement measures to prevent underage use, impaired driving, and other public health concerns associated with increased cannabis availability.

Water Resource Management: Ensuring that cannabis cultivation does not strain local water resources is crucial, given the region's limited water availability.

Market Saturation and Competition: As more businesses enter the market, competition intensifies, potentially leading to market saturation and economic instability for smaller operators.

Strategic Recommendations

To maximize the economic benefits of cannabis legalization while mitigating associated risks, Rio Arriba County should consider the following strategies:

Support for Local Entrepreneurs: Provide resources and training to assist local residents in entering the cannabis industry, with a focus on communities disproportionately affected by previous cannabis prohibitions.

Collaboration with State Agencies: Work closely with the New Mexico Cannabis Control Division and the Cannabis Regulatory Advisory Committee to ensure local regulations align with state policies and to advocate for the county's interests.

Public Education Campaigns: Develop programs to educate the community about responsible cannabis use, legal implications, and health risks to promote public safety and awareness.

²² https://www.ose.nm.gov/WR/documents/OSE%20Cannabis%20FAQ_v9_021822.pdf

²³ <https://www.politico.com/news/2024/05/01/federal-crackdown-new-mexico-weed-farmers-00155624>



Monitoring and Evaluation: Establish systems to monitor the economic and social impacts of the cannabis industry within the county, allowing for data-driven policy adjustments as needed.

Additional Policy Recommendations

To further regulate the cannabis industry effectively, Rio Arriba County should implement the following specific regulations:

Licensing and Permitting: Develop a comprehensive licensing system for all cannabis-related businesses, ensuring alignment with state regulations and addressing community-specific concerns.²⁴

Buffer Zones: Establish buffer zones to maintain a minimum distance between cannabis establishments and sensitive locations such as schools and daycare centers, as permitted by state law.

Operational Standards: Enforce strict security measures, odor control protocols, and environmental sustainability practices to ensure public safety and minimize environmental impacts.

Health and Safety Regulations: Mandate rigorous product testing, clear labeling, and employee training programs to uphold high health and safety standards.

Community Engagement: Create channels for residents to provide feedback on local cannabis operations, ensuring community involvement in the regulatory process.

The legalization of cannabis presents Rio Arriba County with significant economic development opportunities. By implementing thoughtful policies and proactive strategies, the county can cultivate a thriving cannabis industry that contributes to economic growth, job creation, and community well-being, while effectively addressing public health, safety, and environmental concerns, particularly regarding water resources.

²⁴ <https://www.rld.nm.gov/cannabis/laws-rules-regulations/>



ECONOMIC DEVELOPMENT INITIATIVES/CHALLENGES

Initiatives

In 2017, Rio Arriba County hired a private consultant to conduct an audit of the local oil and gas industry. This audit focused on ensuring that companies were accurately paying the ad valorem tax, which is based on the value of resources produced and the equipment used in oil and gas operations. The audit uncovered significant underpayments by some companies, highlighting an ongoing challenge for the County to ensure that businesses contribute their fair share of taxes to maximize revenue from these resources.

Addressing substance abuse remains a critical focus for the County. In 2019, the former Economic Development Director, Chris Madris, collaborated with the North Central New Mexico Economic District to secure a \$6 million grant for a drug rehabilitation center, converting an abandoned nursing home into a facility called "Darrin's Place." The Governor's office contributed an additional \$1 million to purchase the building. Now operational, the 104-bed facility generates about \$240,000 annually in lease payments to the County and provides 60 full-time jobs. Despite its success, some community members initially opposed the center's location due to its proximity to a school. Although the facility primarily serves patients from outside the area, there is a commitment to prioritize local residents, though this approach has faced some contention.

Challenges

Rio Arriba County faces several hurdles in building a robust economy. The County struggles with an aging and shrinking workforce, as many young residents leave in search of educational and better job opportunities. Additionally, a lack of infrastructure, including internet, sewer, water, and communication systems, poses a significant barrier to economic development.

Currently, the Economic Development Director is engaged in various initiatives, including securing grants for emergency communication equipment for the fire department, funding additional hazmat units, and supporting a \$9 million request for a new recreation center. The office is also involved in preparing the Infrastructure Capital Improvement Plan (ICIP) and pursuing grants for community projects, such as cemetery development in Alcalde, a park in Tierra Amarilla, and an AARP grant to employ low-income seniors for County projects.

One critical initiative is the further development of the Empowerment Center, located in the historic WPA-era Old Junior High building, purchased in 2019 with a \$1 million



grant from the Economic Development Administration (EDA). This facility will serve as a business hub, house the nation's first lowrider museum, and include a kitchen for hosting events, enhancing its role as a community and economic center.

Additionally, the County is implementing a grant to install five electric vehicle charging stations. These stations, located in Chama, Tierra Amarilla, the Empowerment Center, Archive Center Annex, and Española, require phase three power, which limits their placement but supports the County's push for sustainable development.

To manage these diverse projects more effectively, the County has recently hired a dedicated project manager. This addition aims to alleviate some of the workload from the Economic Development Director, allowing for a more focused effort on long-term economic strategies and growth initiatives for Rio Arriba County.

DRAFT



**ECONOMIC DEVELOPMENT GOALS &
STRATEGIES**

DRAFT



County-Led Strategies are initiatives where the County takes responsibility for leading efforts, allocating resources, and ensuring successful implementation. These strategies reflect the County's leadership role in addressing critical needs, from developing infrastructure to implementing programs.

County-Supported Strategies are initiatives led by external organizations, community groups, or other governmental entities, where the County plays a supporting role. In these efforts, the County may provide resources, advocacy, or technical assistance to help achieve shared objectives, while leadership and execution are carried out by partner entities.

Goal 1: Support and Strengthen Local Arts, Culture, and Creative Economies

County-Led Strategies:

- Incentivize the use of existing community facilities for programs focusing on local food, fiber, and cultural customs.
- Promote local studio tours and farm tours through County-supported marketing and coordination.
- Designate a County Film Liaison to streamline permitting processes and maintain a directory of local talent and resources for film productions.

County-Supported Strategies:

- Collaborate with the Regional Development Corporation (RDC) and other organizations to identify the needs of arts and culture businesses and assist with funding opportunities.
- Work with the New Mexico Arts Council to support performing and visual arts initiatives.
- Partner with local organizations to develop artisan-based economic projects.

Goal 2: Enhance and Sustain Agricultural Economies

County-Led Strategies:

- Collaborate with the Food Hub Initiative and the Rio Arriba Food and Agriculture Policy Council to assess the County's agricultural economy.
- Support the creation of Community-Supported Agriculture (CSA) organizations and promote their use by schools, hospitals, and senior centers.



- Develop and expand farmers' markets, cold storage infrastructure, and processing facilities.

County-Supported Strategies:

- Work with NMSU Cooperative Extension Service and USDA to provide technical assistance and resources for sustainable agricultural practices.
- Partner with food hubs and councils to develop policies encouraging value-added products and niche markets like organic foods, cannabis, and aquaculture.
- Advocate for expanded access to federal grazing leases to preserve traditional ranching practices.
- Support the Food Hub Initiative and the County Food and Agriculture Policy Council in assessing the County's agricultural economy, including producers and consumers at both individual and institutional levels.
- Support the establishment of Community-Supported Agriculture (CSA) organizations in collaboration with the Sustainable Agriculture Center in Alcalde.
- Support local organizations, including schools, hospitals, and senior centers, in utilizing CSAs.

Goal 3: Expand Workforce and Professional Development Opportunities

County-Led Strategies:

- Partner with Northern New Mexico College (NNMC) and LANL to create tailored workforce training programs for local industries.
- Improve broadband infrastructure to enable remote work opportunities, especially in rural areas.
- Implement youth summer employment programs and job initiatives for seniors.

County-Supported Strategies:

- Support scholarships, internships, and apprenticeships in collaboration with regional employers.
- Work with regional agencies to align professional development programs with local industry needs.
- Launch initiatives to retain local talent and prevent workforce migration.



- Collaborate with regional agencies, including LANL, SCORE, the New Mexico Department of Workforce Solutions, and other economic development organizations, to inventory and offer professional development opportunities in the County, including both degree and non-degree courses.
-

Goal 4: Improve Healthcare Workforce and Services

County-Led Strategies:

- Develop County Capacity to provide and bill for Medicaid and Medicare services, as well as explore other innovative funding sources.
- Continue utilizing the RACHC Health Profile as a freestanding health planning tool.

County-Supported Strategies:

- Partner with Española Presbyterian Hospital to meet the needs of an aging population and increase Medicare market share.
 - Collaborate with the Rio Arriba Community Health Council to develop a long-term healthcare strategy.
-

Goal 5: Promote Local Goods and Small Business Development

County-Led Strategies:

- Create and maintain a "Rio Arriba First" directory of local businesses and integrate it into community and County websites.
- Advocate for buy-local campaigns and procurement reforms to prioritize local goods and services.
- Develop business incubators in key community nodes to support start-ups and home-based businesses.

County-Supported Strategies:

- Partner with chambers of commerce and non-profits to provide training and certification for small enterprises.
 - Encourage the development of home-based enterprises through partnerships with local and federal agencies.
-



Goal 6: Develop a Comprehensive Tourism Program

County-Led Strategies:

- Create a County-wide tourism plan with strategies promoting outdoor recreation, cultural heritage, and agri-tourism.
- Oversee the development of hiking, biking, and equestrian trails, and create a comprehensive recreation map.
- Implement policies to regulate short-term rentals, balancing tourism with local housing needs.

County-Supported Strategies:

- Collaborate with the New Mexico Tourism Department and regional organizations to promote cultural and historical tourism.
- Work with local tribes to enhance tourism infrastructure and create authentic visitor experiences.

Goal 7: Strengthen Infrastructure to Support Economic Development

County-Led Strategies:

- Enhance broadband and wireless connectivity, particularly in rural areas.
- Establish tax districts to fund historic preservation and redevelopment projects.

County-Supported Strategies:

- Advocate for state and federal funding to support infrastructure projects that align with economic growth goals.



HOUSING

DRAFT



Rio Arriba County has a pressing need for housing that:

1. Promotes and maintains safety.
2. Provides diverse housing options to attract new and accommodate existing residents.
3. Offers affordability for young residents and those with limited incomes.

However, meeting these needs is difficult due to high inflation and limited well-paying jobs. Failure to address these challenges may lead to a continued loss of residents, particularly the young and educated, while wealthier retirees and developers from outside the area could purchase homes, reducing availability for locals. The County can tackle these issues with strategies like zoning ordinances, subdivision regulations, and nuisance abatement programs aimed at fostering positive residential growth.

The County's roughly 80 residential communities have diverse needs. For example, remote areas like Lindrith and Las Tablas have limited access to essential services, while communities such as Alcalde, Hernandez, and Chimayo have closer proximity to Española's shopping and medical facilities.

There are approximately 16,122 occupied housing units in the County, with a homeownership rate of 79%, which is higher than the state's 74.2%. This rate has slightly decreased since 2000, when it was 81.6%. Rental units make up 21% of the housing stock, compared to 25.8% statewide. The average household size has remained consistent at 2.8 people, which is higher than the state average of 2.4 people per household.²⁵

Approximately 38.0% of single-family homes in Rio Arriba County are manufactured or mobile homes, compared to the state average of 14.7%. About 7.6% of all housing units in the County are 85 years old or older, down from 11.9% in 2013. This decline suggests that older homes have become uninhabitable, reducing the overall housing stock. Additionally, 2.5% of homes are reported to lack complete plumbing facilities, with many of these likely being older homes.

Around 5.8% of homes are heated with propane, a significant decrease from 2013, when 17.5% relied on propane, suggesting greater access to natural gas. In the past decade, progress has been made regarding homes with complete kitchen facilities and phone service. Less than 1.0% (0.5%) of homes now lack complete kitchen

²⁵ 2022 American Community Survey United States Census

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



facilities, down from 2.0% in 2013. Meanwhile, 3.0% of homes in the County do not have telephone service, down from nearly 5.0% in 2013.

Rio Arriba County Housing Characteristics 2024				
Statistic	Rio Arriba County 2022	New Mexico 2022	Rio Arriba County 2013	New Mexico 2013
Number of Housing Units	19,545	956,743	19,559	905,134
Number of Occupied Units	16,122	848,218	14,959	753,507
Vacant Housing Units	3,423	108,525	4,600	151,627
Average Household Size	2.8%	2.4%	2.7%	2.6%
Housing Tenure				
Owner-Occuoid	78.9%	74.2%	79.0%	69.0%
Renter-Occupied	21.1%	25.8%	21.0%	31.1%
Median Gross Rent	\$ 955	N/A	\$ 783 (2015)	N/A
Housing Types				
Single Family Detached	58.3%	66.7%	57.5%	64.7%
Single Family Attached	0.9%	3.5%	1.5%	3.7%
Mobile Home	38.0%	14.7%	37.7%	16.6%
Units Buily in 1939 or earlier	7.6%	3.7%	11.9%	5.5%
House Heating Fuel				
Utility Gas	52.5%	62.8%	55.4%	67.5%
Bittled,tank or LP gas	5.8%	7.1%	17.5%	9.6%
Wood	17.8%	7.5%	18.3%	6.6%
Solar	0.6%	N/A	N/A	N/A
Electricity	7.4%	21.9%	6.4%	12.8%
Selected Characteristics				
Lacking complete plumbing fixtures	2.5%	0.9%	2.6%	1.3%
Lacking complete kitchen facilities	0.5%	0.8%	2.0%	1.3%
No Telephone Service	3.0%	1.4%	4.7%	4.7%
Occupants per Room				
1 or less	91.7%	97.6%	96.6%	92.5%
1 to 1.5	1.4%	1.5%	2.4%	2.9%
1.51 Or more	0.3%	0.9%	1.0%	1.4%
Median Home Value	\$ 212,700	\$ 274,500	\$ 125,800	\$ 161,500



AFFORDABILITY

The lack of affordable housing inventory for sale, significant rent increases, and aging housing stock have contributed to the housing challenges in Rio Arriba County. The County has an aging population, which further compounds the issues related to its older housing stock. The median income in Rio Arriba County is \$52,031, while the median income in Española is significantly lower at \$44,427. According to the Department of Housing and Urban Development, Rio Arriba County's income limit for a low-income, three-person household is \$46,500, which is 7.5% lower than New Mexico's average of \$50,259 for qualifying for federal assistance.

The poverty rate in Rio Arriba County is 22.3%, and the median income is \$46,994. New Mexico has a higher percentage of senior households compared to the U.S. (34.2% vs. 31.3%). In Rio Arriba County, 38.2% of households include seniors, defined as households with one or more members aged 65 years or older.

New Mexico's homeownership rate is 67.6%, higher than the U.S. average of 63.8%. Rio Arriba County's homeownership rate is 77.8%, with 22.2% of households being renters. Many families in Rio Arriba County own land but may lack the resources to build a home, making manufactured housing an affordable and convenient option. Mobile homes make up 38.0% of the housing in the County. However, the prevalence of manufactured homes has contributed to issues related to sewer and water contamination.

Rio Arriba County Housing Affordability		
Homeowners	Rio Arriba County 2023	Rio Arriba County 2013
Median Mortgage	\$ 1,409.00	\$ 1,117.00
Renters	Rio Arriba County 2023	Rio Arriba County 2013
Median Rent	\$ 704.00	\$ 655.00
Owner Occupied Unit Values	% of units	
Less than \$50k	3.6%	5.9%
\$50k-99k	5.3%	12.1%
\$100k-299,999k	47.8%	64.4%
\$300k-499,999k	30.8%	12.0%
\$500k-749,999k	7.8%	5.7%
\$750k-999,999k	2.9%	
\$1,000,000 or more	1.9%	



The U.S. Department of Housing and Urban Development (HUD) defines housing as affordable if costs do not exceed 30% of household income, although this standard varies depending on income level. Wealthier households may spend more than 30% of their income on housing and still afford other expenses, while lower-income households may struggle to find housing priced at 30% or even 50% of their income. Renters typically have much lower incomes than homeowners, and the percentage of renters who can afford a median-priced home is a key measure of affordability. According to the New Mexico Mortgage Finance Authority (MFA), only 14.1% of renter households in Rio Arriba County can afford to purchase a median-priced home, and this estimate does not account for those who may qualify for a loan. Approximately one-third of owner-occupied homes in Rio Arriba County carry a mortgage. Homeownership affordability has declined significantly in recent years due to a doubling of mortgage interest rates and persistently high home prices, which are driven by limited housing inventory.²⁶

HOMEOWNERSHIP

There are just over 19,545 housing units in Rio Arriba County, with 4,574 located in Española. The majority are single-family homes, 38.0% of which are manufactured housing. Over 65.0% of the housing stock is more than 30 years old. The U.S. Census also reports that over 17.0% of housing units are more than 75 years old and likely in need of rehabilitation, repair, and energy efficiency improvements. Homeownership (owner-occupied) in Rio Arriba County is just under 80.0%, higher than the national average of 74.2%. Both the city and the County exhibit high rates of vacant housing, with 3,423 vacant units in Rio Arriba County. Many of these older properties are likely in need of repair and updating.

It is assumed that the high number of vacant homes may be due to the lower cost of purchasing a used manufactured home compared to repairing or adding to an older site-built home, leaving the old home vacant. Financing homes or obtaining improvement loans has been challenging in both the city and the County, and mortgage financing may be the main obstacle for potential homeowners. Nearly 40.0% of renter households are "cost burdened," paying more than 30.0% of their gross income on rent. Although the overall rental vacancy rate in the Española area is high at 10.6%, the vacancy rate in subsidized rental projects is very low, under 4.0%, indicating a high demand and a need for new affordable rental housing development, according to the County City Housing Plan.

²⁶ United States Department of Housing and Urban Development



RIO ARRIBA HOUSING AUTHORITY²⁷

The Public Housing Program was created to ensure secure, safe, clean, and affordable housing for all eligible low-income families without discrimination. One of the major challenges the program faces, especially post-COVID, is the rising rent rates, which affect the affordability of housing even within subsidized programs. The Rio Arriba County Public Housing Authority operates 29 units in Tierra Amarilla, NM, and 25 units in Ojo Caliente, NM. Both locations offer homes with 1 to 5 bedrooms, including handicap-accessible units, to accommodate various family needs.

The Rio Arriba Housing Choice Voucher Program (Section 8 Program) offers rental assistance to low-income families, allowing them to choose their own rental homes within Rio Arriba County. After living in the County for one year, participants have the option to relocate and use their voucher anywhere in the U.S. or its territories, provided there is a housing authority with a Section 8 program. The program currently supports 25 families in Rio Arriba County, including areas such as Tierra Amarilla and Ojo Caliente, and continues to manage the voucher system.

The Housing Authority Director emphasized an ongoing and critical need for housing, particularly for seniors, larger families, and homeless individuals. However, the Director noted that the Housing Authority operates under federal funding limitations, which restrict their ability to provide housing for individuals with felony convictions. This constraint significantly impacts the Authority's capacity to meet the full scope of the housing demand within the community.

To address both housing and broader community needs, the Housing Authority is engaged in multiple collaborations. The Director is working with the Rio Arriba County Health and Human Services to secure funds and grants for housing projects. Additionally, the Authority is partnering with the Truth or Consequences and Santa Fe County Housing Authorities. These efforts focus on promoting residential density, managing properties in disrepair, and addressing condemned homes. A joint proposal from Rio Arriba County and its regional partners (Los Alamos and Sandoval counties) aims to build 49 affordable housing complexes and 16 transitional units for low-income and justice-involved populations. The goal is to close gaps in affordable housing and remove barriers for those transitioning from the justice system.

²⁷ Rio Arriba County Website



HOUSING GOALS & STRATEGIES

DRAFT



County-Led Strategies are initiatives where the County takes responsibility for leading efforts, allocating resources, and ensuring successful implementation. These strategies reflect the County's leadership role in addressing critical needs, from developing infrastructure to implementing programs.

County-Supported Strategies are initiatives led by external organizations, community groups, or other governmental entities, where the County plays a supporting role. In these efforts, the County may provide resources, advocacy, or technical assistance to help achieve shared objectives, while leadership and execution are carried out by partner entities.

Goal 1: Expand Affordable Housing Options for Low-Income Families and Workforce

County-Led Strategies:

- Develop partnerships with public and private entities to construct affordable housing units that also generate local employment opportunities.
- Incentivize the construction of affordable rental housing, focusing on areas affected by LANL's workforce expansion.
- Adopt and implement an Affordable Housing Plan to guide funding and development priorities.

County-Supported Strategies:

- Partner with organizations like the New Mexico Mortgage Finance Authority and Habitat for Humanity to educate first-time homebuyers on budgeting, maintenance, and homeownership preparation.
- Collaborate with local businesses and institutions to create workforce housing solutions for employees.

Goal 2: Promote Clustered, Higher-Density, and Infill Developments

County-Led Strategies:

- Develop incentives such as density bonuses and reduced fees to encourage clustered and infill developments in areas with adequate infrastructure.
- Support the rehabilitation of existing housing stock as part of infill development efforts.



County-Supported Strategies:

- Advocate for infrastructure improvements in targeted development areas to support higher-density housing.
-

Goal 3: Support Housing Diversity and Affordable Homeownership

County-Led Strategies:

- Conduct a County-wide housing assessment to evaluate availability, affordability, and needs for various housing types, including workforce, senior, low-income, multi-family, and special needs housing.
- Permit alternative housing options, such as tiny homes, to diversify housing availability.

County-Supported Strategies:

- Support advocacy organizations lobbying for legislation to make home buying and rehabilitation more affordable.
 - Collaborate with regional housing authorities to develop new affordable housing projects.
 - Establish a Community Housing Development Organization (CHDO) and/or Community Land Trusts to expand affordable housing options.
-

Goal 4: Protect and Restore Traditional Housing

County-Led Strategies:

- Promote the restoration of existing homes for use as rentals or family-owned residences to preserve the County's architectural heritage.

County-Supported Strategies:

- Provide technical assistance and incentives to support restoration efforts over demolition.
-



Goal 5: Increase Housing Options for Seniors and the Elderly

County-Led Strategies:

- Support the development of independent living facilities tailored for seniors capable of managing daily activities.
- Encourage mixed-use developments that integrate senior housing with essential services like healthcare, recreation, and shopping.

County-Supported Strategies:

- Collaborate with local healthcare providers to ensure these developments include access to medical services.
-

Goal 6: Address Homelessness Through Shelter and Transitional Housing Initiatives

County-Led Strategies:

- Develop transitional housing programs with case management services to support homeless individuals in achieving long-term stability.

County-Supported Strategies:

- Partner with organizations to establish sober-living facilities and treatment centers.
-

Goal 7: Mitigate the Impact of Short-Term Rentals on Housing Availability

County-Led Strategies:

- Implement regulations for short-term rental properties to balance tourism demands with local housing needs.

County-Supported Strategies:

- Monitor the effects of short-term rentals on housing affordability and availability, adjusting policies as needed.
-



Goal 8: Support Sustainable Housing Development Practices

County-Led Strategies:

- Promote the use of green building practices and energy-efficient manufactured homes in new housing developments.

County-Supported Strategies:

- Advocate for state and federal incentives that encourage environmentally friendly housing construction.

Goal 9: Engage Stakeholders in Workforce Housing Development

County-Led Strategies:

- Build stronger partnerships with LANL and other stakeholders to align housing initiatives with growing workforce demands.

County-Supported Strategies:

- Explore opportunities for LANL to support affordable housing infrastructure and investments.

DRAFT



COMMUNITY FACILITIES & INFRASTRUCTURE

DRAFT



Rio Arriba County is a rural area with a population of 39,876 as of the July 2023 U.S. Census Estimate. The only incorporated city is Española, with a population of 10,526 according to the Census. The remaining 29,500 residents live in small rural communities, mostly situated along the County's irrigable river valleys. Due to this dispersed population, the County has a limited number of concentrated water and sewer systems. Similarly, access to utilities like electricity, gas, telephone, and internet services is affected by the low population density and proximity to more urbanized areas.

WATER

The New Mexico State Engineer's Office manages 116 registered water systems in Rio Arriba County, categorized into 45 Community Systems, 16 Non-Community Systems, 46 Non-Public Systems, and 9 Non-Transient Non-Community Systems. Most of these systems rely on groundwater, with only five utilizing surface water sources. The scale of these systems varies significantly, from larger providers like the City of Española, which serves over 10,000 residents, to smaller systems such as the Plaza Blanca Water System, which serves only 25 people.

The County also includes 16 non-community systems, such as those at Abiquiu Dam and El Vado Lake, and 46 non-public systems that typically serve institutions like schools and utilities. Additionally, nine non-transient non-community systems cater to facilities such as schools and detention centers. While many residents depend on private wells for their water supply, shared wells are more common in densely populated areas like Chamita and Hernandez.

Mutual Domestic Water Consumers Associations (MDWCAs) are essential for managing water resources in rural and low-income areas of the County. Established under the Sanitary Projects Act, these organizations address historical public health concerns by providing safer water solutions and access to infrastructure funding. However, they must adhere to state regulations, including mandatory reporting and auditing, to maintain compliance.

Rio Arriba County currently faces significant challenges in water management, including outdated water plans, overestimated water needs, and a lack of reservoir infrastructure. Proposed solutions, such as increasing groundwater use and developing supplemental wells, require extensive collaboration and time to implement. Updating the County's 40-year water plan is critical, as there are noticeable funding and development disparities across different regions of the County.



Water banking, a strategy that involves better management and allocation of water resources, has also been discussed as a potential approach to address these challenges. This highlights the need for improved water resource management to support the County's sustainable development and meet the needs of its residents more effectively.

Regional Water Systems

Since the 1940s, public water systems have been developed in many traditional communities across Rio Arriba County. Recently, several community systems, such as El Rito Regional Water System, Agua Sana Water Users Association, Alcalde MDWCA, and Greater Chimayo MDWCA, have regionalized to improve economies of scale and extend service to new residents. The trend of residential development on non-irrigated land in the County's southern area helps protect agricultural lands and traditions. Ensuring sustainable growth requires safe drinking water, fire protection, and wastewater treatment systems.

The headwaters of the Chama River in northern Rio Arriba County provide water to Santa Fe and Albuquerque. Abiquiu Dam, located 31 miles northwest of Española, is a significant structure built by the U.S. Army Corps of Engineers, holding 1,369,000 acre-feet of water. It serves flood control, irrigation, municipal water storage, and hydroelectric generation, alongside recreational activities like fishing, boating, and camping. Similarly, El Vado Dam, completed in 1935, forms El Vado Lake, a reservoir part of the Middle Rio Grande Project. The San Juan-Chama Project added a diversion from the San Juan River basin to supplement the water supply, providing irrigation in the Middle Rio Grande Basin. Heron Lake, upstream from El Vado Lake, stores water transferred from the San Juan River through the Azotea Tunnel, offering recreational activities and contributing to the region's water supply.

Navajo Dam, located in the northwest corner of Rio Arriba County, is part of the Colorado River Storage Project and forms Navajo Lake, a popular recreational destination known for fishing, boating, and camping. It also contributes to water management and storage across the upper Colorado River Basin.

A key challenge facing the County's jurisdictional water systems is the reliance on aging volunteers, making it difficult to recruit younger residents for critical roles. Ideally, water testing should be handled by a paid position to ensure regular, timely testing and the safety of the drinking water across all systems. This would help address concerns related to hazardous waste and drinking water quality in the County's water systems.



New Mexico Climate Review²⁸

The New Mexico State Engineers Office is Currently working on a 40-year water plan. The following is an excerpt from the on-going report that predicts the impact of climate change on New Mexico (Leap Ahead).

“The Leap Ahead projects estimates of a statewide increase in temperature of 5° to 7° F and reductions in available water of about 5% per decade, resulting in 25% less water in rivers over the course of the 50-year study period. A vital message of The Leap Ahead is that “[t]his is not the climate in which New Mexico water use and management developed, and status quo management is not an option.” This statement also applies to New Mexico’s water infrastructure. The effects of climate change on water quality are understudied compared to the effects on the quantity of supply, according to The Leap Ahead. Surface water quality may be negatively affected by decreased surface water flow, increases in water temperature, E. coli concentration, post wildfire runoff, and decreases in dissolved oxygen. These anticipated impacts will be driven by nonpoint sources, which make them more difficult to manage. Groundwater quality impacts are even less understood. Potential effects include localized increases in total dissolved solids and salinity in shallow aquifers due to increased evaporation of surface sources of recharge. Increased temperatures may also increase microbial activity, leading to the leaching of metals into the aquifer.”

TRADITIONAL ACEQUIA INFRASTRUCTURE

Rio Arriba County is home to acequia systems, developed by early settlers, which serve as vital water distribution networks. These systems, considered governmental units, manage the allocation of irrigation water to support local agriculture. Acequias form the backbone of settlement and agricultural development throughout the County. Over 200 acequia systems span the river valleys, playing an essential role in sustaining both farming communities and the broader ecosystem. Diversion dams are a key feature of this infrastructure, ensuring the flow of water to different areas.

WASTEWATER

The Sanitary Projects Act aims to enhance public health in rural New Mexico communities by establishing political subdivisions responsible for managing and maintaining wastewater facilities for the public good. In Rio Arriba County, there are four such systems located in Abiquiu, Chama, Cordova, and Truchas. The City of Española and the Village of Chama operate larger municipal systems. Most County

²⁸ New Mexico State Water Plan 5-Year Review New Mexico Office of the State Engineer Interstate Stream Commission NMSA § 72-14-3.1 (2003) 2023.



residences rely on individual septic systems. The New Mexico Environment Department, established by the 40th State Legislature in 1991, oversees the management of waste, including its generation, transportation, and disposal across the state.

Ohkay Owingeh, located in Rio Arriba County, is in the process of upgrading its wastewater treatment plant. In 2021, the pueblo secured funding for this project through a combination of financial support from the U.S. Department of Agriculture, receiving a \$1.5 million grant and a \$610,000 loan. These funds will be used to build a new wastewater treatment facility, enhancing the community's infrastructure and improving environmental management in the area.

ENERGY

Natural gas in Rio Arriba County is supplied by the New Mexico Gas Company, but service is only available in specific developed areas of the County. The map to the left of the company's service territory highlights the major gas transmission lines within Rio Arriba County. However, access to natural gas service along these transmission lines is generally limited to areas near principal roadways, restricting availability to regions directly adjacent to these routes. This means that not all areas along the transmission lines benefit from gas service.



Española currently has natural gas service on most streets, but expanding gas lines into residential neighborhoods is not a priority for the gas company. Under the current policy, property owners are responsible for the cost of extending gas lines into their areas. Propane gas is an alternative for areas without gas pipelines, but it is almost double the cost of natural gas when measured by heat output (BTUs). Propane is typically delivered by truck and stored in 500-gallon tanks. Many rural residents use wood to avoid the high cost of propane.

Electricity is provided by Jemez Mountain Electric Cooperative (JMEC) and Northern Rio Arriba Electric Cooperative (NORA). JMEC serves the southern and western parts of the County, while NORA covers about 3,100 people in areas like Dulce and Chama.



Neither cooperative generates its own electricity, sourcing it instead from Tri-State Generation and Transmission Association. This Denver-based company supplies power to multiple states and offers renewable performance payments to support local energy projects, such as solar and wind. Additionally, two hydroelectric plants in Rio Arriba (El Vado and Abiquiu) generate electricity for Los Alamos County.

Energy independence is seen as key to Rio Arriba's economic health, especially in light of past events like the Great Depression and the COVID-19 pandemic. As the County becomes more integrated into the global economy, promoting self-reliance through energy independence is increasingly important. Solar technology holds promise as a significant contributor to this goal. Large-scale solar arrays require extensive land and investment, but rooftop solar installations are more feasible and cost-effective. By combining solar with micro-grid technology, the County could enhance self-reliance, reduce transmission losses, and improve economic conditions. This approach could also stimulate local job creation by training a workforce skilled in solar energy technologies, working in collaboration with schools and utility cooperatives. While solar energy may not be the sole solution to economic self-reliance, it is a critical component deserving serious consideration.

When viewed collectively, all of these energy initiatives have the potential to bring lasting benefits to Rio Arriba County.

Solar

The Jicarilla Apaches, in partnership with a private firm, are developing a solar energy project called Jicarilla 2 on Jicarilla Apache Nation lands in Rio Arriba County. The facility will have an installed capacity of 62.5 megawatts (MW) and will provide renewable electricity to 16,000 homes, avoiding the emission of approximately 50,000 tons of CO₂ annually. Another project, Jicarilla 1, with the same capacity of 62.5 MW and 20 MW of battery storage, is being developed at the same location. The renewable energy produced by Jicarilla 2 will be sold by PNM.²⁹ These projects contribute to the County's status as a leader in solar energy production in New Mexico.

Additionally, a new project called Shallow Basket is under development in partnership with National Renewable Solutions (NRS) and Guzman Energy. This project will have a capacity of 190 MW and includes a battery storage system to supply power to approximately 38,000 homes when completed. This development strengthens Rio

²⁹ Repsol Global Press Release 27/04/2022



Arriba's role in expanding the renewable energy portfolio in the region, while supporting local economic development and environmental sustainability.³⁰

TELECOMMUNICATIONS

Windstream Communications is the primary provider of landline telephone, cellular service, television, and internet to Rio Arriba County homes and businesses. Other cellular services are available where communication towers provide sufficient coverage.

The County is collaborating with several entities on REDI Net, a high-speed broadband network designed to improve rural healthcare, education, public safety, and government services. Six wireless carriers operate in the County, covering 90.5% of the land and 99.04% of residents, with 5G service reaching 89.63% of homes.

Eleven internet providers operate in the County, offering fiber, DSL, and fixed wireless services. Starlink, a satellite-based provider, offers internet access to remote areas, addressing the long-standing issue of unreliable connectivity in these locations. While more expensive, Starlink allows for remote work and communication in even the most isolated areas of Rio Arriba County.

SOLID WASTE

The North Central Solid Waste Authority (NCSWA) manages waste removal for residential and commercial accounts in Rio Arriba County, Santa Clara Pueblo, and Ohkay Owingeh Pueblo. Established by the County in 2004, NCSWA operates independently, providing services such as curbside waste collection, commercial dumpster pickup, and roll-off services. Additionally, it manages six transfer stations accepting recyclables like oil, plastics, metals, and more. However, in 2022, the city of Española took over its trash collection, significantly reducing NCSWA's revenue.

In August 2024, NCSWA passed a \$7.3 million budget, with Rio Arriba County contributing \$1 million. Rate increases set for January 1, 2025, aim to boost revenue, reduce the need for County subsidies, and improve services. Issues, including illegal waste disposal in County arroyos and billing errors that wrongly charged residents without services, continue to challenge the authority.

Liquid waste disposal remains an ongoing issue, with the New Mexico Environment Department collaborating with County officials to find solutions for hazardous waste like paints, batteries, and motor oils. Solid waste from the County is currently taken to

³⁰ <https://www.businesswire.com/news/home/20230913214817/en/Guzman-Energy-Partners-with-National-Renewable-Solutions-on-Shallow-Basket-Solar-and-Battery-Storage-Project>



external dump sites, incurring additional costs. Despite efforts, the search for an appropriate, permitted site within the County is ongoing, hampered by regulatory challenges. Addressing this issue remains a priority.

COMMUNITY FACILITIES

Rio Arriba County has made a variety of buildings available for community use and government functions. These multipurpose facilities serve diverse purposes such as hosting the County Fair, senior programs, recreation activities, and medical clinics, as well as housing New Mexico State University extension programs. The Senior Program promotes health and wellness for residents aged 50 and older through fitness and activities aimed at fostering independent living, especially for rural and low-income minorities.

The Recreation Department has provided youth meals for over 20 years and continues to expand its Summer Food Service Program. Beyond meals, the recreation sites offer educational and recreational activities, including nutrition education, arts and crafts, swimming, and drug and alcohol prevention programs through RAC S.T.O.P.

Additionally, Rio Arriba County operates two administration buildings, located in Española and Tierra Amarilla, where residents can access services like development permits and contact the Sheriff, County Assessor, Clerk, and Treasurer. The County Courthouse and detention center are also situated in Tierra Amarilla.

This framework strengthens the County's commitment to enhancing health, wellness, safety, and community engagement, as reflected in the following lists of Rio Arriba County facilities.



Rio Arriba County Senior Centers		
Name	Location	Department
Alcalde Community Center	Alcalde	Seniors
Chama Senior Center	Chama	Seniors
Coyote Senior Center	Coyote	Seniors
Dixon Community Center	Dixon	Seniors
El Rito Community Center	El Rito	Seniors
Espanola Senior Center	Española	Seniors
La Arbolera Senior Center	Chimayo	Seniors
Tierra Amarilla Senior Center	Tierra Amarilla	Seniors
Truchas Senior Center	Truchas	Seniors

Rio Arriba County Community Centers		
Name	Location	Department
Velarde Community Center	Velarde	Public Works
Medanales Community Center	Medanales	Public Works
Hernandez Community Center	Hernandez	Public Works
San Pedro Community Center	Española	Public Works

Rio Arriba County Leased Properties		
Name	Location	Department
Health Commons	Española	County Manager
HOY Campus	Velarde	County Manager
Darrin's Place	Española	County Manager



Rio Arriba County Administrative Facilities		
Name	Location	Department
La Loma Vista Cemetery	Alcalde	Economic Development
Empowerment Center	Española	County Manager
RAC Stop	Española	Health & Human Services
Onate Center	Alcalde	County Manager
El Mirador Campus	Alcalde	County Manager
Fleet Services	Alcalde	Fleet
County Sheriff	Española	Sherriff
County Annex Building	Española	County Manager
Alcalde Animal Control	Alcalde	Sheriff
County Fair Grounds	Abiquiu	County Manager
Old TA Elementary	Tierra Amarilla	County Manager
Fleet Services – Coyote	Coyote	Fleet
New Canjilon Community Center	Canjilon	Public Works
Cebolla Community Center	Cebolla	Public Works
Courthouse	Tierra Amarilla	County Manager
Detention Center	Tierra Amarilla	Detention Administrator
3 Quads	Tierra Amarilla	Public Works
Fleet Maintenance	Tierra Amarilla	Fleet
Archive Building	Tierra Amarilla	County Manager
Administrative Complex	Tierra Amarilla	County Manager
Tierra Amarilla Gym	Tierra Amarilla	Public Works
Detention Trailers	Tierra Amarilla	Detention Administrator
Old Sheriff's Office	Tierra Amarilla	Public Works

PUBLIC SAFETY

The Rio Arriba County Sheriff's Department is responsible for law enforcement in the unincorporated areas of the County. The department operates from offices in both Española and Tierra Amarilla, where it also manages a jail facility with a capacity to hold 140 inmates. In contrast, the City of Española maintains its own police department, separate from the County Sheriff's Department. This structure allows for

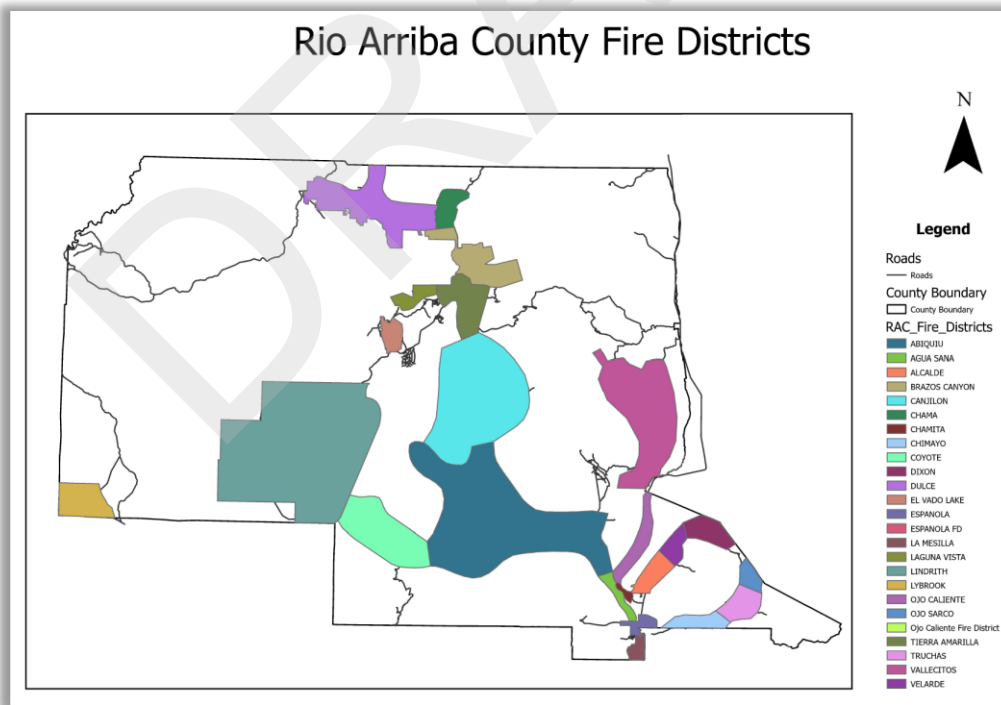


distinct coverage and services in the County's unincorporated and incorporated areas.

Fire Department/Emergency Medical Services

The Fire Department and Emergency Medical Services in Rio Arriba County are overseen by the Rio Arriba Fire Chief. The County is divided into five regions, with management extending to 18 fire departments. Of these, 15 departments also provide rescue and emergency medical services (EMS) for the local area. Additionally, two private companies operate within the County to deliver EMS services, complementing the County's resources in emergency response. This organizational structure ensures comprehensive coverage across the region.

Rio Arriba County Fire/EMS District Organization
Region 1: Coyote, Dulce and Lindrith Fire/EMS
Region 2: Brazos Canyon, Canjillon, Laguna Vista, Tierra Amarilla Fire/EMS
Region 3: Abuquiu, El Rito, Vallecitas Fire/EMS
Region 4: Agua Sana, Alcalde, Chamita, La Mesilla Fire/EMS
Region 5: Dixon, Ojo Sarco, Truchas, Velarde Fire/EMS





Rio Arriba County Fire Stations		
Name	Location	Department
Abiquiu Fire Station	Abiquiu	Fire/EMS
Agua Sana Fire Station	Española	Fire/EMS
Alcalde Fire Station	Alcalde	Fire/EMS
Brazos Fire Station	Chama	Fire/EMS
Canjilon Fire Station	Canjilon	Fire/EMS
Cebolla Fire Station	Cebolla	Fire/EMS
Chamita Fire Station	Ohkay Owingeh	Fire/EMS
Coyote Fire Station	Coyote	Fire/EMS
Dixon Fire Station	Dixon	Fire/EMS
Dulce Fire Station	Dulce	Fire/EMS
El Rito Fire Station	El Rito	Fire/EMS
La Canova Fire Station	La Canova	Fire/EMS
Laguna Vista Fire Station	Los Ojos	Fire/EMS
La Mesilla Fire Station	Española	Fire/EMS
Lindrith/Llaves Fire Station	Lindrith	Fire/EMS
Ojo Sarco Fire Station	Chamisal	Fire/EMS
Ponderosa Fire Station	Ponderosa	Fire/EMS
San Pedro Fire Station	Española	Fire/EMS
Tierra Amarilla Fire Station	Tierra Amarilla	Fire/EMS
Truchas Fire Station	Truchas	Fire/EMS
Vallecitos Fire Station	El Rito	Fire/EMS
Velarde Fire Station	Velarde	Fire/EMS

Presbyterian Hospital, located in Española, serves the southern region of Rio Arriba County, while Las Clinicas del Norte provides healthcare services to the northern part of the County. This division ensures that both the northern and southern communities have access to medical care tailored to their geographical needs.

The mission of the Office of Emergency Management (OEM) is to prepare for and minimize the impacts of natural and human-made disasters through planning, mitigation, response, and recovery efforts. Funded by a matching grant from FEMA, the OEM conducts risk assessments and hazard analyses to identify potential threats to



the County. Once identified, steps are taken to reduce these risks, improving recovery times and facilitating a quicker return to normal. This process includes training, planning, and collaborating with the State Office of Emergency Management on Homeland Security funding to strengthen response capabilities.

HEALTHCARE

The Rio Arriba County Health Care Assistance Program (HCAP) is administered by the Board of County Commissioners and the HCAP Coordinator under the Indigent Hospital and County Health Care Act (NMSA 1978 § Chapter 27, Article 5). It supports medically indigent residents of Rio Arriba County. One key facility is the Health Commons in Española, offering comprehensive health services including medical, behavioral, and maternal-child health care. El Centro Family Health, a non-profit provider, offers affordable healthcare through 13 medical clinics, 9 school-based clinics, and 3 dental clinics, serving over 17,700 patients annually.

The County also oversees Senior Services, having taken over the program in 1982, which provides congregate meals and other essential services at nine community centers. The Rio Arriba Health and Human Services Department (RAHHS), established in 1998, provides intensive case management for vulnerable populations, including those with substance use disorders and high-risk pregnancies, among others. RAHHS is also a Medicaid provider for mental health services, personal care for the elderly and disabled, and operates the only adult day care facility north of Santa Fe.

The Rio Arriba Community Health Council, coordinated by RAHHS, serves as the designated Health and Human Services Council, collaborating with various providers. The Rio Arriba County DWI Program, funded by state and local sources, aims to reduce alcohol-related fatalities through educational and intervention programs. The Presbyterian Española Hospital, a not-for-profit facility, offers a wide range of services including emergency care, primary care, and specialty services with 80 licensed beds.

Additionally, the County provides healthcare services through the Health Clinic at 2243 State Road 68, La Clinica del Pueblo at 14 County Road 324, and the Health Commons at 2010 Industrial Park Road.



PUBLIC SCHOOL DISTRICTS

The following table lists all the public school districts in Rio Arriba County. Some school districts serve areas outside of Rio Arriba County.

Rio Arriba County School Districts		
District Schools	Grade Level	School
Chama Valley Independent School District	Elementary/Middle Schools	Chama Middle/Elementary
Chama Valley Independent School District	Elementary Schools	Tierra Amarilla Elementary PreK-6th
Chama Valley Independent School District	Secondary Schools	Escalante Middle/High School (7-12)
Dulce Independant School District	Elementary Schools	Dulce Elementary
Dulce Independant School District	Secondary Schools	Dulce Middle Scool
Dulce Independant School District	Secondary Schools	Dulce High Schoo;
Española Public Schools	Pre-Kindegarden	Alcalde Elementary
Española Public Schools	Pre-Kindegarden	Eutimio T. Salazar Elementary
Española Public Schools	Pre-Kindegarden	Los Niños Kindergarten Center
Española Public Schools	Elementary Schools	Abiquiu Elementary
Española Public Schools	Elementary Schools	Alcalde Elementary
Española Public Schools	Elementary Schools	Chimayo Elementary
Española Public Schools	Elementary Schools	Dixon Elementary
Española Public Schools	Elementary Schools	Eutimio T. Salazar Elementary
Española Public Schools	Elementary Schools	Hernandez Elementary
Española Public Schools	Elementary Schools	James H Rodriguez Elementary
Española Public Schools	Elementary Schools	Los Niños Kindergarten Center
Española Public Schools	Elementary Schools	San Juan Elementary
Española Public Schools	Elementary Schools	Tony E. Quintana Elementary
Española Public Schools	Elementary Schools	Velarde Elementary
Española Public Schools	Secondary Schools	Carlos F. Vigil Middle School
Española Public Schools	Secondary Schools	Española Valley High School
Jemez Mountain School District	Elementary Schools	Lynbrook K-8
Jemez Mountain School District	Elementary Schools	Gallina Elementary
Jemez Mountain School District	Secondary Schools	Coronado Middle/High SchoolL
Mesa Vista Consolidated Schools	Elementary Schools	El Rito Elementary
Mesa Vista Consolidated Schools	Elementary Schools	Ojo Caliente Elementary
Mesa Vista Consolidated Schools	Secondary Schools	Mesa Vista Middle & High School

Source: www.k12academics.com



**COMMUNITY FACILITIES & INFRASTRUCTURE
GOALS & STRATEGIES**

DRAFT



County-Led Strategies are initiatives where the County takes responsibility for leading efforts, allocating resources, and ensuring successful implementation. These strategies reflect the County's leadership role in addressing critical needs, from developing infrastructure to implementing programs.

County-Supported Strategies are initiatives led by external organizations, community groups, or other governmental entities, where the County plays a supporting role. In these efforts, the County may provide resources, advocacy, or technical assistance to help achieve shared objectives, while leadership and execution are carried out by partner entities.

Goal 1: Improve Energy Distribution and Promote Renewable Energy

County-Led Strategies:

- Identify incentives for renewable energy manufacturers to establish facilities in Rio Arriba County.
- Collaborate with property owners and land grants to provide sites for renewable energy infrastructure.

County-Supported Strategies:

- Partner with federal agencies and local utilities to increase renewable energy transmission capacity.
- Support the use of biomass through partnerships focused on thinning and timber harvesting in high-fuel areas.
- Advocate for natural gas expansion to rural communities.

Goal 2: Minimize Water Usage and Promote Conservation in New Developments

County-Led Strategies:

- Support the use of water harvesting, gray-water treatment systems, and drought-tolerant landscaping in residential and commercial construction.
- Promote wastewater systems that return water to the ground and support surface improvements like vegetation and habitat restoration.



County-Supported Strategies:

- Collaborate with developers and state agencies to integrate water-conserving features in new developments.
-

Goal 3: Expand and Enhance Community Facilities and Recreational Spaces

County-Led Strategies:

- Develop policies to ensure County facilities are fully utilized and accessible to the public year-round.
- Perform energy audits on all County buildings and retrofit them for energy efficiency.
- Assess the need for and develop new facilities for fairs, community events, and youth programs.
- Expand walking and biking paths in open spaces to improve safety and accessibility.

County-Supported Strategies:

- Partner with Northern New Mexico College, school districts, and local municipalities to establish joint-use agreements for community facilities.
 - Support and advocate for state and federal funding to construct a regional recreational facility.
-

Goal 4: Strengthen Emergency Services and Public Safety Infrastructure

County-Led Strategies:

- Transition fire department personnel to a salaried structure while maintaining a robust volunteer base.
 - Establish certification programs for landowners to handle fires on their properties in coordination with fire departments.
 - Collaborate with telecommunication providers to maintain and enhance the E-911 system's accuracy.
-



County-Supported Strategies:

- Partner with regional entities to ensure comprehensive law enforcement and emergency response coverage.
 - Pursue funding to offer competitive salaries for firefighters and EMS personnel.
-

Goal 5: Improve Waste Management and Recycling Access

County-Led Strategies:

- Develop a County-wide facility for solid waste disposal and recycling.
- Introduce more recycling bins and designated disposal points throughout the County to reduce illegal dumping.
- Create accessible waste collection schedules and facilities in rural areas.
- Require fair billing and service standards from waste management providers.

County-Supported Strategies:

- Collaborate with the North Central Solid Waste Authority to improve service quality and expand rural pick-up or transfer stations.
 - Partner with regional recycling programs to expand home recycling pick-up services and increase economies of scale.
-

Goal 6: Expand Healthcare Facilities and Services

County-Led Strategies:

- Develop a comprehensive health plan to guide the improvement of healthcare services in the County.
- Pursue state and federal funding for primary care and treatment facilities in and near the Health Commons.

County-Supported Strategies:

- Support partnerships with medical organizations to expand access to healthcare services for underserved populations.
-



Goal 7: Address Homelessness and Provide Disaster Shelters

County-Led Strategies:

- Develop and maintain community shelters for use during emergencies or natural disasters.
- Support facilities that provide essential services for the homeless population.

County-Supported Strategies:

- Advocate for regional partnerships to enhance the availability of transitional and emergency housing.
-

Goal 8: Advance Climate Resilience and Water Resource Management

County-Led Strategies:

- Identify and mitigate the impacts of climate change on County infrastructure.
- Support the development of a water model to assess watershed impacts and guide decision-making.

County-Supported Strategies:

Partner with the New Mexico Rural Water Association and regional entities to align with state water priorities and address infrastructure gaps.



TRANSPORTATION

DRAFT



The primary transportation in Rio Arriba County is via private automobiles and trucks, with US Highways 84/285 and 68 serving as the main north-south routes connecting New Mexico with Colorado. US Highway 550 crosses the southwestern corner of the County. None of these highways are part of the Interstate system. State highways link to County and private roads, with high mobility vehicle travel concentrated in the Chama and Rio Grande valleys. The North Central Regional Transit District provides free public bus service, starting in 2007.

Rio Arriba has two public-use airports but no commercial air service. Oil and gas products are primarily transported by large underground pipelines, such as the Mid-America Pipeline and Enterprise Products Partners lines, with tanker trucks also used for distribution. The County lacks a commercial railroad system, but the Cumbres and Toltec Scenic Railroad, running between Chama and Antonito, Colorado, is used for tourism. The nearest commercial railroad is the BN&SF, located in Lamy, southeast of Santa Fe.

Streets and Highways

The state and federal highways form the core of Rio Arriba County's transportation system. Enhancing these roads will improve the County's safety and connectivity, allowing for better movement of people and goods. This is crucial for southern Rio Arriba, where many residents commute over 30 minutes to jobs in neighboring counties like Los Alamos and Santa Fe. An ongoing improvement study on NM 68 is expected to be completed in December 2014, focusing on the section between Velarde and the Horseshoe Curve. The New Mexico Department of Transportation (NMDOT) allocated \$28.4 million for various highway projects, including NM 68/74, NM 30, NM 552, and NM 96, with added bicycle and pedestrian enhancements in Española. Although most work involves reconstruction rather than expanding capacity, the projects aim to address vital repairs.

The County Public Works Department maintains all County roads, but private drives and easements remain the responsibility of local users or homeowners' associations. Many of these roads, especially in older subdivisions like Santa California, lack proper maintenance, resulting in eroded and unsafe conditions.

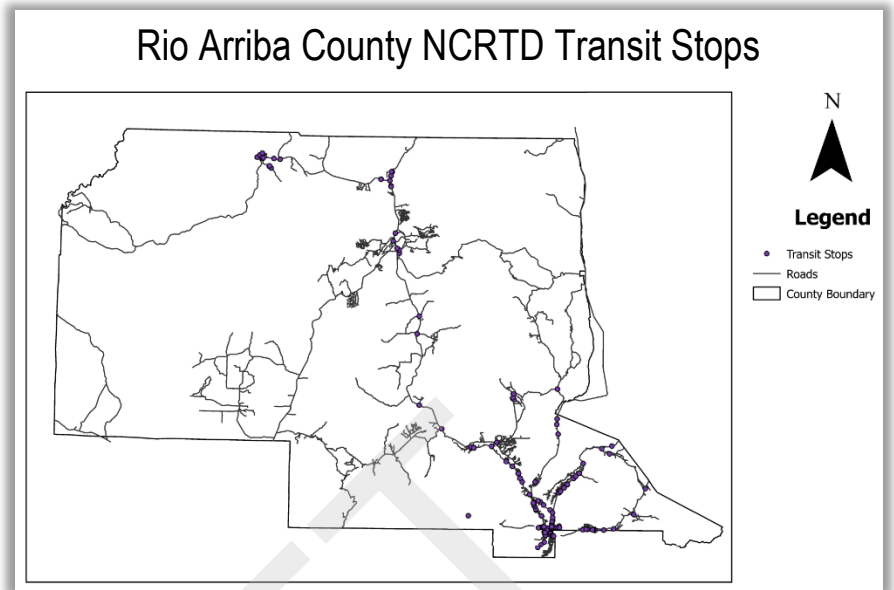
Additionally, Rio Arriba County features three scenic byways: the High Road to Taos (SR 76), the Narrow Gauge Scenic Roadway (SR 17), and El Camino Real de Tierra Adentro, an ancient Spanish trade route. Scenic byway markers appear along McCurdy Road, SR 68, and SR 84/285, with the road to Puye Cliffs also recognized as a designated scenic route.



Public Transit

In 2004, the North Central Regional Transit District (NCRTD) was established, incorporating the Los Valles system into the new RTD service network. The NCRTD expanded its regional transit services, providing connections to nearby cities in Los Alamos and Santa Fe Counties, operating Monday through Friday. By the 2013 fiscal year, the RTD had reached a significant

milestone, with ridership peaking at 193,027 passengers. This growth highlights the increasing reliance on the district's transportation system to support regional mobility.



The NCRTD is working to establish new mobility hubs connecting Taos, Española, and Santa Fe, which will influence the rural bus system. Important factors under consideration include a potential bypass around Española, traffic concerns near Walmart, and the need for precise headway data on bus lines. The bus system currently operates along state roads and offers on-demand service within a 15-mile radius of the Española Transit Center. Progress on mobility hubs is advancing with support from County officials.

In July 2021, the New Mexico Department of Transportation released the New Mexico Public Transportation Plan. This statewide plan outlines how state and federal funding is allocated to support public transportation services, with a particular focus on assisting low-income individuals, the elderly, and people with disabilities. The plan highlights the use of these funds to improve accessibility and ensure that public transportation meets the needs of these vulnerable populations throughout the state.

Airport Service

The nearest international airport for Rio Arriba County residents is the Albuquerque Sunport, located approximately 90 miles south of Española. Within the County, there are two smaller public airports. The Ohkay Owingeh Airport, northeast of Española, is owned by the Ohkay Owingeh Pueblo. It has been upgraded to meet FAA standards,



with improvements to the runway and lighting currently underway. The Lindrith Airpark, owned by the Bureau of Land Management, has a dirt runway and no control tower and is leased to the Wilderness Area Rescue Squad, Inc.

About 25 miles south of Rio Arriba County is the Santa Fe Regional Airport, formerly known as the Santa Fe Municipal Airport. In 2023, the airport recorded 140,257 passengers, reflecting an increase of nearly 14% compared to 2022. The airport has expanded significantly in recent years and is undergoing several infrastructure improvements to accommodate the growing demand for air travel.

Hiking and Biking

In Rio Arriba County, hiking and biking provide both recreational and transportation opportunities. The Continental Divide National Scenic Trail offers scenic hiking through backcountry terrain, with a portion running through the County near Chama. This trail is managed by the Bureau of Land Management, though not all areas are clearly marked. For cyclists, the County offers excellent riding options, though there are no dedicated bike lanes. Biking groups are common, especially in warmer seasons, and there is potential for improved infrastructure for both pedestrians and cyclists.

DRAFT



TRANSPORTATION GOALS & STRATEGIES

DRAFT



County-Led Strategies are initiatives where the County takes responsibility for leading efforts, allocating resources, and ensuring successful implementation. These strategies reflect the County's leadership role in addressing critical needs, from developing infrastructure to implementing programs.

County-Supported Strategies are initiatives led by external organizations, community groups, or other governmental entities, where the County plays a supporting role. In these efforts, the County may provide resources, advocacy, or technical assistance to help achieve shared objectives, while leadership and execution are carried out by partner entities.

Goal 1: Maintain and Upgrade County Roads

County-Led Strategies:

- Develop and implement a Road Management and Maintenance Program to evaluate the overall roadway system, prioritize maintenance needs, and establish standards for road upgrades and new road adoption.
- Resurface deteriorating roads to meet safety specifications and prevent vehicle damage.
- Install traffic-calming measures, such as speed bumps, that comply with engineering standards to reduce reckless driving.
- Use alternative surfacing materials like Poly-pavement or X-zyme for dust and erosion control on dirt roads, reducing maintenance costs.

County-Supported Strategies:

- Partner with the Bureau of Land Management (BLM), private landowners, and community members to improve road quality and safety for public and private roads.
- Advocate for funding and support from state agencies to maintain access to public lands through existing County roads.

Goal 2: Develop Safe and Accessible Multi-Modal Transportation Systems

County-Led Strategies:

- Prepare a County Multi-Modal Transportation Master Plan to evaluate and integrate road, bike, and pedestrian systems, including future traffic projections.



- Design and maintain walking trails, bike lanes, and pedestrian paths to promote alternative transportation modes.
- Expand and maintain trails for hiking, biking, and equestrian activities as part of a comprehensive trail and open space plan.

County-Supported Strategies:

- Collaborate with New Mexico Department of Transportation (NMDOT) and local municipalities to identify roads for bike lanes and pedestrian facilities in new roadway projects.
 - Partner with the Regional Transportation Planning Organization (RTPO) to secure funding for trail development, signage, and maintenance.
-

Goal 3: Enhance Public Transportation Accessibility

County-Led Strategies:

- Identify and prioritize public transportation routes and stops in collaboration with the North Central Regional Transit District (NCRTD).
- Improve safety and accessibility at public transit stops by providing adequate lighting, shelters, and seating.

County-Supported Strategies:

- Support NCRTD in identifying additional bus routes and stops that align with community needs.
 - Advocate for expanded public transportation options to serve rural and underserved areas.
-

Goal 4: Improve Road Safety and Traffic Management

County-Led Strategies:

- Assess state and County routes for safety improvements, including reducing speeding and implementing traffic-calming measures.
 - Support the engineering of roads for lower designed speeds through communities to enhance safety and walkability.
-



County-Supported Strategies:

- Collaborate with NMDOT and other entities to explore the feasibility of a bypass around Española to alleviate traffic congestion.
-

Goal 5: Develop and Maintain Recreational Trails and Outdoor Routes

County-Led Strategies:

- Expand and maintain a comprehensive system of recreational trails, including biking and hiking routes, to enhance outdoor accessibility and tourism.
- Promote recreational events to boost community health and attract visitors.

County-Supported Strategies:

- Partner with federal and state agencies to ensure sustainable trail development and maintenance.
-

Goal 6: Digitize and Optimize Road Infrastructure Planning

County-Led Strategies:

- Digitize data collection on road conditions, including materials, widths, and utilities, to optimize maintenance planning and resource allocation.
- Establish a long-term infrastructure maintenance plan addressing bridges, culverts, paving, and tree removal.



HAZARD MITIGATION

DRAFT



As of the writing of this Comprehensive Plan, the Rio Arriba County Hazard Mitigation Plan (HMP), which was adopted in 2014, is being updated through a parallel process. Updating, adopting, and implementing the HMP will provide numerous benefits to Rio Arriba County and its participating jurisdictions by identifying potential hazards and proactive solutions before disasters occur, thereby improving the County's ability to secure pre- and post-disaster funding for mitigation efforts.

Since the updated HMP will be incorporated into the Comprehensive Plan when available, general relevant information from the 2014 HMP is included here with only minimal updates. This approach avoids duplicating efforts and ensures there are no conflicts in data or goals between the two documents. Any significant new information from the updated HMP will be reflected in future updates to the Comprehensive Plan to maintain alignment with the County's evolving mitigation and preparedness strategies.

INTRODUCTION TO HAZARD MITIGATION

Hazard mitigation refers to any sustained actions taken to reduce or eliminate long-term risks to life and property from natural and human-caused hazards. Effective mitigation planning helps communities reduce vulnerability to disasters before they occur. Rio Arriba County has experienced a variety of hazards over the years, including wildfires, droughts, flash floods, and human-caused hazards. These events highlight the importance of continued planning and proactive mitigation measures.

Historically, federal legislation has provided funding for disaster relief, recovery, and some hazard mitigation planning. The Disaster Mitigation Act of 2000 (DMA 2000), which became law on October 30, 2000, amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288, as amended). Regulations governing this act can be found in Title 44 of the Code of Federal Regulations (CFR), Part 206, Subpart M. DMA 2000 emphasizes the importance of planning for disasters before they occur and establishes both pre-disaster hazard mitigation programs and new requirements for the national post-disaster Hazard Mitigation Grant Program (HMGP).

Section 322 of DMA 2000 specifically addresses mitigation planning at the state and local levels. It introduces requirements allowing HMGP funds to be used for mitigation planning activities and increases available funds for states that have developed comprehensive and enhanced mitigation plans before a disaster. States and communities must have an approved mitigation plan in place before receiving post-disaster HMGP funds. Local and tribal mitigation plans must show that their proposed



mitigation measures are based on a sound planning process, which accounts for the specific risks and capabilities of their communities.

DMA 2000 facilitates cooperation between state and local authorities, encouraging them to work together. It rewards proactive planning and promotes sustainability as a key strategy for disaster resistance. This coordinated planning approach helps governments at all levels articulate their mitigation needs more accurately, leading to faster allocation of funding and more effective risk reduction projects.

To implement the requirements of DMA 2000, the Federal Emergency Management Agency (FEMA) published an interim final rule in the Federal Register on February 26, 2002 (44 CFR Parts 201 and 206), establishing planning and funding criteria for states and local communities. On October 31, 2007, FEMA also published an interim rule to ensure that the Flood Mitigation Assistance (FMA) program planning requirements align with the mitigation planning regulations outlined in 44 CFR Part 201. Since 2007, several updates and legislative changes have strengthened and expanded hazard mitigation policies:

- The Sandy Recovery Improvement Act of 2013 (SRIA): This law made substantial changes to the Stafford Act and streamlined the HMGP application process. SRIA also created more flexibility in how post-disaster mitigation funds could be used, encouraging innovative approaches to risk reduction.
- The Disaster Recovery Reform Act of 2018 (DRRA): This legislation further amended the Stafford Act and was a major milestone in improving pre-disaster mitigation. DRRA created the Building Resilient Infrastructure and Communities (BRIC) program, which provides more robust funding for pre-disaster mitigation projects, emphasizing infrastructure improvements and community-wide resilience. It also allocates a percentage of federal disaster response funds specifically for pre-disaster mitigation, reinforcing the importance of planning before disasters strike.
- FEMA's National Mitigation Investment Strategy (2019): This strategy outlines a coordinated approach to building national resilience through improved hazard mitigation investments. It encourages collaboration across all levels of government, private sectors, and communities to ensure that mitigation projects are effective and integrated into long-term planning.



EMERGENCY MANAGEMENT CYCLE

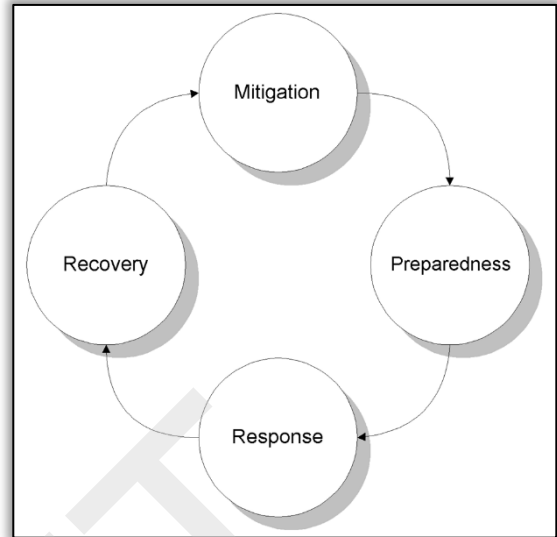
Effective hazard mitigation is part of a broader emergency management cycle, which consists of four key phases:

Mitigation - Reducing or eliminating the risk of hazards before they occur.

Preparedness - Planning and preparing for potential hazard events.

Response - Taking immediate action when a hazard occurs.

Recovery - Rebuilding and recovering after an event.



Source: fema.gov

Mitigation is central to this cycle, as it seeks to minimize the impact of hazards, thus reducing the burden on response and recovery efforts.

HAZARD MITIGATION IN RIO ARRIBA COUNTY

Hazard mitigation addresses both natural and human-caused threats to communities. In the aftermath of the September 11, 2001, terrorist attacks and the subsequent establishment of the U.S. Department of Homeland Security, attention was focused on various hazards, resulting in increased funding for communities to plan for and implement hazard mitigation strategies.

In May 2007, the Rio Arriba Board of County Commissioners adopted the Hazard Mitigation Plan (HMP) for Rio Arriba County, New Mexico. The plan was updated in 2014 and is currently undergoing another update in 2025.

The HMP assesses and proposes mitigation actions for various hazards, including:

- Wildfire
- Drought
- Flooding
- Human-caused hazards, such as terrorism and the transportation of hazardous materials, particularly related to Los Alamos National Security (LANS) operations
- Other hazards, such as severe weather and earthquakes

WILDFIRE

Wildfires are one of the most significant hazards faced by Rio Arriba County. From 1986 to 2013, over 1,800 wildfires were recorded, burning more than 21,000 acres. Between 2014 and 2024, Rio Arriba County experienced increasingly severe wildfire conditions



due to a variety of natural and anthropogenic factors. Over this period, the number of wildfires has grown, with more than 100 incidents recorded, including several large fires that burned thousands of acres. Areas like Northern Rio Arriba County, with dense forests and increasing development in the wildland-urban interface, the Española Bosque, characterized by dense vegetation and proximity to residential zones (particularly prone to fast-moving fires), and wildland-urban interface zones like Canjilon and El Rito are highly vulnerable to wildfire risk due to their proximity to dense forested areas.

Below is a summary of notable fire events in or near Rio Arriba County between 1999 and 2024. Many of these fires led to evacuations, caused extensive ecological damage, and worsened air quality.

Rio Arriba County Notable Fire Events: 1999 - 2024			
Year	Fire Name	Location	Details
1999	Oso Complex Fire	Near the Carson National Forest	Burned over 7,000 acres
2000	Cerro Grande Fire	Los Alamos (nearby)	Burned over 47,000 acres
2010	South Fork Fire	Carson National Forest	Burned approximately 17,000 acres
2011	Las Conchas Fire	Near Jemez Mountains	Burned over 156,000 acres
2013	Thompson Ridge Fire	Jemez Mountains	Burned about 24,000 acres
2016	North Fire	Rio Arriba County	Burned over 6,000 acres
2017	Bonita Fire	Carson National Forest	Burned over 8,000 acres
2020	Medio Fire	Near the Santa Fe National Forest	Burned approximately 4,000 acres
2021	Cuervito Fire	Rio Arriba County	Burned approximately 1,600 acres
2022	Midnight Fire	Near El Rito	Burned approximately 5,000 acres
2022	Cerro Pelado Fire	Near the Jemez Mountains	Burned over 45,000 acres
2023	Black Feather Fire	Near the border of Rio Arriba and Sandoval counties, close to the Santa Fe National Forest	Burned over 2,000 acres
2024	Indios Fire	North of the Village of Coyote	Burned over 11,000 acres

Over the past 20 years, wildfire conditions in Rio Arriba County, New Mexico, have been shaped by a combination of factors including drought, climate change, insect infestations, and forest management practices. The County, with its diverse landscapes of forests, grasslands, and arid areas, has experienced an increase in wildfire frequency and intensity, mirroring broader trends seen across the southwestern United States. Key trends include:

Increased Fire Frequency

The region has seen more frequent wildfires, particularly during the hot and dry summer months. Prolonged drought conditions have dried out vegetation, creating fuel for fires.



Larger, More Intense Fires

Due to increased fuel loads from drought-stressed vegetation and forest overgrowth, wildfires have become larger and more severe. This has led to more significant destruction of property and natural habitats, as well as more complex firefighting efforts.

Impact of Climate Change

Rising temperatures and changing precipitation patterns have extended the fire season, making the conditions for wildfires more conducive. Warmer winters have also reduced snowpack levels, diminished water availability, and contributed to drier landscapes in the spring and summer.

Human Activity

Anthropogenic factors such as land use changes, development in wildfire-prone areas, and accidental ignitions have contributed to some of the fires in the County. Additionally, the oil and gas industry, which plays a significant role in the local economy, has added complexity to wildfire management near infrastructure.

Forest Management Practices

Over the past two decades, forest management agencies have increasingly used prescribed burns to reduce fuel loads and lower the risk of catastrophic wildfires. However, these efforts have not always been sufficient to mitigate the larger-scale fires resulting from climate conditions.



Wildlife and Ecosystem Impacts

Wildfires have caused significant ecological disruption, impacting wildlife habitats, water quality, and soil health. The restoration of affected areas has become a priority, with ongoing efforts to reforest and rehabilitate fire-damaged landscapes.

Overall, Rio Arriba County's wildfire conditions have worsened due to a combination of natural and human-caused factors. While forest management strategies aim to reduce fire risk, the County remains vulnerable to more extreme wildfires, necessitating continued adaptation and preventive measures.

Mitigation Actions: The County aims to reduce wildfire risk by thinning forests, creating defensible spaces in the wildland-urban interface, instituting prescribed burns, establishing firebreaks around communities, and improving fire suppression infrastructure, such as extending water lines and installing hydrants. However, resource limitations and increasingly unpredictable weather patterns present ongoing challenges.

DROUGHT

Rio Arriba County, like much of New Mexico, experiences drought every decade, significantly affecting water resources for human consumption, agriculture, and firefighting. Droughts also increase wildfire risk and degrade water quality.

Over the past 20 years, Rio Arriba County, New Mexico, has experienced a pattern of prolonged drought conditions, typical of the broader Southwestern United States. The County's arid climate has been increasingly affected by higher temperatures and reduced precipitation, linked to climate change. Drought severity has varied over time, with some periods of extreme drought (particularly during 2002–2003, 2011–2013, and more recently 2020–2022), significantly impacting local agriculture, water resources, and the natural environment.

The County's dependence on the Rio Chama and other surface water sources has been strained during these drought periods, leading to lower streamflow and reservoir levels, most notably in the Abiquiu and Heron reservoirs. Reduced snowpack in the nearby Sangre de Cristo and San Juan Mountains has also diminished runoff, which is crucial for the region's water supply. As a result, water conservation efforts have intensified, and local government, agricultural communities, and indigenous populations have faced increased challenges in managing water rights and ensuring equitable distribution.



These drought conditions have also exacerbated wildfire risks, particularly in forested and rural areas, stressing local ecosystems and increasing the frequency and intensity of wildfires. Efforts to mitigate drought impacts include water-use restrictions, forest management strategies, and collaboration with state and federal agencies to develop long-term water sustainability plans.

Despite some intermittent relief during wetter years, the overall trend points to more frequent and severe droughts in the future, making water management and climate adaptation key priorities for Rio Arriba County moving forward.

Mitigation Actions: The County encourages water conservation efforts, including xeriscaping, and the development of a drought management plan. Land use regulations that direct runoff to pervious areas are another mitigation strategy.

FLASH FLOODS

Flash floods are common in Rio Arriba County, particularly after periods of heavy rainfall or snowmelt. The County's steep terrain and sparse vegetation contribute to rapid runoff, increasing the risk of flash flooding. Flooding is often exacerbated by wildfire scars and human development, which reduce natural water absorption.

Over the past 20 years, Rio Arriba County has experienced recurring flash flood events, particularly during the summer monsoon season, which typically runs from July through September. Most recently, significant flash floods were recorded in August 2021 and August 2024, both of which prompted state emergency declarations due to heavy rains that caused infrastructure damage, disrupted agriculture, and impacted local acequias, critical for irrigation. The County's rugged terrain, including its mountains, canyons, and arroyos, makes it highly susceptible to flash flooding, especially in areas affected by wildfires. Wildfire burn scars create conditions for rapid runoff, as vegetation loss prevents water from being absorbed into the soil.

Climate change has intensified rainfall patterns, leading to more severe and unpredictable flash floods. The County has seen both isolated and widespread flash flooding events, causing damage to infrastructure, roads, and private property, particularly in rural areas where stormwater drainage systems are limited. Additionally, major waterways like the Rio Chama and tributaries can overflow during heavy rains, exacerbating flooding in low-lying regions.

Mitigation Actions: The frequency and intensity of flash floods have prompted Rio Arriba County to implement more robust emergency management practices, including improved early warning systems, community awareness campaigns, and



infrastructure improvements to manage flood risks. Specifically, the HMP proposes flood protection measures, such as improving drainage systems, protecting critical infrastructure like roads and bridges, and educating property owners about flood insurance. The County also seeks to gather more comprehensive data on structures within the 100-year floodplain.

DAM FAILURE

The combination of aging infrastructure, changing climate conditions, and the increasing frequency of extreme weather events underscores the need for continued investment in dam safety and emergency preparedness. The County is home to several dams, many of which serve crucial purposes for water storage, irrigation, flood control, and recreation. However, the structural integrity of these dams has become a growing concern due to the region's fluctuating climate patterns, including periods of drought and intense rainfall, which place additional stress on these aging structures.

The Abiquiu Dam poses the most significant risk to Rio Arriba County. A failure would result in significant flooding along the Rio Chama and Rio Grande rivers, with floodwaters reaching critical infrastructure and residences. The U.S. Army Corp of Engineers (USACE) rates each dam by hazard risk as either low, significant, or high. As of 2014, the Abiquiu Dam was categorized as "high" hazard.

Dams fail in two ways: a controlled spillway release initiated to prevent full failure (forced drainage); or the partial or complete collapse of the dam itself. If the Abiquiu Dam fails, the estimated resulting floodwater will reach an elevation of 5,592 feet from forced drainage or 5,634 feet with dam failure. This is important to note because the dam is topographically elevated in relation to the City of Española.

Mitigation Actions: The County monitors dam conditions and works with the USACE to ensure preparedness in the event of dam failure. Evacuation plans and warning systems are critical components of mitigation efforts.

HUMAN-CAUSED HAZARDS

Rio Arriba County is also vulnerable to human-caused hazards, such as hazardous material spills and transportation accidents, particularly related to operations at Los Alamos National Laboratory (LANL). Terrorism and radiological incidents are also considered potential threats.

Over the past two decades, Rio Arriba County has faced various human-caused hazards that have posed significant risks to both public safety and economic stability. These hazards primarily include industrial activities, transportation-related incidents,



improper waste disposal, and unregulated development. The oil and gas industry, a key economic driver, has contributed to environmental risks such as spills, air and water contamination, and increased traffic accidents from heavy truck usage. In addition, the County has experienced issues related to wildfire risks due to human negligence, illegal dumping, and inadequate enforcement of land-use regulations.

Additionally, human-caused hazards in Rio Arriba County have resulted in significant environmental, public health, and economic impacts. Oil spills and water contamination have degraded local ecosystems, threatening vital water sources for agriculture and wildlife, while overuse of water by industries has worsened the region's water scarcity. Exposure to hazardous chemicals from industrial activities raises public health concerns, including respiratory issues, and increased traffic accidents heighten safety risks. Major incidents, such as contamination and industrial accidents, disrupt local economies, particularly in agriculture and tourism, leading to costly cleanups and legal challenges. Additionally, unregulated development in wildfire-prone areas has heightened the risk of property damage during dry seasons.

Mitigation Actions: In response to human-caused hazards, Rio Arriba County has implemented several mitigation efforts, including stricter regulations on oil and gas operations, improved environmental monitoring, and enhanced emergency response systems for industrial accidents and wildfires. Public awareness campaigns have been launched to educate residents on waste disposal and fire prevention, while sustainable land-use planning focuses on reducing environmental impacts and limiting development in high-risk areas. Collaboration with state and federal agencies has bolstered the County's capacity to manage these risks, ensuring compliance with safety standards and access to critical resources. These efforts, combined with ongoing vigilance, have helped mitigate potential hazards, though continued investment in infrastructure and education remains essential for long-term safety. Finally, the County created a collaboration with LANL to implement warning systems for hazardous materials spills.

OTHER HAZARDS

Over the past two decades, Rio Arriba County has faced a variety of hazards, including severe weather events like flash floods, droughts, high winds, wildfires, and occasional earthquakes. While the County is not in a highly active seismic zone, earthquakes still pose a risk, particularly because of older infrastructure and the proximity to fault lines in New Mexico.

Mitigation Actions: Rio Arriba County has implemented various mitigation efforts to address natural hazards, including flood control projects with improved drainage and



riverbank reinforcement, and floodplain regulations to reduce flooding risks. Drought management includes water conservation programs, infrastructure improvements, and usage restrictions. Wildfire risks are mitigated through controlled burns, brush clearance, and defensible space creation, while local fire departments receive expanded training and resources. Earthquake preparedness focuses on retrofitting vulnerable buildings, public awareness campaigns, and updated building codes. Comprehensive emergency response plans, including early warning systems and disaster training, enhance the County's overall resilience to both natural and human-induced threats.

DRAFT



**HAZARD MITIGATION GOALS & STRATEGIES
FROM 2025 HAZARD MITIGATION PLAN**

DRAFT



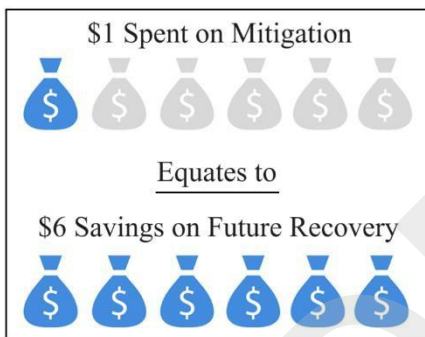
As previously noted, the Rio Arriba County Hazard Mitigation Plan (HMP), originally adopted in 2014, is currently undergoing a parallel updating process. A draft version of the goals and strategies for the 2025 HMP was available at the time of writing this Comprehensive Plan and has therefore been included here. This section will be revised accordingly once the HMP update is finalized. The following is Section 6 – Strategy Mitigation as excerpted from the Draft 2025 Hazard Mitigation Plan.

Section 6 – Mitigation Strategy

6.1 Introduction

As part of this planning effort, Rio Arriba County worked to minimize the risk of future impacts from identified hazards to all citizens of the region. In an attempt to shape future regulations, ordinances and policy decisions the MPC reviewed, revised, and developed a comprehensive hazard mitigation strategy. This comprehensive strategy includes:

- Goals to guide the selection of activities to mitigate and reduce potential loss.
- A discussion of funding capabilities for hazard mitigation projects.
- Identification, evaluation, and prioritization of mitigation actions along with potential funding sources.



Rio Arriba County’s mitigation strategy promotes long-term hazard resilience that will have a positive impact on quality-of-life issues. By minimizing both the exposure to, and potential impacts from, identified hazards jurisdictions can expect to minimize injuries and loss of life, reduce property damage, and minimize the day-to-day social and economic disruptions that follow hazard events.

According to an analysis by the National Institute of Building Sciences, natural hazard mitigation saves \$6 on average for every \$1 spent on federal mitigation grants, Additional findings indicate

that:

6.2 Goals and Objectives

Rio Arriba County, participating jurisdictions, and all stakeholders reviewed the previous LHMP’s goals and objectives to determine if they remained viable and valid. In general terms, the relationship between goals and objectives is as follows:

- **Hierarchy:** Goals provide the overarching direction and desired outcomes, while objectives break down those goals into specific, actionable steps.
- **Alignment:** Objectives should align with and support the achievement of goals. Each objective should be directly related to one or more goals.
- **Measurement:** Goals set the vision, and objectives provide the means to measure progress toward that vision. Objectives are often used to track and evaluate the success of achieving broader goals.

During this process, and after a thorough review and discussion with all stakeholders, it was determined that the priorities of the Rio Arriba County in relation to hazard mitigation planning have not changed during the five years of the previous planning cycle. Additionally, and based on discussion with all stakeholders, it was



determined that the goals and objectives identified in the previous LHMP remained viable and valid. However, a need was determined to include a goal addressing the relationship between climate change and hazard mitigation. As such, Goal 5 was added to address the impacts of climate change on the landscape of mitigation planning. The following represent the identified goals for the 2024 LHMP:

- **Goal 1:** Reduce the risk to the people and property from the identified hazards in this plan.
- **Goal 2:** Work to protect all vulnerable populations, structures, and critical facilities from the impacts of the identified hazards.
- **Goal 3:** Improve public outreach initiatives to include education, awareness, and partnerships with all entities in order to enhance the understanding identified hazards and hazard mitigation opportunities.
- **Goal 4:** Enhance communication and coordination among all agencies and between agencies and the public.

Participants in the LHMP will continuously evaluate these identified goals and objectives against current capabilities and conditions. As part of this process, and where possible, data and feedback from plan stakeholders will be collected

and analyzed to help identify gaps, roadblocks, and achievements. Using this information, strategies will be developed to bridge identified gaps, remove identified roadblocks, and celebrate identified successes in achieving the goals of this LHMP. Additionally, when necessary, goals and objectives will be modified, updated, or expanded based on the review process. In addition, SCOES will work with all local, county, regional, and state agencies and policy makers to help integrate the goals delineated in the LHMP and goals and plans for combating climate change.

6.3 Review and Creation of Hazard Mitigation Actions

Hazard mitigation actions are proactive measures taken to reduce or eliminate the long-term risk and impact of natural and human-made hazards. These actions are designed to minimize the damage caused by disasters and contribute to the overall resilience of communities and infrastructure.

For this plan update members of the MPC were provided with a complete list of previously identified mitigation actions and asked to review them to determine their status. Previously identified mitigation status was reported using the following definitions:

- **Completed:** The action has been fully completed.
- **Not Completed:** The action was not started or has been started and is not completed.
- **Revised:** Action has been revised to reflect current planning environment or identified changes.
- **Cancelled:** The action has been removed from consideration due to either a lack of resources or changing mitigation priorities.
- **Ongoing:** The action is completed and has become an ongoing activity or capability.

Additionally, MPC members and stakeholders were provided with opportunities to identify and incorporate newly identified actions based on the changing hazard environment or previously unidentified needs. When considering new mitigation actions, participating jurisdictions were guided to the January 2013 FEMA publication *Mitigation Ideas, A Resource for Reducing Risk to Natural Hazards*. This document offers a comprehensive collection of strategies and best practices for reducing risks associated with natural hazards. It covers various types of natural hazards, and provides practical ideas for communities, local governments, and individuals to implement.

In preparing a mitigation strategy all reasonable and obtainable mitigation actions were considered to help achieve the general goals. Priorities were developed based on past damage, existing exposure to risk, and



weaknesses identified by the State and local capability assessments. In identifying mitigation actions, the following activities were considered:

- The use of applicable building construction standards.
- Hazard avoidance through appropriate land-use practices.
- Relocation, retrofitting, or removal of structures at risk.
- Removal or elimination of the hazard.
- Reduction or limitation of the amount or size of the hazard.
- Segregation of the hazard from that which is to be protected.
- Modification of the basic characteristics of the hazard.
- Control of the rate of release of the hazard.
- Provision of protective systems or equipment for both cyber and physical risks.
- Establishment of hazard warning and communication procedures.
- Redundancy or duplication of essential personnel, critical systems, equipment, and information materials.

In general, all identified mitigation actions were classified under one of the following broad categories:

- **Local plans and regulations:** Actions that create or update plans to reflect situational changes and/or actions that aid in the creation, revision, or adoption of regulations related to hazard mitigation and management.
- **Infrastructure:** Actions that the modification of existing buildings or structures or involve the construction of structures to reduce the impact of hazard.
- **Natural system protection:** Actions that, in addition to minimizing hazard losses, also preserve or restore the functions of natural systems.
- **Public education and awareness:** Actions to inform and educate citizens, elected officials, and property owners about the hazards and potential ways to mitigate them.

Current climate adaptation strategies highlights using natural system solutions, when possible, to promote community resilience. Natural system solutions utilize natural features or processes to build more resilient communities, which in turn can contribute to climate change mitigation, climate adaptation, hazard mitigation, and environmental justice. These natural system solutions, often referred to as “green infrastructure” provide many additional community benefits including improving community health and wellness, protecting the environment, creating wildfire habitats, reducing greenhouse gas emissions, and providing recreational opportunities. As an additional benefit, the FEMA Building Resilient Infrastructure and Communities grant program provides additional scoring criteria to promote and encourage the utilization of natural system solutions.

6.4 Prioritization of Mitigation Actions

The MPC and subject matter experts worked together to prioritize both previously identified and newly identified hazard mitigation actions. The methodology used to determine mitigation action priorities was based upon the following:

- Review of the updated risk assessments.
- Review of revised goals and objectives.
- Review of capabilities.

A multi-pronged and flexible analysis method was used for determining and prioritizing mitigation actions. An initial review of previously identified but not completed actions was conducted to ensure that, based on current condition and capabilities, the actions were still viable. Actions that were considered viable were retained in this plan update, with minor revisions completed as necessary.

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



For identified actions that were retained, and for newly identified actions, the FEMA recommended Social, Technical, Administrative, Political, Legal, Economic, and Environmental (STAPLEE) criteria were used to assist with prioritization. The following table details the STAPLEE criteria:

Table 123: STAPLEE Review Criteria

Criteria	Discussion	Example Considerations
Social	<i>There should be community acceptance and support for the mitigation action?</i>	<i>Does the action have community acceptance? Will the proposed action adversely affect one segment of the population?</i>
Technical	<i>The proposed mitigation action should be technically feasible and should provide a long-term reduction in losses.</i>	<i>How effective is the action in avoiding or reducing future losses? Does it solve a problem or only a symptom? Does the action create additional problems?</i>
Administrative	<i>Personnel and administrative capabilities should be available to administer all phases of the project.</i>	<i>Are the staffing and administrative capabilities to implement the action in place? Is there someone to coordinate and lead the effort?</i>
Political	<i>Political support for the mitigation action needs to be present.</i>	<i>Is the action politically acceptable? Have political leaders been involved in the planning process? Is there a political champion to help see the project to completion?</i>
Legal	<i>The legal authority to implement the actions need to be in place or possible with the passing of laws or regulations.</i>	<i>Does the legal authority to implement the proposed action exist? Are there potential legal repercussions?</i>
Economic	<i>The current budget (and/or general obligation bonds or other instruments) need to be in place to fully fund the mitigation action.</i>	<i>Do the potential benefits of this action exceed the potential costs? Has funding been secured for the proposed action? What are the potential funding sources (public, non-profit, and private)?</i>
		<i>How will this action affect the fiscal capability of the community(s)? Does the action contribute to other community goals, such as capital improvements or economic development?</i>
Environmental	<i>Actions should interface with the need for sustainable and environmentally healthy communities. Also, statutory considerations, such as the National Environmental Policy Act need to be considered for federal funds.</i>	<i>How will the action affect the environment? Will the action need environmental regulatory approvals? Will it meet federal, state, and local state regulatory requirements? Are endangered or threatened species likely to be affected?</i>

Based on the prioritization review, the MPC assigned each action the following prioritized ranking:

- **High Priority:** Actions that provide substantial progress towards improving resiliency and are determined as potentially urgent in nature by the MPC. This would include actions that strongly support the reduction of high hazard risks and meet mitigation goals. Additionally, actions in this ranking may have imminent funding availability or strong community support.
- **Medium Priority:** Actions that provide reasonable progress towards improving resiliency and are



determined as moderately urgent in nature by the MPC. This would include actions that would lessen impact hazard events, but not eliminate the impact completely.

- **Low Priority:** Actions that provide incremental progress towards improving resiliency and are determined as slightly urgent in nature by the MPC. This would include actions that are generally the responsibility of the local community, actions outside the normal authority of the State, or actions whose cost/benefit analysis returns a low yield.

6.5 Mitigation Action Funding Sources

It is generally recognized that mitigation actions help realize long term savings by preventing future losses due to hazard events. However, many mitigation actions are beyond the budgetary capabilities of a single jurisdiction. This section provides a general description of some of the avenues available to defray the cost of implementing mitigation actions.

FEMA provides financial assistance to state, local, tribal, and territorial governments, as well as certain private non-profit organizations, to implement projects that help reduce the risk and impact of future disasters. These grant programs are designed to support initiatives aimed at mitigating hazards and improving resilience. The main grant program offered by FEMA for hazard mitigation is the Hazard Mitigation Assistance (HMA) program. The HMA program includes four subprograms, the Hazard Mitigation Grant Program (HMGP), the HMGP Post-Fire, Building Resilient Infrastructure and Communities (BRIC), and the Flood Mitigation Assistance (FMA) grant program. Applicants to these grant programs are required to submit project proposals that demonstrate the effectiveness of their proposed mitigation projects. The eligibility criteria, application process, and specific requirements for each program are outlined by FEMA in their guidelines and announcements, which are typically published on FEMA's website.

The following provides a general overview of major grant funding streams:

- **HMGP and HMGP Fire:** The HMGP grants assist in implementing long-term hazard mitigation measures following Presidential disaster declarations, including fire declarations. Funding is available to implement projects in accordance with State, Tribal, and local priorities.
- **BRIC:** BRIC supports states, local communities, tribes and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. The BRIC program guiding principles are supporting communities through capability- and capacity-building; encouraging and enabling innovation; promoting partnerships; enabling large projects; maintaining flexibility; and providing consistency. Working





in coordination with BRIC, the National Mitigation Investment Strategy is intended to provide a national, whole-community approach to investments in mitigation activities and risk management.

- **FMA Grant Program:** FMA is a competitive grant program that provides funding to states, local communities, federally recognized tribes and territories. Funds can be used for projects that reduce or eliminate the risk of repetitive flood damage to buildings insured by the NFIP. FEMA chooses recipients based on the applicant's ranking of the project and the eligibility and cost-effectiveness of the project. FEMA requires state, local, tribal and territorial governments to develop and adopt hazard mitigation plans as a condition for receiving certain types of non-emergency disaster assistance, including funding for hazard mitigation assistance projects.



The following chart summarizes HMA grants programs:

Chart 28: HMA Grant Program Summary

HMA Program Comparison	 HMGP	 HMGP Post Fire	 BRIC	 FMA
Program Type	Post-disaster	Post-disaster	Pre-disaster	Pre-disaster
Funding Availability	Presidentially declared disaster	FMAAG-declared disaster	6% set aside from federal post-disaster grant funding	Annual appropriations
Competitive?	No	No	Yes	Yes
Eligible Applicants	States, federally recognized tribes, territories and the District of Columbia (DC)	States, federally recognized tribes, territories and DC	States, federally recognized tribes, territories and DC	States, federally recognized tribes, territories and DC
Eligible Subapplicants	State agencies, local governments, tribes and private nonprofit organizations	State agencies, local governments, tribes and private nonprofit organizations	State agencies, local governments and tribes	State agencies, local governments and tribes
Hazard Mitigation Plan Requirement	Yes	Yes	Yes	Yes
NFIP Participation	Communities with projects in Special Flood Hazard Areas (SFHAs)	Communities with projects in SFHAs	Communities with projects in SFHAs	Subapplicants and properties

Additionally, the following provide available grant funding avenues for hazard mitigation projects:

- **Rehabilitation Of High Hazard Potential Dam (HHPD) Grant Program:** HHPD awards provide technical, planning, design and construction assistance in the form of grants for rehabilitation of eligible high hazard potential dams. A state or territory with an enacted dam safety program, the State Administrative Agency, or an equivalent state agency, is eligible for the grant.
- **Emergency Management Performance Grant:** Program provides state, local, tribal and territorial emergency management agencies with the resources required for implementation of the National Preparedness System and works toward the National Preparedness Goal of a secure and resilient nation. Allowable costs support efforts to build and sustain core capabilities across the prevention, protection, mitigation, response and recovery mission areas.



- **State Homeland Security Program:** Program includes a suite of risk-based grants to assist state, local, tribal and territorial efforts in preventing, protecting against, mitigating, responding to and recovering from acts of terrorism and other threats. This grant provides grantees with the resources required for implementation of the National Preparedness System and working toward the National Preparedness Goal of a secure and resilient nation.
- **Nonprofit Security Grant Program:** Program is one of three grant programs that support DHS/FEMA's focus on enhancing the ability of state, local, tribal, and territorial governments, as well as nonprofits, to prevent, protect against, prepare for, and respond to terrorist or other extremist attacks. These grant programs are part of a comprehensive set of measures authorized by Congress and implemented by DHS to help strengthen the nation's communities against potential terrorist or other extremist attacks. Among the five basic homeland security missions noted in the DHS Strategic Plan for Fiscal Years 2020-2024
- **Public Assistance Program:** The mission of FEMA's Public Assistance program is to provide assistance to State, Tribal and local governments, and certain types of Private Nonprofit organizations so that communities can quickly respond to and recover from major disasters or emergencies declared by the President. Through the Public Assistance program, FEMA provides supplemental Federal disaster grant assistance for debris removal, emergency protective measures, and the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain private non-profit organizations. The Public Assistance Program also encourages protection of these damaged facilities from future events by providing assistance for hazard mitigation measures during the recovery process. The Federal share of assistance is not less than 75% of the eligible cost for emergency measures and permanent restoration. The grantee determines how the non-Federal share (up to 25%) is split with the eligible applicants.
- **Individual Assistance Program:** After a disaster, the federal government determines if any county in the state meets the criteria for individual disaster assistance. The decision is based on damage related to the severity and magnitude of the event. When a county receives an Individual Assistance declaration from the President of the United States, anyone who lives in that county can apply for assistance.
- **Small Business Administration Disaster Loans:** The Small Business Administration provides low-interest disaster loans to homeowners, renters, businesses of all sizes, and most private nonprofit organizations. Small Business Administration disaster loans can be used to repair or replace the following items damaged or destroyed in a declared disaster: real estate, personal property, machinery and equipment, and inventory and business assets.
- **The Housing and Urban Development Agency:** Provides flexible grants to help cities, counties, and States recover from Presidentially declared disasters, especially in low-income areas, subject to availability of supplemental appropriations.
- **Community Development Block Grant Program:** This is a flexible program that provides communities with resources to address a wide range of unique community development needs. The program provides annual grants on a formula basis to general units of local government and States.
- **Individual and Households, Other Needs Assistance Program:** This program provides financial assistance to individuals or households who sustain damage or develop serious needs because of a natural or man-made disaster. The funding share is 75% federal funds and 25% state funds. The program provides grants for necessary expenses and serious needs that cannot be provided for by insurance, another federal program, or other source of assistance. The current maximum allowable amount for any one disaster to individuals or families is \$25,000. The program gives funds for disaster-related necessary expenses and serious needs, including personal property, transportation, medical and dental, funeral, essential tools, flood insurance, and moving and storage.
- **WUI Grants:** The 10-Year Comprehensive Strategy focuses on assisting people and communities in the WUI to moderate the threat of catastrophic fire through the four broad goals of improving prevention and suppression, reducing hazardous fuels, restoring fire-adapted ecosystems, and promoting community assistance. The WUI Grant may be used to apply for financial assistance towards hazardous fuels and educational projects within the four goals of: improved prevention, reduction of hazardous fuels, restoration of fire-adapted ecosystems and promotion of community assistance.

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



The Bureau of Indian Affairs (BIA) offers various grant programs aimed at supporting hazard mitigation efforts within tribal communities, including the Ohkay Owingeh. These programs are designed to reduce the risk of natural hazards, enhance community resilience, and protect life, property, and cultural resources on tribal lands. Key BIA mitigation grant programs include:

- **Tribal Resilience Program Grants:** These grants support tribes in planning and implementing actions to address climate change impacts, including hazard mitigation related to extreme weather events, droughts, wildfires, and other climate-related hazards. Grants can be used for activities such as vulnerability assessments, resilience planning, capacity building, and community education. Federally recognized tribes and tribal organizations are eligible to apply for these grants.
- **BIA Emergency Management Program Grants:** This program provides financial assistance to tribes to develop and implement emergency management programs, including hazard mitigation planning and preparedness activities. Grants can be used to develop tribal hazard mitigation plans, purchase emergency management equipment, and conduct training and exercises. Federally recognized tribes can apply.
- **Indian Community Development Block Grant Imminent Threat Grants:** These grants are designed to address imminent threats to public health and safety on tribal lands, including those posed by natural hazards. Funds can be used for projects such as flood control, fire protection, and infrastructure improvements that mitigate the impact of natural disasters. Federally recognized tribes are eligible to apply.
- **BIA Housing Improvement Program:** While primarily focused on improving housing conditions for low-income tribal members, HIP funds can also be used for housing-related hazard mitigation activities, such as floodproofing and retrofitting homes for resilience. Grants can be used to repair or replace substandard housing and improve the safety and resilience of tribal homes. Federally recognized tribes and individual tribal members are eligible to apply.
- **BIA Forestry and Wildland Fire Management Program:** This program focuses on the management of forest resources and the prevention and mitigation of wildfires on tribal lands. Grants and technical assistance are provided for wildfire prevention, fuel reduction projects, and post-fire rehabilitation efforts. Federally recognized tribes and tribal organizations with forested lands.
- **BIA Aid to Tribal Governments:** This program provides funds to Indian Tribal governments to support general Tribal government operations, to maintain up-to-date Tribal enrollment, to conduct Tribal elections, and to develop appropriate Tribal policies, legislation, and regulations. Funds may be used in a variety of ways to strengthen the capabilities of Indian tribes in self-government, community planning, and maintenance of membership records.
- **BIA Replacement and Repair of Indian Schools:** Providing safe, functional, code-compliant, economical, and energy efficient education facilities for American Indian students attending Bureau of Indian Affairs owned or funded primary and secondary schools or residing in Bureau owned or funded dormitories. Additional objectives for ARRA funded projects include having a demonstrated or potential ability to deliver programmatic results, optimizing economic activity and the number of jobs created or saved, achieving long-term public benefits from improved school infrastructure, fostering energy independence or improving educational quality.

These grants help tribes proactively address the risks associated with natural hazards, reducing vulnerability and increasing community resilience. By providing funding directly to tribes, these programs support tribal sovereignty, allowing tribes to design and implement mitigation strategies that are tailored to their specific needs and priorities. Additionally, many of these programs also emphasize the protection of culturally significant sites and resources from the impacts of natural hazards.

Small and impoverished communities that receive grants may receive a federal cost share of up to 90% of the total amount approved under the grant award. As defined in 44 CFR 201.2, a small and impoverished community is:

- A community of 3,000 or fewer individuals that is identified by the State as a rural community
- Is not a remote area within the corporate boundaries of a larger city

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



- *Is economically disadvantaged, by having an average per capita annual income of residents not exceeding 80% of national, per capita income.*
- *The local unemployment rate exceeds by one percentage point or more, the most recently reported, average yearly national unemployment rate*
- *Any other factors identified in the State Plan in which the community is located*

6.6 **Previously Identified Jurisdictional Mitigation Actions**

Previously identified hazard mitigation actions were reviewed by the relevant jurisdiction to determine the status of each action. The status of these previously identified hazard mitigation actions indicates if the action has been completed, is carried over to this version of the plan, has been revised, or is no longer being considered. Additionally, each action was assigned a new number to conform with the numbering system in this LHMP.

Actions in the previous LHMP were not differentiated by jurisdiction, and only assigned to Rio Arriba County. The following table details the status of the actions, for the county. All other jurisdictions elected to create standalone actions for purposes of this plan.

Table 124: Rio Arriba County Previous Plan Hazard Mitigation Actions

New Action Number	Previous Action Number	Description	Status
11	1	<i>Air Conditioning and Ventilation Modernization</i>	<i>Carried over, modified</i>
-	2	<i>Alert, Broadcast, and Warning System</i>	<i>Deleted, not mitigation</i>
18	3	<i>Bionet Installation Program</i>	<i>Carried over, modified</i>
1	4	<i>Critical Facility Backup Generator Installation</i>	<i>Carried over, modified</i>
26	5	<i>Debris & Natural Fuels Reduction Program</i>	<i>Carried over, modified</i>
27	6	<i>Defensible Spaces/Buffer Zones Program</i>	<i>Carried over, modified</i>
19	7	<i>Embankment Soil Barrier Installation</i>	<i>Carried over, modified</i>
22	8	<i>FEMA Code 361 Safe Room Projects</i>	<i>Carried over, modified</i>
25	9	<i>Insulation & Energy Efficiency Upgrade Program</i>	<i>Carried over, modified</i>
7	10	<i>Dam Failure Public Awareness and Education Program</i>	<i>Carried over, modified</i>
16	11	<i>Rainwater Retention/Detention Project</i>	<i>Carried over, modified</i>
-	12	<i>Remote Water Monitoring Stations</i>	<i>Deleted, not technically feasible</i>
19	13	<i>Slope Reinforcement and Modification Program</i>	<i>Carried over, modified</i>
24	14	<i>Snow Fence Installation Program</i>	<i>Carried over, modified</i>
-	15	<i>Expansive Soil Sampling and Analysis</i>	<i>Deleted, hazard no longer considered</i>
14	16	<i>Storm Water Drainage System Upgrade</i>	<i>Carried over, modified</i>
2	17	<i>Transportation Status and Routing Notification Systems</i>	<i>Carried over, modified</i>
5	18	<i>Tree Wire Installation</i>	<i>Carried over, modified</i>
-	19	<i>Underground Electrical Transmission Installation</i>	<i>Deleted, cost prohibitive</i>
25	20	<i>Water Line Insulation Program</i>	<i>Carried over, modified</i>
21	21	<i>Wildfire Structural Retrofit Program</i>	<i>Carried over, modified</i>
9	22	<i>Xeriscaping program</i>	<i>Carried over, modified</i>

Completed actions may be found in the following section. Carried over, revised, and deleted actions may be found in 6.8.

6.7 **Completed Mitigation Actions**

Rio Arriba County, the Ohkay Owingeh, and all participating jurisdictions remain committed to investigating and obtaining all available grant funding for the completion of hazard mitigation projects. Since the completion of the previous LHMP in 2013 none of the identified mitigation actions have been completed:

Neither Rio Arriba County, the Ohkay Owingeh, or any participating jurisdictions have received any FEMA Hazard Mitigation Grant funding (HMGP, BRIC, PDM, FMAG) as of this plan.



6.8 Jurisdictional Mitigation Actions

To support the mitigation goals identified in this LHMP, Rio Arriba County, the Ohkay Owingeh, and all participating jurisdictions identified a comprehensive range mitigation projects and activities. The selected set carefully takes an all-hazards approach to mitigation while simultaneously addressing each of the plan’s profiled hazards. The list of mitigation actions is based upon the potential to reduce risk to life and property with an emphasis on ease of implementation, community and agency support, consistency with local jurisdictions’ plans and capabilities, available funding, and jurisdictional vulnerability.

It is important to note that since the previous LHMP, requirements for plan approval have changed. In the previous plan, all jurisdictions identified only a few actions, with many of the actions identified at the county level to cover local participants. As such, the actions in this plan have been re-written and reclassified on a wholesale basis to ensure each participating jurisdiction has identified at least one action per identified hazard. In doing so, presenting a comparison to previously identified actions is impractical. However, any actions previously identified that have been completed are noted to illustrate successes.

The strategy for development and revision of hazard mitigation actions in this LHMP allows a more tailored approach to mitigation planning, ensuring that communities address the hazards most relevant to their circumstances while also acknowledging that not all hazards may be equally significant across different areas. It promotes a more efficient use of resources by focusing efforts on mitigating the most pressing risks faced by each community.

For each identified action, the following applies:

- New actions that have been added to this plan update are identified as such
- Some actions have been reassigned or reclassified. In these cases, not all information is provided under the original listing, rather the newly assigned responsible entity has been given the opportunity to detail the requested information
- All mitigation action information was provided by jurisdictional officials through outreach from the MPC

The following table provides a mitigation action cross check for each participating jurisdiction.

Table 125: Participating Jurisdiction Mitigation Action Cross Check

Hazard	Rio Arriba County	Chama	Espanola	Ohkay Owingeh
All Hazards	1, 2, 3, 4, 5	-	-	-
Dam Failure	6, 7	1, 2	1, 2	1, 2
Drought	8, 9, 10	3, 4	3, 4	3, 4, 5
Extreme Temperatures	11, 12	5, 6	5, 6	6, 7
Flood	13-17	7, 8	7, 8	8, 9
Landslide	18, 19	9, 10	9, 10	10, 11
Severe Weather	20, 21, 22, 23	11, 12	11, 12	12, 13, 14
Severe Winter Weather	24, 25	13	13	15, 16
Wildfire	26, 27, 28	14, 15	14, 15	12, 14, 17, 18, 19

The following tables identify mitigation action items for each participating jurisdiction, along with the following information:

- Hazard addressed
- Responsible party
- Overall priority
- Goal(s) addressed
- Estimated cost
- Potential funding source

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



- *Proposed completion timeframe*
- *Current status*

It is important to note that when assigning a responsible party for these actions the participating jurisdictions have limited staff and departments. As such, the overall assignment has been given to the highest-ranking employee or overarching department.

DRAFT

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Table 126: Rio Arriba County Mitigation Actions

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Status
Rio Arriba County 1	Install generators in all county facilities to ensure the continuous function of government activities.	All hazards	Emergency Manager, Rio Arriba County Facilities Director	High	1, 2	\$10,000 to \$50,000 per location	HMGP, BRIC, General Funds	Ten years	Carried over due to lack of funding
Rio Arriba County 2	Purchase electronic mobile traffic notification signs.	All Hazards	Emergency Manager, Rio Arriba County Public Works Director	Medium	1, 2	\$35,000 - \$50,000	HMGP, General Funds	Five years	Carried over due to lack of funding
Rio Arriba County 3	Conduct education programs on all hazards for citizens and businesses of Rio Arriba County.	All hazards	Emergency Manager	Medium	3	\$500 per event	HMGP, BRIC, General Funds	Three years	New
Rio Arriba County 4	Develop restrictions on planting large or rapidly growing trees near power lines and major arterials.	All hazards	Emergency Manager, County Manager	Low	1, 2, 4	Staff time	General Funds	Five years	New
Rio Arriba County 5	Conduct a regular tree trimming and tree wire installation program.	All hazards	Emergency Manager	High	1, 2	\$25,000 per occurrence	General Funds	Continuous	Carried over due to lack of funding
Rio Arriba County 6	Conduct a GIS driven analysis of all assets in identified high hazard dam inundation areas for the determination of long-term projects to reduce or eliminate the vulnerability of these identified assets.	Dam Failure	Emergency Manager, IT Director, NFIP Coordinator	Medium	1, 2	Staff time	General Funds	Five years	New
Rio Arriba County 7	Post permanent signage showing evacuation and higher ground routes in identified inundation areas.	Dam Failure	Emergency Manager, GIS Director, NFIP Coordinator	Medium	1, 2	Staff time and \$10,000	General Funds	Five years	New
Rio Arriba County 8	Develop and adopt a water conservation	Drought	Emergency Manager,	Low	1, 2, 3, 4	Staff time	General Funds	Five years	New

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Table 126: Rio Arriba County Mitigation Actions

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Status
	<i>ordinance that stipulates landscaping requirements, hours for irrigation, retrofitting with low-flow outlets, and penalties for wasting water.</i>		<i>County Manager</i>						
<i>Rio Arriba County 9</i>	<i>Replace existing plantings with low water native plants at all jurisdictional owned facilities</i>	<i>Drought</i>	<i>Rio Arriba County Facilities Director</i>	<i>Medium</i>	<i>1, 2</i>	<i>\$5,000 - \$20,000 per facility</i>	<i>HMGP, BRIC, General Funds</i>	<i>Ten years</i>	<i>Carried over due to lack of funding</i>
<i>Rio Arriba County 10</i>	<i>Conduct regular water use seminars to provide information on low flow utilities, low water native plants, and conservation methods.</i>	<i>Drought</i>	<i>Emergency Manager</i>	<i>Medium</i>	<i>3, 4</i>	<i>\$1,000 per class</i>	<i>General Funds</i>	<i>Yearly</i>	<i>New</i>
<i>Rio Arriba County 11</i>	<i>Modernization HVAC systems in jurisdictional facilities.</i>	<i>Extreme Heat</i>	<i>Rio Arriba County Facilities Director</i>	<i>Low</i>	<i>1, 2</i>	<i>\$25,000 per facility</i>	<i>HMGP, BRIC, General Funds</i>	<i>Five years</i>	<i>Carried over due to lack of funding</i>
<i>Rio Arriba County 12</i>	<i>Identify and prepare county buildings for usage as heat shelters.</i>	<i>Extreme Heat</i>	<i>Facilities Director</i>	<i>Low</i>	<i>1, 2</i>	<i>\$2,000 per facility</i>	<i>BRIC, General Funds</i>	<i>Five years</i>	<i>New</i>
<i>Rio Arriba County 13</i>	<i>Continue to participate in, and enforce provisions of, NFIP.</i>	<i>Flood</i>	<i>NFIP Administrator</i>	<i>High</i>	<i>1, 2</i>	<i>Staff time</i>	<i>General Fund</i>	<i>On-going</i>	<i>On-going</i>
<i>Rio Arriba County 14</i>	<i>Upgrade all stormwater systems to be able to handle high flood flows</i>	<i>Flood</i>	<i>Emergency Manager, NFIP Administrator</i>	<i>High</i>	<i>1, 2</i>	<i>Per project cost</i>	<i>FMA, HMGP, BRIC, General Funds</i>	<i>Ten years</i>	<i>Carried over due to lack of funding</i>
<i>Rio Arriba County 15</i>	<i>Designate all floodways as open space</i>	<i>Flood</i>	<i>Emergency Manager, NFIP Administrator</i>	<i>High</i>	<i>1, 3</i>	<i>Staff Time</i>	<i>General Funds</i>	<i>Five years</i>	<i>New</i>

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Table 126: Rio Arriba County Mitigation Actions

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Status
Rio Arriba County 16	Construct rainwater retention/detention ponds at strategic locations.	Flood	NFIP Administrator, Public Works Director	Medium	1, 2	Facility size dependent	HMGP, BRIC, General Funds	Ten years	Carried over due to lack of funding
Rio Arriba County 17	Procure permanent signage to warn of flood hazard areas.	Flood	NFIP Administrator, Emergency Manager	Medium	1, 2	Location dependent	HMGP, General Funds	Five years	New
Rio Arriba County 18	Stabilize cliffs with terracing or plantings of grasses or bionets to hold soil together.	Landslide	Rio Arriba County Public Works Director	Low	1, 3	Location dependent	HMGP, BRIC, General Funds	5-10 years	Carried over due to lack of funding
Rio Arriba County 19	Map landslide prone slopes, and then conduct a slope reinforcement and modification program.	Landslide	Rio Arriba County Public Works Director	Low	1, 2	Location dependent	HMGP, BRIC, General Funds	5-10 years	Carried over due to lack of funding
Rio Arriba County 20	Install signage on highways in known high wind areas alerting high profile vehicles of hazard.	Severe Storms	Rio Arriba County Public Works Director	Medium	1, 2	\$20,000	HMGP, BRIC, General Funds	Five years	New
Rio Arriba County 21	Install high wind, hail, and fire-resistant roofing on all jurisdictional facilities.	Severe Weather	Rio Arriba County Facilities Director	Medium	1, 2	Project dependent	General Fund, HMGP, BRIC	Five years	New
Rio Arriba County 22	Construct FEMA approved saferooms in county facilities.	Severe Storms	Rio Arriba County Public Works Director	Medium	1, 2	Facility size dependent	HMGP, BRIC, General Funds	5-10 years	Carried over due to lack of funding
Rio Arriba County 23	Install and maintain surge protection on critical electronic equipment.	Severe Weather	City Manager	Low	1, 3	\$10,000 per location	General Fund, HMGP, BRIC	Five years	New
Rio Arriba County 24	Install living snow fences along major roads.	Severe Winter Weather	Rio Arriba County Public Works Director	Low	1, 3	Per location cost	General Fund, HMGP, BRIC	Ten years	Carried over due to lack of funding

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Table 126: Rio Arriba County Mitigation Actions

<i>Action Identification</i>	<i>Description</i>	<i>Hazard Addressed</i>	<i>Responsible Party</i>	<i>Overall Priority</i>	<i>Goal(s) Addressed</i>	<i>Estimated Cost</i>	<i>Potential Funding Source</i>	<i>Proposed Completion Timeframe</i>	<i>Status</i>
Rio Arriba County 25	Further insulate all water lines in jurisdictional facilities.	Severe Winnter Weather	Rio Arriba County Facilities Director	Medium	1, 2	Location dependent	General Fund, HMGP, BRIC	Five years	Carried over due to lack of funding
Rio Arriba County 26	Conduct a fuel thinning program on all county owned and managed land, to include private lands overseen by Rio Arriba County Fire Districts, to reduce potential wildfire hazard.	Wildfire	Rio Arriba County Emergency Manager, Fire Chiefs	Medium	1, 2	\$500 per acre	HMGP, BRIC, General Funds	Continuous	On-going
Rio Arriba County 27	Create defensible space buffers at all critical facilities	Wildfire	Fire Chiefs, Emergency Manager	High	1, 2	Facility size dependent	HMGP, BRIC, General Funds	As required	Carried over due to lack of funding
Rio Arriba County 28	Increase public training on wildland-urban interface fire prevention.	Wildfire	Fire Chiefs, Emergency Manager	High	2	Staff time	General fund	Three to five years	New

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Table 127: Chama Hazard Mitigation Actions

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Status
Chama-1	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam Failure	City Manager	Medium	1, 2	\$5,000 per location	FEMA mitigation grant, General fund	Five years	New
Chama-2	Map all infrastructure and facilities within dam inundation areas.	Dam Failure	City Manager	Medium	1, 2, 3	\$10,000 per location	FEMA mitigation grant, General fund	Five years	New
Chama-3	Conduct a native, low water planting program for all jurisdictional owned facilities.	Drought	City Manager	Low	1, 3, 6	\$5,000 - \$50,000 per location	FEMA mitigation grant, General fund	Five years	New
Chama-4	Conduct agricultural education program on water reduction methods.	Drought	City Manager	High	1, 2, 3, 6	Staff Time	General fund	Five years	New
Chama-5	Modernization of HVAC systems in jurisdictional facilities.	Extreme Temperatures	City Manager	Low	1, 3, 6	\$25,000 per facility	FEMA mitigation grant, General fund	Ten years	New
Chama-6	Identify and prepare jurisdictional buildings for usage as temperature shelters.	Extreme Temperatures	City Manager	Low	1, 3, 6	\$2,000 per facility	General fund	Two years	New
Chama-7	Continue to participate in the National Flood Insurance Program.	Flood	City Manager	High	3	Staff Time	General fund	Continuous	On-going
Chama-8	Construct rainwater retention/detention ponds at strategic locations.	Flood	City Manager	Medium	1, 3, 6	Project dependent	General Fund, FMA, HMGP, BRIC	Ten years	New
Chama-9	Stabilize cliffs with terracing or plantings of grasses or other plants to hold soil together.	Landslide	City Manager	Low	1, 3	Staff time	General Fund	5-10 years	New
Chama-10	Map , and then notify property owners located	Landslide	City Manager	Low	1, 2, 3	Staff time	General Fund	Three years	New

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Table 127: Chama Hazard Mitigation Actions

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Status
	<i>in high-risk landslide areas.</i>								
Chama-11	<i>Install high wind, hail, and fire-resistant roofing on all jurisdictional facilities.</i>	<i>Severe Weather</i>	<i>City Manager</i>	<i>Medium</i>	<i>1, 3, 6</i>	<i>Project dependent</i>	<i>General Fund, HMGP, BRIC</i>	<i>Five years</i>	<i>New</i>
Chama-12	<i>Install and maintain surge protection on critical electronic equipment.</i>	<i>Severe Weather</i>	<i>City Manager</i>	<i>Low</i>	<i>1, 3</i>	<i>\$10,000 per location</i>	<i>General Fund, HMGP, BRIC</i>	<i>Five years</i>	<i>New</i>
Chama-13	<i>Install living snow fences along major roads.</i>	<i>Severe Winter Weather</i>	<i>City Manager</i>	<i>Low</i>	<i>1, 3</i>	<i>Per location cost</i>	<i>General Fund, HMGP, BRIC</i>	<i>Ten years</i>	<i>New</i>
Chama-14	<i>Create defensible space buffers at all critical facilities</i>	<i>Wildfire</i>	<i>City Manager</i>	<i>High</i>	<i>1, 2</i>	<i>Facility size dependent</i>	<i>HMGP, BRIC, Jurisdiction budget</i>	<i>As required</i>	<i>New</i>
Chama-15	<i>Increase public and fire department training on wildland-urban interface fire prevention.</i>	<i>Wildfire</i>	<i>City Manager</i>	<i>High</i>	<i>3</i>	<i>\$30 per student per training session</i>	<i>Forest Service and federal grants</i>	<i>Three to five years</i>	<i>New</i>

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Table 128: Espanola Hazard Mitigation Actions

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Status
Espanola-1	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam Failure	City Manager	Medium	1, 2	\$5,000 per location	FEMA mitigation grant, General fund	Five years	New
Espanola-2	Map all infrastructure and facilities within dam inundation areas.	Dam Failure	City Manager	Medium	1, 2, 3	\$10,000 per location	FEMA mitigation grant, General fund	Five years	New
Espanola-3	Conduct a native, low water planting program for all jurisdictional owned facilities.	Drought	City Manager	Low	1, 3, 6	\$5,000 - \$50,000 per location	FEMA mitigation grant, General fund	Five years	New
Espanola-4	Conduct agricultural education program on water reduction methods.	Drought	City Manager	High	1, 2, 3, 6	Staff Time	General fund	Five years	New
Espanola-5	Modernization of HVAC systems in jurisdictional facilities.	Extreme Temperatures	City Manager	Low	1, 3, 6	\$25,000 per facility	FEMA mitigation grant, General fund	Ten years	New
Espanola-6	Identify and prepare jurisdictional buildings for usage as temperature shelters.	Extreme Temperatures	City Manager	Low	1, 3, 6	\$2,000 per facility	General fund	Two years	New
Espanola-7	Continue to participate in the National Flood Insurance Program.	Flood	City Manager	High	3	Staff Time	General fund	Continuous	On-going
Espanola-8	Construct rainwater retention/detention ponds at strategic locations.	Flood	City Manager	Medium	1, 3, 6	Project dependent	General Fund, FMA, HMGP, BRIC	Ten years	New
Espanola-9	Stabilize cliffs with terracing or plantings of grasses or other plants to hold soil together.	Landslide	City Manager	Low	1, 3	Staff time	General Fund	5-10 years	New
Espanola-10	Map , and then notify property owners located	Landslide	City Manager	Low	1, 2, 3	Staff time	General Fund	Three years	New

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Table 128: Espanola Hazard Mitigation Actions

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Status
	<i>in high-risk landslide areas.</i>								
<i>Espanola-11</i>	<i>Install high wind, hail, and fire-resistant roofing on all jurisdictional facilities.</i>	<i>Severe Weather</i>	<i>City Manager</i>	<i>Medium</i>	<i>1, 3, 6</i>	<i>Project dependent</i>	<i>General Fund, HMGP, BRIC</i>	<i>Five years</i>	<i>New</i>
<i>Espanola-12</i>	<i>Install and maintain surge protection on critical electronic equipment.</i>	<i>Severe Weather</i>	<i>City Manager</i>	<i>Low</i>	<i>1, 3</i>	<i>\$10,000 per location</i>	<i>General Fund, HMGP, BRIC</i>	<i>Five years</i>	<i>New</i>
<i>Espanola-13</i>	<i>Install living snow fences along major roads.</i>	<i>Severe Winter Weather</i>	<i>City Manager</i>	<i>Low</i>	<i>1, 3</i>	<i>Per location cost</i>	<i>General Fund, HMGP, BRIC</i>	<i>Ten years</i>	<i>New</i>
<i>Espanola-14</i>	<i>Create defensible space buffers at all critical facilities</i>	<i>Wildfire</i>	<i>City Manager</i>	<i>High</i>	<i>1, 2</i>	<i>Facility size dependent</i>	<i>HMGP, BRIC, Jurisdiction budget</i>	<i>As required</i>	<i>New</i>
<i>Espanola-15</i>	<i>Increase public and fire department training on wildland-urban interface fire prevention.</i>	<i>Wildfire</i>	<i>City Manager</i>	<i>High</i>	<i>3</i>	<i>\$30 per student per training session</i>	<i>Forest Service and federal grants</i>	<i>Three to five years</i>	<i>New</i>

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Table 129: Ohkay Owingeh Mitigation Actions

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Status
Ohkay Owingeh 1	Install evacuation route and high ground signage in any high hazard dam potential inundation areas.	Dam Failure	Ohkay Owingeh Tribal Council	Medium	1, 2	\$5,000 per location	FEMA mitigation grant, Tribal General Fund	Five years	New
Ohkay Owingeh 2	Map all infrastructure and facilities within dam inundation areas.	Dam Failure	Ohkay Owingeh Tribal Council	Medium	1, 2, 3	\$10,000 per location	FEMA mitigation grant, Tribal General Fund	Five years	New
Ohkay Owingeh 3	Install low flow utilities in all tribal facilities.	Drought	Ohkay Owingeh Tribal Council	High	1, 2	\$50,000 per facility	BIA, HMGP, BRIC, Tribal General Fund	Five years	New
Ohkay Owingeh 4	Conduct a native plant landscaping program for all tribal owned facilities	Drought	Ohkay Owingeh Tribal Council	High	1, 2	\$5,000 - \$20,000 per location	BIA, HMGP, BRIC, Tribal General Fund	Five years	New
Ohkay Owingeh 5	Conduct a personal water use education program.	Drought	Ohkay Owingeh Tribal Council	High	1, 3	\$5,000	Tribal General Fund	Five years	New
Ohkay Owingeh 6	Modernization of HVAC systems in tribal facilities.	Extreme Temperatures	City Manager	Low	1, 3, 6	\$25,000 per facility	BIA, HMGP, BRIC, Tribal General Fund	Ten years	New
Ohkay Owingeh 7	Educate tribal members of potential health impacts of extreme temperatures.	Extreme Temperatures	City Manager	Low	1, 3, 6	\$2,000 per facility	BIA, HMGP, BRIC, Tribal General Fund	Two years	New
Ohkay Owingeh 8	Clean and repair drainage ditches and culverts to maintain capacity.	Flood	Ohkay Owingeh Tribal Council	High	1, 2	\$300,000	BIA, HMGP, BRIC, Tribal General Fund	Five years	New
Ohkay Owingeh 9	Construct rainwater retention/detention ponds at strategic locations.	Flood	Ohkay Owingeh Tribal Council	Medium	1, 2	Location and size dependent	BIA, HMGP, BRIC, Tribal General Fund	Ten years	New
Ohkay Owingeh 10	Install bionets in landslide prone locations.	Landslide	Ohkay Owingeh Tribal Council	Low	1, 2	Location and size dependent	BIA, HMGP, BRIC, Tribal General Fund	Ten years	New
Ohkay Owingeh 11	Conduct a slope reinforcement and modification program in slide prone areas	Landslide	Ohkay Owingeh Tribal Council	Low	1, 2	Location and size dependent	BIA, HMGP, BRIC, Tribal General Fund	Ten years	New
Ohkay Owingeh 12	Purchase and install critical facility backup generators.	Severe Weather, Wildfire	Ohkay Owingeh Tribal Council	High	1, 2	\$40,000 per facility	BIA, HMGP, BRIC, Tribal General Fund	Five years	New

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Table 129: Ohkay Owingeh Mitigation Actions

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Status
Ohkay Owingeh13	Install surge protectors in all tribal facilities.	Severe Weather	Ohkay Owingeh Tribal Council	Low	1, 2	\$10,000 per location	BIA, HMGP, BRIC, Tribal General Fund	Five years	New
Ohkay Owingeh 14	Install hail and fire-resistant roofing on all tribal facilities.	Severe Weather, Wildfire	Ohkay Owingeh Tribal Council	Low	1, 2	\$50,000 per location	BIA, HMGP, BRIC, Tribal General Fund	Five years	New
Ohkay Owingeh 15	Conduct a winterization educational class for the public.	Severe Winter Weather	Ohkay Owingeh Tribal Council	Medium	1, 3		Tribal General Fund	Five years	New
Ohkay Owingeh 16	Conduct an insulation and energy upgrade program for all tribal owned and managed buildings.	Severe Winter Weather	Ohkay Owingeh Tribal Council	Medium	1, 2	\$75,000 - \$125,000	BIA, HMGP, BRIC, Tribal General Fund	Five years	New
Ohkay Owingeh 17	Create defensible spaces and buffer zones void of vegetative fuel at all tribal facilities.	Wildfire	Ohkay Owingeh Tribal Council	High	1, 2	Facility size dependent	BIA, HMGP, BRIC, Tribal General Fund	As required	New
Ohkay Owingeh 18	Implement hazardous fuels reduction program.	Wildfire	Ohkay Owingeh Tribal Council	High	1, 2	\$100,000	BIA, HMGP, BRIC, Tribal General Fund	Five years	New
Ohkay Owingeh 19	Conduct wildfire education program and outreach programs for public.	Wildfire	Ohkay Owingeh Tribal Council	High	1, 3	Staff Time	Tribal General Fund	Five years	New

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Table 130: Rio Arriba School District Hazard Mitigation Actions

Action Identification	Description	Hazard Addressed	Responsible Party	Overall Priority	Goal(s) Addressed	Estimated Cost	Potential Funding Source	Proposed Completion Timeframe	Status
Rio Arriba School District- 1	Conduct a native, low water planting program for all jurisdictional owned facilities.	Drought	School Superintendent	Low	1, 3, 6	\$5,000 - \$50,000 per location	FEMA mitigation grant, District General Budget	Five years	New
Rio Arriba School District- 2	Conduct agricultural education program on water reduction methods.	Drought	School Superintendent	High	1, 2, 3, 6	Staff Time	District General Budget	Five years	New
Rio Arriba School District- 3	Modernization of HVAC systems in district facilities.	Extreme Temperatures	School Superintendent	Low	1, 3, 6	\$25,000 per facility	FEMA mitigation grant, District General Budget	Ten years	New
Rio Arriba School District- 4	Identify and prepare district buildings for usage as shelters during times of extreme temperatures.	Extreme Temperatures	School Superintendent	Low	1, 3, 6	\$2,000 per facility	District General Budget	Two years	New
Rio Arriba School District- 5	Educate students on dangers of entering flooded areas..	Flood	School Superintendent	High	3	Staff Time	District General Budget	One year	New
Rio Arriba School District- 6	Construct rain gardens next to paved parking areas.	Flood	School Superintendent	Medium	1, 3, 6	Project dependent	District General Budget, FMA, HMGP, BRIC	Ten years	New
Rio Arriba School District- 7	Map any district facilities in high-risk landslide areas.	Landslide	School Superintendent	Low	1, 3	Staff time	District General Budget	5-10 years	New
Rio Arriba School District- 8	Install high wind, hail, and fire-resistant roofing on all district facilities.	Severe Weather	School Superintendent	Medium	1, 3, 6	Project dependent	District General Budget, HMGP, BRIC	Five years	New

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



Table 130: Rio Arriba School District Hazard Mitigation Actions

<i>Action Identification</i>	<i>Description</i>	<i>Hazard Addressed</i>	<i>Responsible Party</i>	<i>Overall Priority</i>	<i>Goal(s) Addressed</i>	<i>Estimated Cost</i>	<i>Potential Funding Source</i>	<i>Proposed Completion Timeframe</i>	<i>Status</i>
<i>Rio Arriba School District- 9</i>	<i>Install and maintain surge protection on critical electronic equipment.</i>	<i>Severe Weather</i>	<i>School Superintendent</i>	<i>Low</i>	<i>1, 3</i>	<i>\$10,000 per location</i>	<i>District General Budget, HMGP, BRIC</i>	<i>Five years</i>	<i>New</i>
<i>Rio Arriba School District- 10</i>	<i>Educate students on impacts of severe winter weather, including education on proper driving techniques.</i>	<i>Severe Winter Weather</i>	<i>School Superintendent</i>	<i>Low</i>	<i>1, 3</i>	<i>Staff Time</i>	<i>District General Budget, HMGP, BRIC</i>	<i>Ten years</i>	<i>New</i>
<i>Rio Arriba School District- 11</i>	<i>Create defensible space buffers at all district facilities.</i>	<i>Wildfire</i>	<i>School Superintendent</i>	<i>High</i>	<i>1, 2</i>	<i>Facility size dependent</i>	<i>Jurisdiction budget</i>	<i>As required</i>	<i>New</i>

DRAFT



Prior to the implementation of any action further feasibility analysis will be performed. Additionally, a Benefit-Cost Analysis that determines the future risk reduction benefits of a hazard mitigation project and compares those benefits to its costs will be conducted as required. Applicants and sub-applicants will use FEMA approved methodologies and tools, such as the Benefit-Cost Analysis Toolkit, to demonstrate the cost-effectiveness of their projects. The result of the analysis is a Benefit-Cost Ratio, and a project is considered cost-effective when the Benefit-Cost Ratio is 1.0 or greater. Depending on the project, either a full Benefit-Cost Analysis will be completed by entering documented values into the FEMA Benefit-Cost Analysis Toolkit, which calculates a benefit-cost ratio or, if the project meets specified criteria, a streamlined Benefit-Cost Analysis may be completed (FEMA's cost-effectiveness requirement is never waived).

Rio Arriba County, the Ohkay Owingeh, and all participating jurisdictions acknowledge that the adoption and approval of this plan does not obligate the completion of each identified action. Rather, the MPC understands that progress should be shown in mitigation efforts which may include the completion of mitigation actions or other actions or progress in achieving the goals of the LHMP.

6.9 Mitigation Action Implementation and Monitoring

Rio Arriba County, the Ohkay Owingeh Tribe, and each participating jurisdiction is responsible for implementing and managing identified mitigation actions. To foster accountability and increase the likelihood that actions will be implemented, every proposed action is assigned to a specific department or position as a champion. In general:

- The identified champion will be responsible for tracking and reporting on action status.
- The identified champion should provide input on whether the action as implemented is successful in reducing vulnerability, if applicable.
- If the action is unsuccessful in reducing vulnerability, the identified champion will be tasked with identifying deficiencies and additional required actions.

Additionally, each action has been assigned a proposed completion timeframe to determine if the action is being implemented according to plan.

RACOEM is responsible for monitoring the progress of mitigation activities and projects throughout the county in conjunction with the participating stakeholder communities. To facilitate the tracking of any awarded hazard mitigation grants, the RACOEM will compile a list of projects funded throughout the calendar year, if any, and add it to an electronic database. Additionally, RACOEM will monitor information on any other mitigation projects that were not funded through hazard mitigation grants. RACOEM will utilize the NMDHSEM tracking system, an automated system that provides a streamlined and efficient way to apply for and manage grant funding.

Providing grant oversight, NMDHSEM will continuously monitor the grant process to ensure compliance with federal and state regulations and requirements. Monitoring focuses on providing technical assistance and guidance to validate or improve administrative and fiscal efficiencies in managing award funds. As part of the monitoring process, NMDHSEM will provide as needed compliance assessment to review all related transactions and processes to verify that Grant Subaward funds were expended in compliance with federal and state regulations and the terms and conditions of the Subaward.

During the monitoring process, NMDHSEM may determine that the process is not in compliance with federal and state regulation and requirements. The following are common areas of non-compliance:

- **Internal Controls**
 - Lack of segregation of duties for smaller nonprofit organizations
 - Inadequate policies for victim petty cash/financial assistance
 - Single audit findings, audit reports submitted late, lack of required audits
 - Inadequate monitoring of second tier subrecipients
- **Financial Management**

2025 RIO ARRIBA COUNTY COMPREHENSIVE PLAN



- *Improper/inadequate tracking and recording of Subaward costs*
 - *Costs not allocated properly and/or Inadequate cost allocation plan*
 - *Overcharging of office facility rent or indirect costs*
 - *Inadequate/unsupported/unallowable required match*
 - *Match not recorded or not identified in accounting records as match*
 - *Match not claimed on reimbursement request as occurred*
 - *Reimbursement requests not submitted timely*
- *Personnel*
 - *Functional timesheets not used for Subaward Personnel costs*
 - *Fringe benefit costs claimed in incorrect cost category*
 - *Unsupported/unallowable Personnel costs*
 - *Unsupported volunteer in-kind match claimed on reimbursement request*
- *Operating*
 - *Unsupported/unallowable operating cost items*
 - *Lack of proof of payment of cost item(s)*
 - *Cost claimed on reimbursement request prior to expending money*
- *Equipment*
 - *Equipment inventory records missing required information*
 - *Disposal data and information missing from records*
 - *Physical equipment inventory/record reconciliation not performed*
 - *Missing or unidentifiable equipment (onsite equipment inspections)*
- *Procurements/Contracts*
 - *Lack of written procurement procedures*
 - *Lack of written code of conduct covering conflicts of interest in procurements*
 - *Improper procurement*
 - *Non-competitive procurement not justified/approved*
 - *Procurement documentation not maintained*
 - *Suspension/debarment not checked prior to awarding contract*
 - *Competition requirements not met (quotes, bids, proposals)*
 - *No cost/price analysis*
 - *Lack of negotiating profit/discount when required*
 - *Contracts/purchase orders do not contain all required provisions*

Should any areas be determined as non-complaint, a Corrective Action Plan may be required to address any identified issues, with the plan needing to be completed and implemented in a specific time frame.

Upon completion of a project, a member of the awarded jurisdiction, a member of the Rio Arriba County MPC, and a NMDHSEM representative will conduct a closeout site visit to:

- *Review all files and documents*
- *Review all procurement files and contracts to third parties*
- *Take photos of the completed project*

Project closeout packages will generally be submitted 90 days after a project has been completed, and will include the following:

- *Summary of documentation*
- *Pictures of completed project*
- *Materials, labor, and equipment forms, if required*
- *Close-out certification*

IMPLEMENTATION

DRAFT



COMPREHENSIVE PLAN ADMINISTRATION, AMENDMENT AND UPDATE

The Rio Arriba County Comprehensive Plan is a dynamic document meant for continuous implementation and review. The plan will undergo informal annual reviews and a formal update every five years, with updates informed by Census and socio-economic data. Below is a suggested framework for implementation of the plan.

Administrative Structure

- County Manager: Overall accountability.
- Department Heads: Lead on their respective areas.
- Core Implementation Team: Cross-functional team tracking progress and coordinating between departments.
- Comprehensive Plan Implementation Task Force: Appointed by the County Board of Commissioners, including County Departments, the Planning and Zoning Commission, local business and real estate representatives, ranchers, water stakeholders, and community leaders.

Areas of Focus and Assigned Owners

- Land Use & Natural Resources: Director of Planning & Zoning
- Economic Development: Economic Development Director
- Social Justice & Housing: Director of Community Services
- Public Safety & Emergency Response: Fire Chief & Sheriff
- Waste Management & Infrastructure: Public Works Director
- Education & Public Awareness: Education Liaison
- Tourism, Film & Cultural Preservation: Economic Development Director

Milestones & Timeframes

- Q3 2025: Initial kick-off and resource allocation.
- Q4 2025: Submission of action plans by department heads.
- Q1 2026: Mid-year review with adjustments based on initial results.
- 2026-2027: Quarterly progress reports and milestone assessments.
- 2028: Comprehensive review and progress report.
- 2030: 5-Year Comprehensive Plan Update

Accountability Mechanism

- Monthly Reporting: Department heads submit updates to the County Manager.
- Quarterly Reviews: Public reports to the County Commission.
- Mid-Year Audits: Conducted by an internal audit team.
- Performance Metrics: Specific targets tied to County goals (e.g., public safety, economic development).
- Accountability: Regular job performance reviews tied to milestones.



Stakeholder Engagement

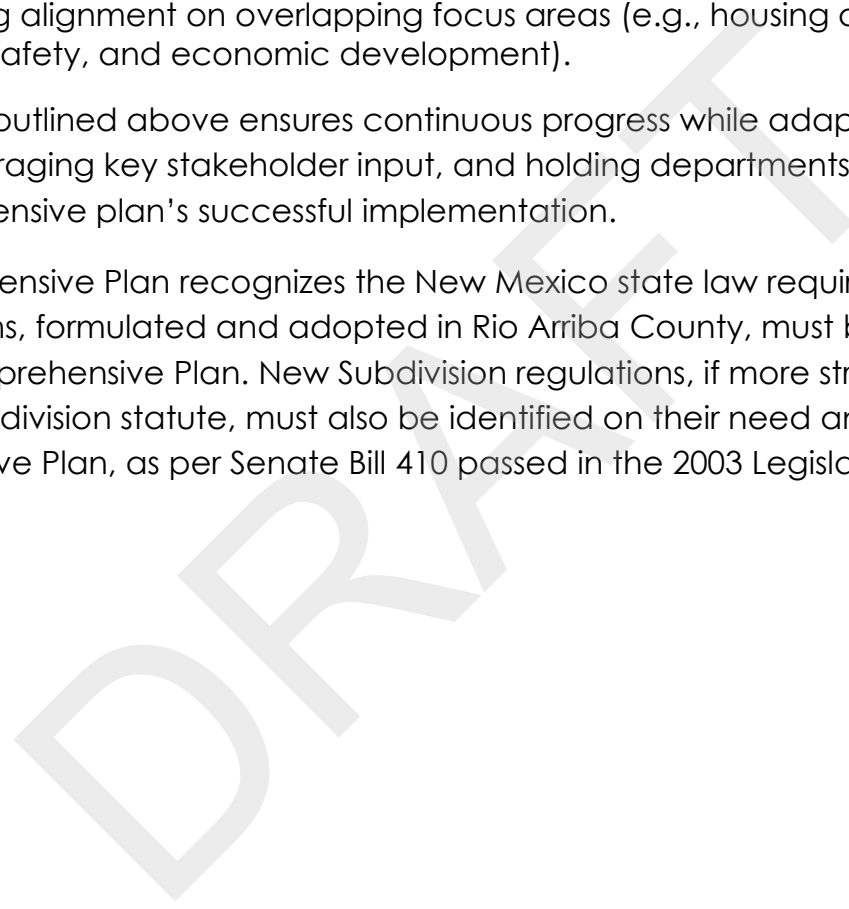
- Public Forums: Quarterly updates and feedback sessions with residents.
- Advisory Committees: Established for key sectors like economic development, natural resources, and community services.
- Public Input: Recognizing residents as a critical component of the planning process.

Cross-Departmental Collaboration

- Inter-Departmental Meetings: Regular coordination among departments, ensuring alignment on overlapping focus areas (e.g., housing and infrastructure, public safety, and economic development).

The structure outlined above ensures continuous progress while adapting to changing priorities, leveraging key stakeholder input, and holding departments accountable for the comprehensive plan's successful implementation.

The Comprehensive Plan recognizes the New Mexico state law requirement that land use regulations, formulated and adopted in Rio Arriba County, must be in accordance with the Comprehensive Plan. New Subdivision regulations, if more stringent than those in the NM Subdivision statute, must also be identified on their need and specified in the Comprehensive Plan, as per Senate Bill 410 passed in the 2003 Legislative session.





IMPLEMENTATION STRATEGY PRIORITIES

This section of the 2025 Rio Arriba Comprehensive Plan highlights the top strategies for each major topic area, based on the results of prioritization surveys, one completed by the public and the other by the Steering Committee, conducted in February and March 2025. Respondents were asked to rank all strategies associated with each goal within the main topic areas. The combined results from both surveys were used to identify the highest priority strategies.³¹

Natural Resources Priority Strategies

- Work with property owners to return disturbed lands to their natural function.
- Encourage managed grazing practices and habitat restoration through partnerships with ranchers and conservationists.
- Sponsor community clean-up events and road corridor improvement programs.
- Acquire and maintain inventories of critical natural resources, including aquifers, wildlife corridors, scenic views, and recreation sites.
- Collaborate with the Department of Game and Fish to establish conditions minimizing the cumulative impact of development on wildlife.
- Enhance infrastructure for water and wastewater systems with funding from state and federal sources.

Land Use Priority Strategies

- Regulate short-term rentals to prevent displacement of long-term residents and mitigate rising housing costs.
- Prioritize growth in traditional communities by focusing on housing restoration and infrastructure improvement.
- Consolidate all County code enforcement activities, including animal abuse, into a single County division.
- Ensure all new County buildings meet energy efficiency standards and conduct energy audits on older facilities.

³¹ The surveys asked respondents to assign priorities to only those identified as County-Led Strategies: Initiatives where the County takes responsibility for leading efforts, allocating resources, and ensuring successful implementation. These strategies reflect the County's leadership role in addressing critical needs, from developing infrastructure to implementing programs.

2024 Rio Arriba County Comprehensive Plan



- Conduct an analysis of the County parcel map to identify areas suitable for development while preserving rural character.
- Ensure the consolidated County Code Enforcement division has adequate staffing.
- Incentivize the use of green building materials and energy-efficient designs in private developments through updates to the development code.
- Conduct and maintain an inventory of existing infrastructure, buildings, and dilapidated structures, identifying opportunities for retrofitting or demolition.

Economic Development Priority Strategies

- Enhance broadband and wireless connectivity, particularly in rural areas.
- Develop County Capacity to provide and bill for Medicaid and Medicare services, as well as explore other innovative funding sources.
- Continue utilizing the RACHC Health Profile as a freestanding health planning tool.
- Partner with Northern New Mexico College (NNMC) and LANL to create tailored workforce training programs for local industries.
- Incentivize the use of existing community facilities for programs focusing on local food, fiber, and cultural customs.
- Create a County-wide tourism plan with strategies promoting outdoor recreation, cultural heritage, and agri-tourism.
- Support the creation of Community-Supported Agriculture (CSA) organizations and promote their use by schools, hospitals, and senior centers.
- Develop and expand farmers' markets, cold storage infrastructure, and processing facilities.

Housing Priority Strategies

- Promote the restoration of existing homes for use as rentals or family-owned residences to preserve the County's architectural heritage.
- Develop transitional housing programs with case management services to support homeless individuals in achieving long-term stability.
- Implement regulations for short-term rental properties to balance tourism demands with local housing needs.

2024 Rio Arriba County Comprehensive Plan



- Promote the use of green building practices and energy-efficient manufactured homes in new housing developments.
- Build stronger partnerships with LANL and other stakeholders to align housing initiatives with growing workforce demands.
- Conduct a County-wide housing assessment to evaluate availability, affordability, and needs for various housing types, including workforce, senior, low-income, multi-family, and special needs housing.
- Regulate short-term rentals to prevent displacement of long-term residents and mitigate rising housing costs.
- Support the rehabilitation of existing housing stock as part of infill development efforts.
- Permit alternative housing options, such as tiny homes, to diversify housing availability.

Transportation Priority Strategies

- Assess state and County routes for safety improvements, including reducing speeding and implementing traffic-calming measures.
- Expand and maintain a comprehensive system of recreational trails, including biking and hiking routes, to enhance outdoor accessibility and tourism.
- Identify and prioritize public transportation routes and stops in collaboration with the North Central Regional Transit District (NCRTD).
- Improve safety and accessibility at public transit stops by providing adequate lighting, shelters, and seating.
- Digitize data collection on road conditions, including materials, widths, and utilities, to optimize maintenance planning and resource allocation.
- Establish a long-term infrastructure maintenance plan addressing bridges, culverts, paving, and tree removal.
- Support the engineering of roads for lower designed speeds through communities to enhance safety and walkability.
- Prepare a County Multi-Modal Transportation Master Plan to evaluate and integrate road, bike, and pedestrian systems, including future traffic projections.



Community Facilities and Infrastructure Priority Strategies

- Develop and maintain community shelters for use during emergencies or natural disasters.
- Develop a comprehensive health plan to guide the improvement of healthcare services in the County.
- Identify incentives for renewable energy manufacturers to establish facilities in Rio Arriba County.
- Collaborate with property owners and land grants to provide sites for renewable energy infrastructure.
- Support the use of water harvesting, gray-water treatment systems, and drought-tolerant landscaping in residential and commercial construction.
- Promote wastewater systems that return water to the ground and support surface improvements like vegetation and habitat restoration.
- Identify and mitigate the impacts of climate change on County infrastructure.
- Support the development of a water model to assess watershed impacts and guide decision-making.
- Collaborate with telecommunication providers to maintain and enhance the E-911 system's accuracy.
- Create accessible waste collection schedules and facilities in rural areas.

Hazard Mitigation Priority Strategies

- See [Hazard Mitigation Goals & Strategies from 2025 Hazard Mitigation Plan](#).

APPENDICES

APPENDIX A (TREATY OF GUADALUPE HIDALGO)

APPENDIX B (TREATY OF GUADALUPE HIDALGO PROVISIONS)

APPENDIX C (PUBLIC INVOLVEMENT OVERVIEW)

APPENDIX D (STAKEHOLDER INTERVIEWS OVERVIEW)

APPENDIX E (PUBLIC WELFARE POLICY STATEMENT)

APPENDICES WILL BE INCLUDED IN THE FINAL VERSION OF THE PLAN