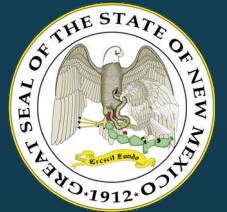


NEW MEXICO INTEGRATED WATER FINANCING PLAN

A PARTNERSHIP BETWEEN THE
**WESTERN STATES
WATER COUNCIL, WESTFAST,
AND THE STATE OF
NEW MEXICO.**



WESTERN STATES
WATER COUNCIL

WestFAST

Thornburg Foundation

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FOUNDATION

NOVEMBER 2024



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Appendix A: Participants

LIST OF ACRONYMS

ADDs	Area Development Districts
AMM	Aquifer Mapping and Monitoring
ARPA	American Rescue Plan Act
ASCE	Association of the Society for Civil Engineers
ASR	Aquifer Storage and Recovery
AWMCs	Area Water Management Councils
BDAs	Beaver Dam Analogs
BIL	Bipartisan Infrastructure Law
BLM	Bureau of Land Management
CAP	Continuing Authorities Program
CCA	Critical Conservation Area
CWA	Clean Water Act
CWDG	Community Wildfire Defense Grant
CWPPs	Community Wildfire Protection Plans
CWSF	Council of Western State Foresters
CWSRF	Clean Water State Revolving Fund
DOD	Department of Defense
DOE	Department of Energy
DOI	Department of Interior
DWSRF	Drinking Water State Revolving Fund
EC	Emerging Contaminants
EIB	Environmental Impact Bond
EMWT	Estancia, Moriarty, Willard, and Torrance
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FMAG	Fire Management Assistance Grant
FTEs	Full Time Equivalents
HB	House Bill
HMGP	Hazard Mitigation Grant Program
HUC	Hydrologic Unit Code
HUD	Department of Housing and Urban Development
IaaS	Infrastructure as a Service
IRA	Inflation Reduction Act

JPA	Joint Powers Agreement
MCLs	Maximum Contaminant Limits
MDWCA	Mutual Domestic Water Consumers Association
NASA	National Aeronautics and Space Administration
NAWI	National Alliance for Water Innovation
NCRS	National Conservation
NEPA	National Environmental Policy Act
NFF	National Forest Foundation
NFWF	National Fish and Wildlife Foundation
NIDIS	National Integrated Drought Information System
NMBGMR	New Mexico Bureau of Geology and Mineral Resources
NMDA	New Mexico Department of Agriculture
NMDFA	New Mexico Department of Finance and Administration
NMDGF	New Mexico Department of Game and Fish
NMDHSEM	New Mexico Department of Homeland Security and Emergency Management
NMED	New Mexico Environment Department
NMFA	New Mexico Finance Authority
NMISC	New Mexico Interstate Stream Commission
NMLFC	New Mexico Legislative Finance Committee
NMOSE	New Mexico Office of the State Engineer
NMFD	New Mexico Forestry Division
NMT	New Mexico Tech
NMWF	New Mexico Wildlife Federation
NOAA	National Oceanic and Atmospheric Administration
NOFO	Notice of Funding Opportunity
NRCS	Natural Resources Conservation Service
NWF	National Wildlife Federation
NWQI	National Water Quality Initiative
ONRT	Office of the Natural Resources Trustee
PAS	Planning Assistance to States
PER	Preliminary Engineering Report
PFAS	polyfluoroalkyl substances
RCAC	Rural Community Assistance Corporation
RCPP	Regional Conservation Partnership Program
RFA	Request for Applications
RFP	Request for Proposals

RoL	Ribbons of Life
SDC	Small or Disadvantaged Communities Grant
SSA	Sole Source Aquifer Program
STAGs	State Technical Assistance Grants
SWCDs	Soil and Water Conservation Districts
SWEFC	Southwest Environmental Finance Center
SWIFIA	State Water Infrastructure Financing Authority
TEK	Traditional Ecological Knowledge
TMDL	Total Maximum Daily Load
TPP	Tribal Partnership Program
TRCP	Theodore Roosevelt Conservation Partnership
TWICC	Texas Water Infrastructure Coordinating Council
UNM	University of New Mexico
URG	Upper Rio Grande
USACE	U.S. Army Corps of Engineers
USBR	U.S. Bureau of Reclamation
USDA	U.S. Department of Agriculture
USDA RD	U.S. Department of Agriculture Rural Development
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UWDCC	Utah Water Development Coordinating Council
WBPs	watershed-based plans
WestFAST	Western Federal Agency Support Team
WOTUS	Waters of the United States
WRDA	Water Resources Development Act
WSWC	Western States Water Council
WTF	Water Policy and Infrastructure Task Force
WUI	Wildland Urban Interface



EXECUTIVE SUMMARY

Federal funding opportunities generated through the American Rescue Plan Act (ARPA), the Bipartisan Infrastructure Law (BIL), and the Inflation Reduction Act (IRA) represent a generational opportunity to invest in water resources. Numerous federal agencies have been tasked with distributing and investing in various aspects of water resources, especially in the arid West. States, Tribes, and local governments are among the primary eligible recipients for much of this funding, although the ability to optimize the impact of these funding opportunities on state priority issues is limited by capacity constraints, policy and planning gaps, and the complexity of the funding landscape. This project aims to assist the State of New Mexico with these challenges through collaborative development of an Integrated Water Financing Plan that focuses on New Mexico's priority water resource challenges. Two primary reference documents utilized were the January 2024 Governor's 50-year Water Action Plan and the December 2022 report, Facing New Mexico's 21st Century Water Challenges: A Report of the New Mexico Water Policy and Infrastructure Task Force.

The New Mexico Integrated Water Financing Plan is a collaboration between state agencies, Western Federal Agency Support Team (WestFAST), the Western States Water Council, other federal partners, and project funding partners. Using a facilitated process three demonstration projects were selected that aligned with the three major areas of focus in both the Water Task Force Report (2022) and the Governor's 50-year Water Action Plan (2024):

- Accelerating Small Community Drinking Water System Regionalization
- Aquifer Mapping and Monitoring
- Ribbons of Life: Upper Rio Grande Riparian Conservation, Restoration and Watershed Health Initiative

These three areas were the focus for a series of virtual workshops, one in-person workshop, and many one-on-one meetings. The information and feedback shared at these workshops helped to shape the content and recommendations provided within this report, as well as build capacity and strengthen relationships among participants across different entities.

Separate two-page summaries have been developed to summarize the needs and recommendations specific to the three selected demonstration projects. More general outcomes are summarized below.

Funding from multiple sources were incorporated into the plans for each of the demonstration projects.

- A wide variety of federal funding programs were explored and prioritized for each of the demonstration projects, including programs managed by USBR, FEMA, USACE, DOE, EPA, NRCS, and Sentinel Landscapes. In-kind resources were also identified from the BLM, USGS, NASA, and NIDIS-NOAA.

- State sources were identified to pair with federal funds, including the New Mexico Match Fund, capital outlay, and Water Trust Board funds.
- Private investment opportunities that can be paired with federal and state funding were identified for infrastructure elements including watershed and nature-based solutions for water resources.

Several policy and planning gaps were identified and solutions generated to further enable access to funding. These consist of the following:

- Incentivizing regionalization of drinking water systems.
- Optimizing a blend of loan and grant funds and ensure projects are fully funded early in the planning stage.
- Pursuing watershed designations for the Upper Rio Grande basin to be more competitive for EPA and NRCS funds.

Several needs for future coordination were identified through collaborative workshop discussions, consisting of:

- Establish a New Mexico Federal Agency Support Team (NM FAST) to facilitate more regular and effective coordination across federal and state agencies for water related programs.
- Launch a statewide planning and scoping study for aquifer mapping and monitoring to be coordinated through a multiagency steering committee.
- Create a state water financing coordinating council for infrastructure financing.
- Accelerate coordination across multiple stakeholders for the Ribbons of Life project to position for upcoming funding opportunities.

The project also identified several federal policy changes that could help to reduce barriers to accessing federal funds and increase collaboration between federal agencies, states, and other partners. These consist of:

- Streamline some federal permitting requirements
- Increase flexibility in funding programs to make it easier for small and disadvantaged communities to access funds
- Develop a long-term durable federal funding mechanism for ongoing water infrastructure, water conservation, and watershed restoration needs
- Continue targeted investment in capacity building and water workforce development.

A series of applicable lessons related to the collaboration process and financing solutions are outlined at the end of the report in addition to the following overall conclusions:

- Federal funding programs are numerous, complex, and challenging to navigate. Having program experts available to provide technical assistance is critical to overcome barriers and identify the best opportunities.
- The New Mexico Integrated Water Financing Plan project provided an opportunity for state agencies that typically do not work together to better understand the funding that is available and to identify collaborative approaches to securing funding in the future.

Regardless of the funding that is available, capacity must be developed to manage and implement the funding. Capacity needs to be strengthened at all levels of government in order to most effectively benefit from the available funding.



CHAPTER 1 – PROJECT OVERVIEW

1.1 PROJECT PURPOSE, GOALS, AND OBJECTIVES

Successful water resources management and access to safe and clean drinking water is a fundamental need, particularly in the southwestern United States. The lack of and the ability to access funding and financing for water resources projects remains a significant barrier to meeting New Mexico’s and other southwestern states’ water resources needs. Federal funding opportunities generated through the American Rescue Plan Act (ARPA); Investment in Infrastructure and Jobs Act, also known as the Bipartisan Infrastructure Law (BIL); and Inflation Reduction Act (IRA) represent a generational opportunity to invest in water resources. Numerous federal agencies have been tasked with distributing funding and investing in various aspects of water resources, especially in the arid West. States, Tribes, and local governments are among the primary eligible recipients for much of this funding, although the ability to optimize the impact of these funding opportunities on state priority issues is limited by 1) state agency capacity to identify, apply for, and administer new federal funds; 2) challenges aligning existing state planning efforts across state agencies and with relevant federal funding programs, and meeting any cost share or eligibility criteria; and 3) lack of capacity at the local level to develop necessary technical and financial plans and preparing complex applications to access and use both state and federal funds. This project aims to assist the State of New Mexico with these challenges through collaborative development of an Integrated Water Financing Plan that focuses on New Mexico’s priority water resource challenges.

The project builds on the successful foundation of the work of the New Mexico Water Policy and Infrastructure Task Force (WTF), *Facing New Mexico’s 21st Century Water Challenges: A Report of the New Mexico Water Policy and Infrastructure Task Force* (WTF Report; WTF 2022) and the *New Mexico 50-year Water Action Plan* released by Governor Lujan Grisham in January 2024 (Office of the Governor 2024). Among the most urgent recommendations of the WTF Report was to accelerate delivering critical water solutions to New Mexican communities by facilitating access to state and federal funding. This project is a collaboration between the State of New Mexico, the Western States Water Council (WSWC), the Western Federal Agency Support Team (WestFAST), and numerous other partners.

The project aimed to accomplish the following:

- **Inventory.** Inventory existing federal funds that have been delivered, committed, and/or otherwise available to the State of New Mexico to address water resources issues, with a focus on ARPA, BIL, and IRA, building on the New Mexico Department of Finance and Administration’s (NMDFA’s) current efforts to inventory federal funds.
- **Focus.** Using a facilitated process, select a set of activities necessary for the State of New Mexico to make meaningful progress on the three areas and 17 goals identified in the WTF Report using existing state-level planning documents and the expertise of federal partners with

knowledge of funding from existing federal programs across multiple agencies that can be applied to those activities in the near future.

- Strategize.** Identify federal funding opportunities associated with ARPA, BIL, IRA, and other programs across multiple federal agencies available to the State of New Mexico beyond regular appropriations and develop creative financing approaches for a defined set of priority activities. Strategies to overcome barriers to implementation will also be identified.
- Synthesize.** Deliver an Integrated Water Financing Plan that reflects the strategies and implementation barriers developed through a collaborative facilitated process for three of New Mexico’s priority needs.

1.2 OVERVIEW OF FEDERAL FUNDING DATABASES

The federal government operates a variety of databases with information on federal funding opportunities (Table 1). Some of these databases are agency specific, such as the Federal Emergency Management Agency (FEMA) grants website and the [EPA’s FedFUNDS](#), while others are government wide such as Grants.gov. Each database typically provides the program applicability and an agency contact for further information. Other funding sources from private, non-governmental, and state funders may be appropriate for use in New Mexico; a handful are profiled below.

Table 1. Summary of Existing Federal Funding Databases used in Plan

Federal Funding Database Name and Link	General Information
BIL Drinking Water Page	Repository for BIL drinking water information.
Colorado River Collaborative	Repository for Colorado River watershed grants. Many of these grants are not specific to the Colorado River watershed.
Department of Transportation Wildlife Crossing Program	Wildlife Crossing grant program information. Program is open to aquatic and terrestrial crossings.
NMDFA	State agency that manages many funding opportunities on behalf of state agencies.
Environmental Policy Innovation Center	Provides technical and funding assistance to environmental projects.
Environmental Protection Agency (EPA) Grants	Repository for EPA grants.
EPA Water Reuse Funds	Repository for EPA Water Reuse projects.
Federal Funding for Water and Wastewater Utilities in National Disasters (FedFUNDS)	Repository for EPA funding opportunities available to utilities following disasters and tips to combining funding with FEMA and HUD.
FEMA Grants Website	Repository for FEMA grants.
General Grants	Repository for most federal grants.
IRA Guidebook	Guidebook for IRA projects and funding sources.
Justice 40 Initiative	Executive Order requiring that 40% of federal investment in climate, restoration, and adaptability be invested in historically marginalized or over-polluted communities.
New Mexico Wild	Non-profit and advocacy organization with listed resources on BIL impacts in New Mexico.
NOAA Habitat Restoration	Project site for habitat and coastal restoration projects.
Public Funding Opportunities Navigator (TRCP)	The Theodore Roosevelt Conservation Partnership (TRCP) developed this navigator to provide information on current federal funding opportunities that could be useful for watershed, forest, and habitat work in New Mexico.

Federal Funding Database Name and Link	General Information
Rural Community Assistance Partnership	Non-profit partnership of service agencies that provide technical assistance to rural communities.
Water Program Portal	Dashboards and tools for organizations and public agencies tracking recent federal investments in water, BIL, and IRA.
U.S. Department of Agriculture (USDA) Water Programs	Project site for USDA water and wastewater programs.

1.3 INVENTORY OF WATER FUNDING NEEDS

Current water resource funding needs associated with New Mexico’s water resources goals and plans were inventoried into a spreadsheet database so that project partners could easily evaluate and summarize individual and groups of needs in one streamlined tool. Funding needs included a variety of program and project activities such as new or increased capacity in existing state administered programs, infrastructure projects, watershed treatment and management projects, agricultural system improvement projects and initiatives, stream and wetland restoration or conservation projects, information and education campaigns, water monitoring or assessment initiatives, and/or climate resilience initiatives. Funding needs were provided via survey tool shared with partners and stakeholders, through direct communication with state agencies and partners, and through review of the following water-related planning documents:

- [Facing New Mexico’s 21st Century Water Challenges: A Report of the New Mexico Water Policy and Infrastructure Task Force](#) (WTF 2022)
- [Governor’s 50-Year Water Action Plan](#) (Office of the Governor 2024)
- [New Mexico Clean Water State Revolving Fund Intended Use Plan for Base Funding and Bipartisan Infrastructure Law Funding, State Fiscal Year 2023](#) (New Mexico Environment Department [NMED] 2022)
- [New Mexico Drinking Water State Revolving Fund – Intended Use Plan: DWSRF Base and \(BIL\) General Supplemental Funding, \(BIL\) Lead Service Line Replacement, and \(BIL\) Emerging Contaminants](#) (NMED and New Mexico Finance Authority 2024)
- [2020 New Mexico Forest Action Plan: A Collaborative Approach to Landscape Resilience](#) (New Mexico State Forestry, Energy, Minerals and Natural Resources Department 2020)
- [New Mexico Nonpoint Source Management Plan](#) (NMED 2024)
- [New Mexico State Hazard Mitigation Plan 2023-2028](#) (New Mexico Department of Homeland Security and Emergency Management [NMDHSEM] 2024)
- [New Mexico Climate Strategy: 2021 Progress and Recommendations](#). (New Mexico Interagency Climate Change Task Force 2021)

In total, the database identified 81 activities with funding needs across New Mexico, including 18 related to infrastructure, 26 related to water resources management activities, and 23 related to watershed health. In addition to information such as activity description, region, and plan source, the database has important data to guide activity consideration into the future. This metadata includes geography, jurisdiction, program leads, cooperating agencies, cross-alignment with other state plans, cost (if available), project type, and whether the activity is suitable for finance bundling with other activities.

1.4 SELECTION OF DEMONSTRATION PROJECTS

Several considerations were used to select three demonstration projects from the 81 activities in the database described above. These include the following:

- **Impact:** Widespread impact to people, communities, and water resources in New Mexico.
- **Equity:** Beneficiaries include communities with socially vulnerable and economically disadvantaged populations.
- **Tribal priorities:** Reflects needs and priorities of Tribes, Pueblos, and Nations.
- **Diversity:** Project types, geography, state programs, size, rural/urban, etc.
- **Alignment:** State water plans including *Governor's 50-year Water Action Plan* and WTF Report.
- **Long-term funding challenges:** Previous funding efforts have been unsuccessful.
- **Urgency:** Addresses urgent water resource problems.
- **Project stage:** Developed enough to begin identifying eligible funding.
- **At least one activity:** The projects have at least one activity in the Colorado River basin, with nature-based solutions, and/or using integrated water resources management.

Using a facilitated process and consultation with state agencies, federal partners, WSWC, and the funding partners, three demonstration projects were selected that aligned with the three major areas of focus in both the Water Task Force Report (2022) and the *Governor's 50-year Water Action Plan* (Figure 1):

- Accelerating Small Community Drinking Water Regionalization
- Aquifer Mapping and Monitoring
- Ribbons of Life: Upper Rio Grande Riparian Conservation, Restoration and Watershed Health

These three areas were the focus for the virtual workshop series and the New Mexico Integrated Water Financing Plan (NM Integrated Water Financing Plan) report.

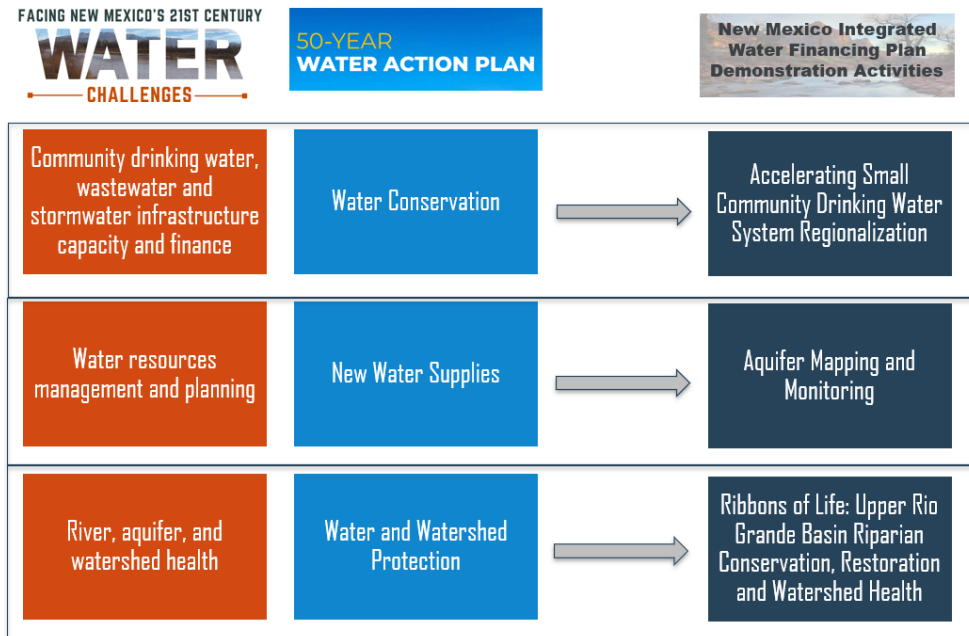


Figure 1. Three demonstration projects selected for the NM Integrated Water Financing Plan workshops and report.

1.5 WORKSHOP SERIES DESIGN

A series of workshops was held for each of the three selected demonstration projects. The workshop series consisted of the following activities for each pilot activity: one virtual planning meeting and two focused, virtual workshops (Table 2). The virtual planning meeting included discussion of workshop format and schedule, agenda review, best facilitation tools to use such as breakout rooms and meeting whiteboards, and assigning team roles. Agendas were distributed to workshop participants prior to events and detailed workshop summaries were compiled and distributed with participants following each workshop.

The information and feedback shared at these workshops helped to shape the content and recommendations provided within this report, as well as build capacity and strengthen relationships among participants across different entities. Following the demonstration activity workshops and the completion of this report, a full-day workshop will be scheduled to share lessons learned, offer collaboration opportunities, and provide a chance to begin development of financing plans for additional activities.

Table 2. Summary of Workshops for NM Integrated Water Financing Plan

Step	Purpose	Aquifer Mapping and Monitoring	Small Community Drinking Water Infrastructure	Upper Rio Grande Ribbons of Life
Planning Meeting (virtual)	WestFAST and state leads to agree on final project scope (to maximize potential funding opportunities) and workshop participants.	May 7, 2024	May 9, 2024	May 17, 2024
Workshop 1 (virtual)	Participants work together to brainstorm and identify new federal funding opportunities, financing mechanisms, and previous obstacles/barriers. Action items are assigned to participants and contractors.	July 17, 2024	June 6, 2024	July 15, 2024
Workshop 2 (virtual)	Same participants as Workshop 1 with minimal additions based on action items/gaps. Participants/contractors provide updates based on Workshop 1 action items. Agree on most feasible federal funding opportunities; identify key barriers and potential solutions to additional funding.	October 7, 2024	October 9, 2024	October 18, 2024
NM Integrated Water Financing Plan	Captures best/most feasible federal funding opportunities and key barriers to necessary funding. Provided to participants/stakeholders for review.	October 2024		
Full Day Workshop	Focused on lessons learned, collaboration opportunities, and workshopping of additional activities.	November 14, 2024		

1.6 PARTICIPANTS AND ENGAGEMENT

Throughout the project, a range of strategies were employed to engage stakeholders and maximize participation, including interviews, a survey, an introductory webinar, and an updated webinar. Engagement was encouraged, aimed at ensuring that state and federal input was appropriately gathered and incorporated into the research and analysis tasks, while respecting time and resource constraints of public agencies. Multiple workshops were also held with targeted participants by topic to engage stakeholders. As these engagement activities were carried out, a contact list was developed for participants across various agencies and organizations. The final contact list consists of 200 people, and a detailed record can be found in Appendix A.

Introductory Webinar

An introductory webinar was held to introduce the project to federal agencies, state agencies, water ambassadors, Tribes, and additional stakeholders. Participants were asked to identify contacts from their respective agencies who would be interested in participating in the project and identify additional plans that should be reviewed as part of the research and analysis portion of the project.

Participant Interviews

Interviews were conducted as needed throughout the process to collect detailed recommendations for efficiencies, identify example processes that are working well, and recommendations for improved dissemination of federal funding. Twenty-one interviews were conducted throughout the research and

analysis portion of the project with specific subject matter experts that represent a range of agencies and organizations. Appendix A includes a detailed list of interviews held throughout the project.

Survey

A survey was prepared and distributed to all contacts who were invited to participate in the introductory webinar, roughly 80 people. Survey results were compiled and incorporated into an activity database along with information from six state plans, interviews, and the WTF Report. This activity database was used by the Executive Team to identify the three pilot activities.

Update and Listening Session Webinar

An update and listening session webinar was held on March 26, 2024, to review the project goals, give a state planning and key statewide needs overview, and discuss the NM Integrated Water Financing Plan process, timeline, and progress.

Tribal Outreach

Coordination with the New Mexico Indian Affairs Department and the New Mexico Office of the State Engineer (NMOSE) Tribal Liaison was an important part of preparing the Tribal outreach approach for the NM Integrated Water Financing Plan. On February 2, 2024, a multi-topic letter was sent to each of the 24 Tribes, Pueblos, and Nations in New Mexico signed by the Indian Affairs Department Director, State Engineer, and Director of the New Mexico Interstate Stream Commission. The letter addressed the Water Security Planning Act, establishment of the Water Security Tribal Advisory Council, and an introduction to this Integrated Water Financing Plan. Encouragement to participate in the process and links were included; Tribes, Pueblos, and Nations were asked to contribute potential projects and activities through a survey.

Several Tribal contacts accepted the invitation to the March 26, 2024, Update and Listening Session; all who responded to the invitation were included in the main contact list and continued to receive status updates throughout the process.

Release of Draft and Final NM Integrated Water Financing Plan

The draft NM Integrated Water Financing Plan was provided to the demonstration project workshop participants prior to Workshop #2 for review and comment. After integrating agency comments and feedback as directed by the Executive Team, the final plan will be released to the full contact list in early November, prior to the In-person Information Exchange.

In-person Information Exchange Workshop

The full day in-person Information Exchange Workshop will be held in Santa Fe on November 14, 2024, with invitations going out to the full contact list. The workshop will include a discussion of lessons learned from collaboratively developing innovative financing concepts; an opportunity for state and federal agency representatives plus stakeholders to collaborate with both traditional and non-traditional financing partners; and facilitated breakout groups to work on innovative financing of additional priorities from New Mexico's water community.



CHAPTER 2 – SELECTED WATER FINANCING NEEDS

2.1 ACCELERATING SMALL COMMUNITY DRINKING WATER SYSTEM REGIONALIZATION

2.1.1 BACKGROUND AND OPPORTUNITY STATEMENT

Equitable, reliable, and affordable access to clean drinking water, and safe collection and treatment of wastewater, are essential for quality of life. Many of New Mexico's aging water and wastewater systems have been left behind, leaving communities' health at risk.

Acute water shortages and aging drinking water infrastructure in small communities (fewer than 10,000 people) threaten public health, constrain economic development, and contribute to system inefficiencies that waste clean municipal water.

Nearly 87% of New Mexico's community water systems are in very small or small communities (serving fewer than 3,000 people). Small community infrastructure improvements are difficult to finance with traditional water loan funds due to the high cost per household for small systems.

Regionalization¹ opportunities require high levels of initial investment and coordination. Planning funds are capped for single entities, so it is difficult for them to collaborate on regionalization plans.

Individual public water system managers and operators are tasked with addressing all of the above challenges, in addition to providing safe drinking water to customers. Public water system managers are often unpaid volunteers who have full-time jobs and numerous responsibilities outside of running the water system.

Regionalization presents multiple benefits and opportunities for New Mexico's small rural communities including the following:

- **Water conservation:** improved and regionalized drinking water systems are more efficient and help to conserve critical municipal water supplies.
- **Water supply resiliency:** Secure equitable, reliable, and affordable access to safe drinking water, and safe collection and treatment of wastewater for New Mexico communities, which are essential for a quality of life. Regionalization has the opportunity to increase resiliency to drought and climate risks when sources are diversified and expanded.

¹ Consolidation of water infrastructure or administrative functions across jurisdictions/existing drinking water facilities to improve quality and cost efficiencies.

- **Regionalization:** Economies of scale through consolidation of administrative functions and/or integration of infrastructure.
- **Public health:** Improved drinking water quality; mitigation and remediation of groundwater contamination.
- **Equity:** Small, rural, and Tribal communities; affordable funding needed for disadvantaged communities.
- **Capacity building:** Capacity building for community water systems through regional collaboration by using asset management–based principles. Creating career paths for certified operators and water resources professionals.

Acceleration of drinking water system regionalization aligns with the *Governor’s 50-year Water Action Plan* Action A3 related to drinking water infrastructure and is supported by recommendation 1.2 from the WTF Report. These goals are summarized in Table 3.

Table 3. Drinking Water System Regionalization Alignment with State Water Resources Plans and Goals

Water Task Force Recommendations	50-Year Water Action Plan Recommendations
Recommendation 1.2: Promote and incentivize regional collaboration—from informal to formal arrangements—by drinking water and wastewater systems through administration of existing funding programs, prioritization of technical assistance investments, and clear laws and processes that preserve local flexibility and ensure safe harbor for systems that consolidate.	A3: Reduce leaks in drinking water infrastructure and increase municipal conservation.

2.1.2 SMALL COMMUNITY DRINKING WATER SYSTEM FUNDING NEEDS

New Mexico’s public water systems provide water to approximately 99.2% of the population and include a total of 564 community public water systems, of which 88% (499) are very small or small systems serving fewer than 3,300 people (Figure 2; NMED 2022). Very small and small community drinking water systems often serve disadvantaged and underserved populations which require assistance to achieve and maintain regulatory compliance.

Drinking water infrastructure needs across New Mexico are estimated to be at least \$3 billion (ASCE 2021; EPA 2023; NMLFC 2024). Not all of these needs are well documented, however 18 projects related to drinking water were identified across 16 New Mexico Regional Water Plans. Of these, seven did not have cost estimates developed, indicating that the initial planning for these projects has not yet been funded. The total cost of infrastructure upgrade needs identified in the remaining projects totals \$118.6 million. In the following section, several regionalization case studies are summarized that total over \$200 million in infrastructure need. Finally, total requests to NMED’s Drinking Water Bureau totaled over \$400 million in 2023.

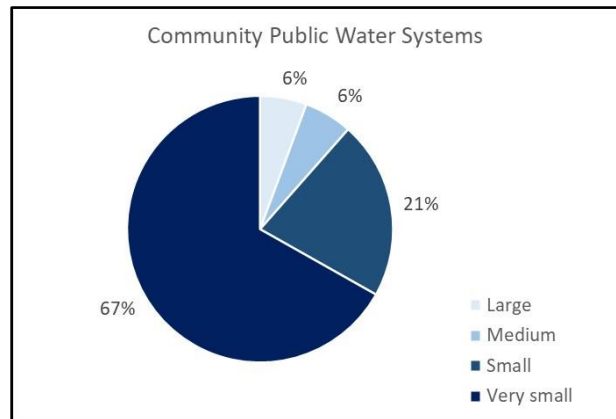


Figure 2. Size distribution of New Mexico’s community public water systems (NMED 2022).

Technical and administrative capacity constraints at the local level are difficult to quantify but are evidenced in part by the types of violations reported by NMED's Drinking Water Bureau. In 2022, 172 public water systems experienced violations related to public notification and confidence reporting requirements. In the same year, 79 systems had violations related to monitoring and reporting and 51 systems had violations related to treatment techniques. In addition, 26 systems had violations of Safe Drinking Water Maximum Contaminant Limits (MCLs). The fact that 92% of all of the systems experiencing violations relate to administrative issues reflects the magnitude of the operational and administrative capacity constraints in small drinking water systems.

2.1.3 REGIONALIZATION CASE STUDIES

Numerous communities across New Mexico have begun to explore opportunities related to regionalization of drinking water systems in various forms including administrative and through physical integration (Figure 3). A summary of these examples is provided in Table 4 and was used to evaluate barriers and opportunities for regionalization during the workshop series. The fact that 92% of all of the systems experiencing violations relate to administrative issues reflects the magnitude of the operational and administrative capacity constraints in small drinking water systems.

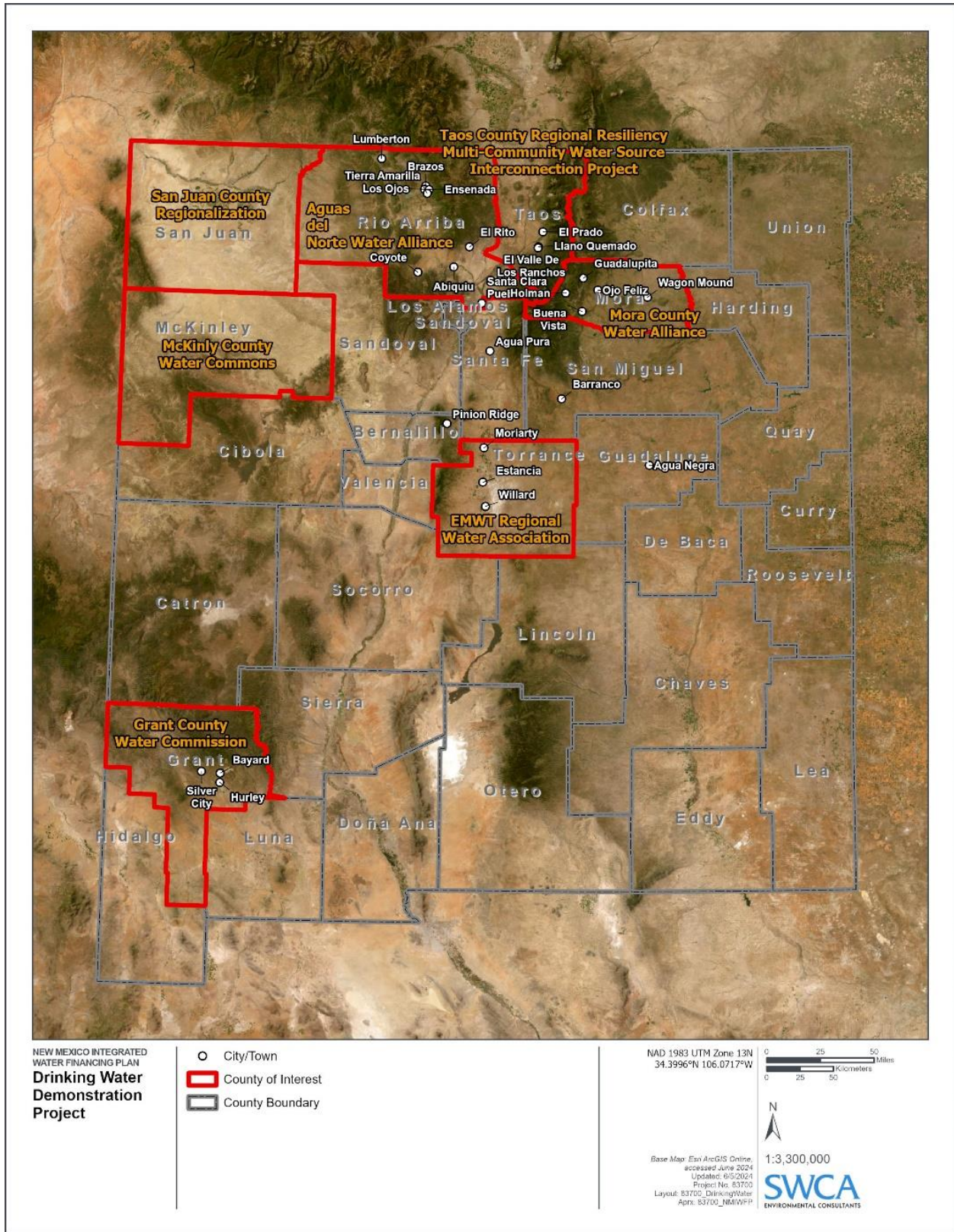


Figure 3. Location of drinking water system regionalization case studies in New Mexico.

Table 4. Summary of Drinking Water Regionalization Case Studies in New Mexico

Community/Case Study	Demonstration	Status	Estimated Cost
<p>El Valle de Los Ranchos Water and Sanitation District, El Prado Water and Sanitation District and the Llano Quemado Mutual Domestic Water Consumers Association Regional Resiliency Multi-Community Water (MDWCA) Source Interconnection Project</p> <p>Taos County Population: El Valle de Los Ranchos – 428 El Prado Water and Sanitation District – 1,300 Llano Quemado – 1,040 Contact: Ramon Lucero, Rural Community Assistance Corporation (RCAC)</p>	<p>Regionalize <u>three existing facilities</u>, <u>resolve MCL exceedances</u>, and build resilient infrastructure in a <u>growing community</u>.</p>	<p>The project will include 36,000 linear feet of 12-inch water line and associated appurtenances that interconnects El Prado Water and Sanitation District’s distribution system to both El Valle de Los Ranchos Water and Sanitation District and Llano Quemado MDWCA.</p> <p>The goal for this project is to create resiliency and redundancy among three public water systems which will provide a level of resiliency and redundancy for the entire region. There are three adjoining community water systems that will additionally benefit from the project. The project will have the potential to supply water to areas currently not served by public water systems, which are extremely vulnerable to New Mexico’s long-term severe drought, catastrophic fires, and flooding events. The project will additionally mitigate potential water quality concerns for both ground and surface water from the density of on-site septic systems and illegal cesspools.</p> <p>In addition, approximately 10 other community water systems in the Taos Valley have signed a memorandum of understanding to collaborate with each other. Of these, four are having conversations to execute a memorandum of agreement to seek funding for a Preliminary Engineering Report (PER) to investigate interconnections between each water system.</p> <p>This project has significant momentum.</p>	<p>Planning: \$500,000 Project Anticipated Cost: \$20 million Projects under this group of community water systems can be bundled. Cost/pe: \$7,225</p>
<p>Estancia, Moriarty, Willard, and Torrance (EMWT) Regional Water Association</p> <p>Torrance County Population: ~50,000 Contact: Bobby Ortiz, EMWT Board Chair, BOrtiz@cobbfendley.com Ramón Lucero, RCAC, rlucero@rcac.org</p>	<p>Development of a <u>new regional public water system</u> for the Estancia Basin.</p>	<p>The EMWT Regional Water Association was established in 2014 with the purpose of acquiring or constructing a regional water supply system which would serve domestic, municipal, agricultural, commercial, industrial, and governmental users. The regional system would serve four existing towns and provide opportunities for connection to others in the Estancia Basin. An Infrastructure Capital Improvement Plan was submitted to the NMDFA in 2016 which described its proposed overall regional project. In addition, a long-term master plan and environmental report were submitted to NMED. A Fiscal Year 2020 to 2024 update (EMWT Regional Water Association 2020) identifies nearly \$90 million in capital projects. To date, the EMWT Regional Water Association has received several planning grants and has submitted applications for additional state and federal funding for capital projects.</p>	<p>\$87,384,936 Follow-up needed on current status/activity/interest. Cost/pe: \$1,748</p>

Community/Case Study	Demonstration	Status	Estimated Cost
<p>Mora County Water Alliance Mora County Population: - Agua Negra: 216 - Agua Pura: 330 - Buena Vista: 192 - Guadalupe: 148 - Ojo Feliz: 62 - South Holman: 99 - Upper Holman: 192 - Wagon Mound: 200 Contact: Ramón Lucero, RCAC</p>	<p><u>Infrastructure regionalization</u> of multiple existing water systems in <u>eight very small communities</u>.</p>	<p>Mora County water systems are vulnerable to several threats including drought, aging infrastructure, lack of capacity and resources, and groundwater contamination. Regionalization of administrative functions has already occurred.</p> <p>One of the goals of this water master plan is to explore areas of potential collaboration between participating public water systems and their respective communities to alleviate stresses on managerial, financial, operational, and regulatory components.</p> <p>PER for an interconnection project is currently being produced.</p> <p><i>Currently getting funding from NMDHSEM Public Assistance Program as a result of fire disaster.</i></p>	<p>Water System Interconnection: \$6,206,000 Cost/pe: \$4,313</p>
<p>Grant County Water Commission Grant County Population: - Silver City: 9,704 - Hurley: 1,256 - Santa Clara: 1,686 - Bayard: 2,116 Contact: Ramón Lucero, RCAC</p>	<p><u>Infrastructure regionalization</u> of four existing water system with focus on resiliency.</p>	<p>Regionalization of four existing water systems in Grant County (Gila River Basin) with a focus on water security and resiliency. Project has been considered for several special funding opportunities (Interstate Stream Commission, Regional Border Commission, mining community, New Mexico Finance Authority).</p> <p>Recently revised PER—the cost estimate is up to date.</p> <p>Beneficial use of 1197 acre-feet of water rights.</p>	<p>Capital Cost: \$91 million Some funding has been secured; likely for planning/design and feasibility. Cost/pe: \$6,164</p>
<p>Asociación de Los Brazos and Los Ojos MDWCA Rio Arriba County Population: 300 (combined)</p>	<p><u>Infrastructure regionalization</u> connecting two <u>very small community</u> systems.</p>	<p>The proposed project uses treated water from Los Ojos MDWCA as a water supply with the potential to add water treatment in future to treat water from an abandoned infiltration gallery. The project includes a new waterline and storage tank expansion sufficient for the anticipated 20-year growth of the association. The new tank also provides increased water pressure and additional flow capacity for the upgraded water system. The project also includes a new pumping station that will be sized to pump from the Los Ojos connection to the Otero tank. Proposed distribution system improvements include replacement of the existing distribution waterline and expansion of the system to connect to the Otero tank and extending 12 new services.</p>	<p>\$1,208,287 Cost/pe: \$4,028</p>

Community/Case Study	Demonstration	Status	Estimated Cost
<p>McKinley County Water Commons McKinley County Gallup population: 21,900 Small systems population: 1,250</p>	<p><u>Infrastructure regionalization</u> of small water systems into existing larger public water system.</p>	<p>McKinley County water systems have been actively working with the Northwest New Mexico Council of Governments on regionalization/consolidation. Collaboratively the water systems have worked with the county, council of governments, and each other to create a Joint Powers Agreement (JPA) for regional activities. Funding is needed as a start-up for a regional entity that would incorporate water systems under the JPA and allow other systems to join in the consortium.</p> <p>An operational business plan has been prepared for this JPA that includes three of the water systems. PER is not yet available for the regionalization effort. These systems still have significant capacity for growth.</p> <p>Note: \$9.5 million for a new drinking water well from the U.S. Bureau of Reclamation was announced for Gallup on May 8, 2024.</p>	<p>\$5 to \$12 million Projects under this JPA can be bundled. Cost/pe: \$575</p>
<p>San Juan County Regionalization Contact: David Synder, City of Farmington, 505-599-1062, dsynder@fmrn.org Ramón Lucero, RCAC</p>	<p><u>Regionalization of administrative functions</u> for some communities and <u>infrastructure regionalization</u> in other communities.</p>	<p>San Juan County hub for regionalization in the greater Farmington area of the county. This project request would fund a hub for regionalization activities including the payment of a operator, managerial duties, legal requirements of consolidation, financial/bookkeeping coordinated activities. Potential communities to be included are Apple Orchard, Flora Vista, the Lower Valley MDWCA, and the Lower Valley Water Sanitation District. The city of Farmington currently provides water to systems outside the city limits. The requested funds would be used to consolidate water systems into the greater Farmington water system. Agua Para los Vecinos was identified as the potential regional organization between the City of Bloomfield, Navajo Dam, and Blanco. PERs are outdated (would need to be updated).</p>	<p>Unknown. Follow-up needed on current status/activity/interest.</p>
<p>Aguas del Norte Water Alliance Rio Arriba County Communities: Lumberton, Abiquiu, Los Ojos, Los Brazos, Barranco, Piñon Ridge, Ensenada, El Valle de Los Ranchos, El Rito, Coyote, and Tierra Amarilla Heather Himmelberger, EFC</p>	<p>Regional cooperation.</p>	<p>Network of small water systems that meets regularly to network, share resources, and discuss solutions to problems facing water systems in our region including metering, lead line inventories, and financing strategies.</p>	<p>Workforce development.</p>
<p>Peñasco Mutual Domestic Water Consumer Association and Rodarte Mutual Domestic Water Consumer Association Taos County 247 connections combined Estevan Lopez, Carlos Abeyta, Peñasco Mutual Domestic Water Consumer Association, Ramón Lucero, RCAC</p>	<p>Physical and administrative regionalization.</p>	<p>First regionalization effort to be created under the Regional Water System Resiliency Act of 2023. In addition to the two initiating utilities, at least six additional neighboring water associations are in the Peñasco Valley alone that could eventually join the regional entity along with others between Truchas, Trampas, and Dixon, which will have a standing invitation to join the regional entity.</p>	<p>Unknown.</p>

2.2 AQUIFER MAPPING AND MONITORING

2.2.1 BACKGROUND AND OPPORTUNITY STATEMENT

Groundwater is one of New Mexico’s most precious resources providing a natural water storage mechanism critical to New Mexico’s communities. Approximately 92% of the state’s community water systems rely on groundwater for some or all sources of drinking water. Groundwater is also vital for agricultural production and commercial and industrial uses, such as mining, manufacturing, energy generation, and private wells for drinking water. Uncertainty about the sources, quality, and amount of groundwater adds considerable pressure to an already strained resource. New Mexico faces water management challenges related to the lack of accurate data about groundwater quantity and quality.

Currently, groundwater level monitoring coverage of the state is insufficient, and the need to understand and manage New Mexico’s groundwater is essential. There are many areas in the state that have little or no active groundwater monitoring. The New Mexico Bureau of Geology and Mineral Resources (NMBGMR) measures about 200 wells annually. The U.S. Geological Survey (USGS) has a cooperative agreement with the NMOSE to measure about 800 wells annually. The number of wells monitored by USGS has been declining since the 1950s (Figure 4) and there are significant monitoring gaps across the state (Figure 5) (Pine et al. 2023). Many sites are not measured frequently enough. Most sites are reused wells and therefore were not drilled with a monitoring purpose.

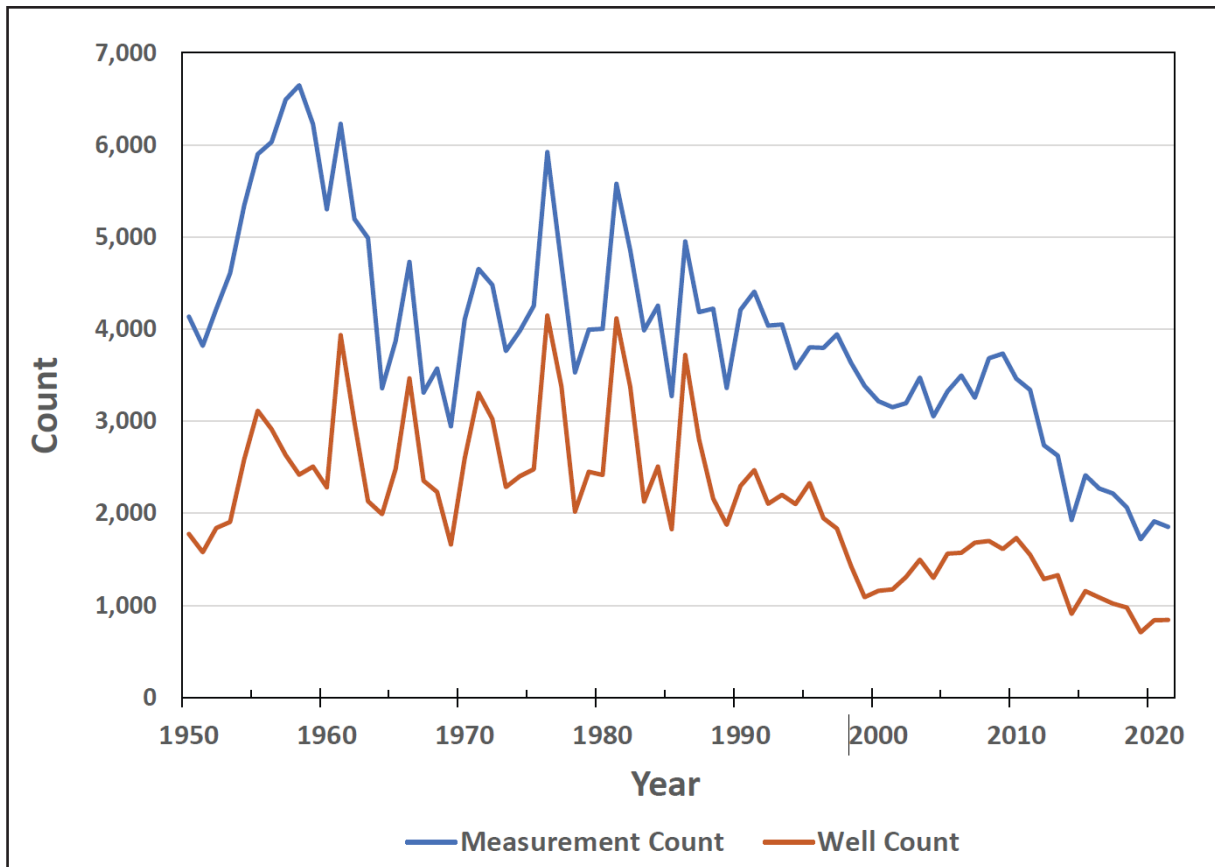


Figure 4. Changes in the number of USGS monitoring wells and water-level measurements in New Mexico from 1950 to 2021 (Pine et al. 2023).

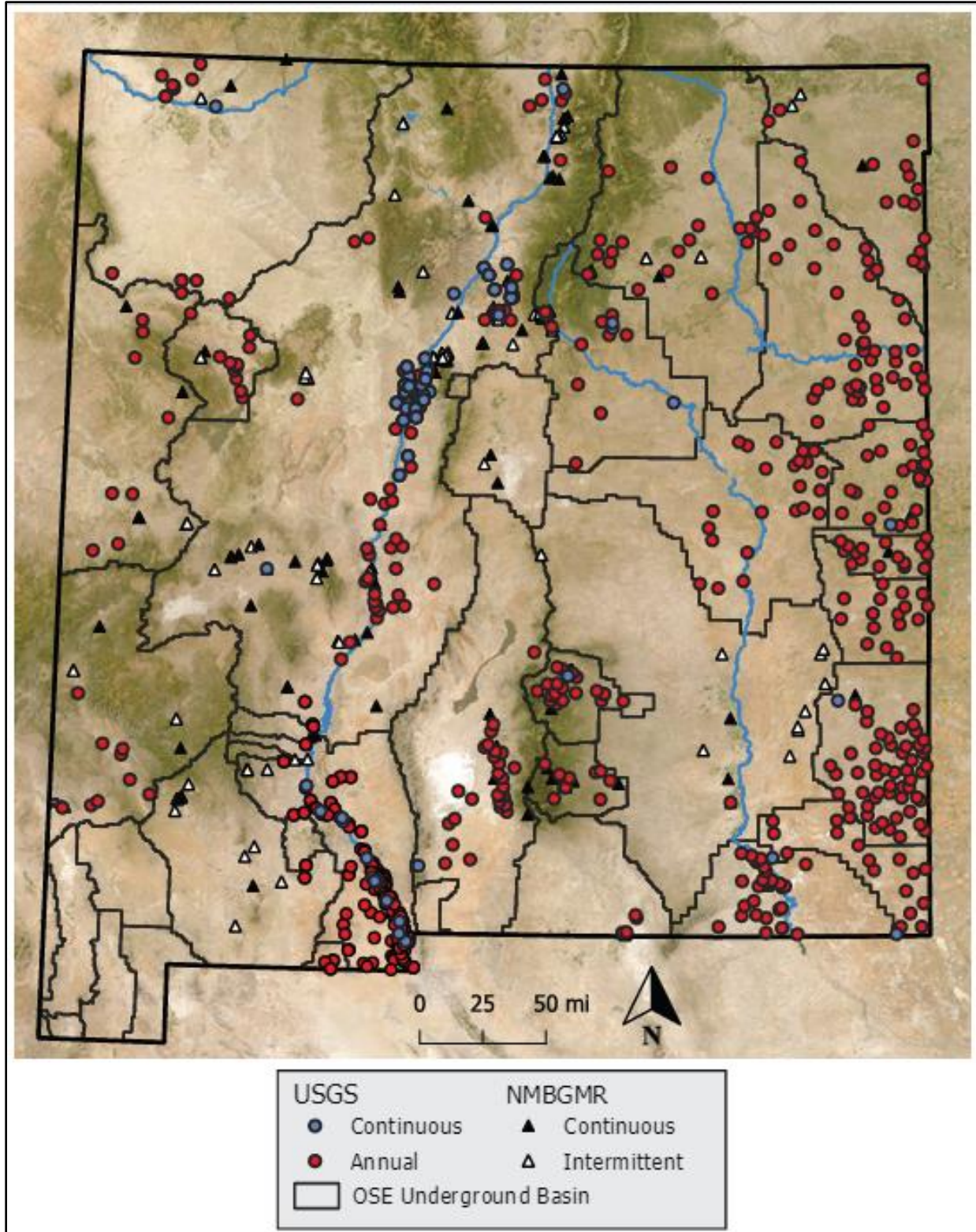


Figure 5. Currently active USGS and NMBGMR monitoring wells in New Mexico (Pine et al. 2023).

Establishment of an integrated statewide groundwater monitoring system is necessary for assessing the quantity, quality, and sustainability of groundwater in aquifers. New Mexico’s growing reliance on groundwater to compensate for surface water declines makes this effort all the more urgent. Aquifers are an example of natural infrastructure providing water storage without incurring evaporative losses and buffering against the seasonal fluctuations in surface water systems. To improve our understanding of complex aquifers and record changes over time, drilling wells is necessary to explore and delineate aquifers, which can also serve as long-term monitoring wells to track the impacts of water use and conservation efforts. This initiative addresses multifaceted challenges and aims to improve understanding, monitoring, and protection of groundwater resources to ensure a resilient water supply for present and future water uses and demands in New Mexico. The aquifer mapping and monitoring effort will provide foundational data and information to support the following water resources needs across the state:

- Water rights administration and management
- Water quality impairment from naturally occurring contaminants (uranium, arsenic)
- Ecosystem hydrology
- Water availability and sustainability
- Drought management and vulnerability assessment
- Development of deep or brackish water sources and evaluation for potential desalination projects
- Evaluation of aquifer storage and recovery or managed aquifer recharge potential

The aquifer mapping and monitoring initiative is supported in the *Governor’s 50-year Water Action Plan* as the plan clearly identified the need to characterize all major and minor aquifers in the state (fresh and brackish), and specifically characterize all major aquifers by 2032. Building a statewide groundwater monitoring network with 100 new dedicated wells by 2037 is another goal of the plan. This project contributes to improved water rights management, addresses water quality issues from contaminants, assesses ecosystem hydrology, ensures water availability, aids drought management, and explores deep or brackish water sources. Further, this initiative addresses Recommendations 2.8 and 3.2 from the WTF Report (WTF 2022). These goals are summarized in Table 5.

Table 5. Aquifer Mapping and Monitoring Alignment with State Water Resources Plans and Goals

Water Task Force Recommendations	50-year Water Action Plan Recommendations
Water Resources Management and Planning: Recommendation 2.8: Advance scientific understanding and monitoring to support protection of the quantity and quality of groundwater resources. Rivers, Aquifer and Watershed Health: Recommendation 3.2: Expand knowledge and improve management of groundwater resources, which are in near-universal decline, and which New Mexico relies on more than any other southwestern state.	New Water Supplies: Action B.3: Improve groundwater mapping and monitoring <ul style="list-style-type: none"> • Characterize all major and minor aquifers in the state (fresh and brackish) • Characterize all major aquifers by 2032 • Build a statewide groundwater monitoring network with 100 new dedicated wells by 2037

More information on this initiative is available from NMBGMR, which can be accessed through this brochure: [2024 Aquifer Mapping Program Info.pdf \(nmt.edu\)](#).

2.2.2 AQUIFER MAPPING AND MONITORING FUNDING NEEDS

The project goal is to map all aquifers by 2037, including installing over 100 new monitoring wells for tracking changes. NMBGMR estimates that \$175 million will be needed over 12 years, primarily for drilling wells, geologic and hydrologic mapping, geophysical surveys, and aquifer characterization (Table 6).

Table 6. Aquifer Characterization and Monitoring Non-recurring Funding Estimates

Year	FY	Wells	Surveys	Contracts/ Collaborators	Sample Analyses	Annual Estimate	Major Costs
1	2026	\$4,020,000	\$2,500,000	\$600,000	\$150,000	\$7,270,000	2–4 wells; 2 surveys
2	2027	\$10,050,000	\$5,300,000	\$800,000	\$210,000	\$16,360,000	10–12 wells; 6–8 surveys
3	2028	\$10,050,000	\$5,300,000	\$800,000	\$210,000	\$16,360,000	10–12 wells; 6–8 surveys
4	2029	\$10,050,000	\$5,300,000	\$800,000	\$210,000	\$16,360,000	10–12 wells; 6–8 surveys
5	2030	\$10,050,000	\$5,300,000	\$800,000	\$210,000	\$16,360,000	10–12 wells; 6–8 surveys
6	2031	\$10,050,000	\$5,300,000	\$800,000	\$210,000	\$16,360,000	10–12 wells; 6–8 surveys
7	2032	\$10,050,000	\$5,300,000	\$800,000	\$210,000	\$16,360,000	10–12 wells; 6–8 surveys
8	2033	\$10,050,000	\$5,300,000	\$800,000	\$210,000	\$16,360,000	10–12 wells; 6–8 surveys
9	2034	\$10,050,000	\$5,300,000	\$800,000	\$210,000	\$16,360,000	10–12 wells; 6–8 surveys
10	2035	\$10,050,000	\$5,300,000	\$800,000	\$210,000	\$16,360,000	10–12 wells; 6–8 surveys
11	2036	\$10,050,000	\$5,300,000	\$800,000	\$210,000	\$16,360,000	10–12 wells; 6–8 surveys
12	2037	\$2,000,000	\$2,100,000	–	–	\$4,100,000	1–2 wells; 2 surveys
Total		\$106,520,000	\$57,600,000	\$8,600,000	\$2,250,000	\$174,970,000	100+ wells tracking fresh and brackish water; major and minor aquifers mapped

Source: Stacy Timmons, Associate Director, Hydrogeology Programs, NMBGMR, legislative presentation provided via email.

In addition to the non-recurring funding needs outlined in Table 6, NMBGMR aims to secure recurring state funding with an annual budget of \$800,000 starting in Fiscal Year 2025 and will need an additional \$1.25 million to cover recurring costs such as personnel (full-time equivalent staff), software licenses, and project/data management. After 2037, the program will shift its focus from building and data acquisition to long-term maintenance and updating and improving models. It is expected that state appropriations, if granted, could serve as a non-federal match for federal funding opportunities.

2.2.3 EXAMPLE PROJECT REGIONS

NMBGMR prepared a report that provides background information for New Mexico to guide the development of a modern and dedicated statewide groundwater level monitoring network (Pine et al. 2023). It highlights 10 example project regions used to begin identifying monitoring needs for aquifer characterization and monitoring (see Figure 6) based on factors such as groundwater use, monitoring history, geology, hydrology, and land ownership. These 10 regions are just a starting point to a larger project goal of building a groundwater monitoring system across the entire state of New Mexico. A summary of each of these regions, including number of wells, land ownership, and characteristics that present opportunities to link to federal programs is presented in Table 7.

Table 7. Summary of Example Project Regions for Aquifer Mapping and Monitoring

Region	No. of Wells	Land Ownership	Potential Nexus with Federal Funding
Estancia Basin	8	Private, state	Closed basin and potential sole source aquifer Desalination potential Supports communities with high drought risk
Roswell Area	4	Bureau of Land Management (BLM), private, state	Desalination potential Supports communities with high drought risk
Southern Lea County	6	BLM, private, state	Supports communities with high drought risk
Lower Rio Grande Basin	2	Private, state	Supports communities with high drought risk Aquifer storage and recovery potential
Nutt-Hockett Basin	3	BLM, private, state	Supports communities with high drought risk
East-Central Clayton Basin	5	U.S. Forest Service (USFS), private, state	Ogallala Aquifer Supports communities with high drought risk
Bluewater Basin	3	USFS, private	Contaminated aquifer (uranium mining) Supports communities with high drought risk
Animas Basin	4	BLM, private, state	Supports communities with high drought risk
Taos Area	3	Private	Supports communities with high drought risk

Note: See details about federal funding programs in Chapter 5.

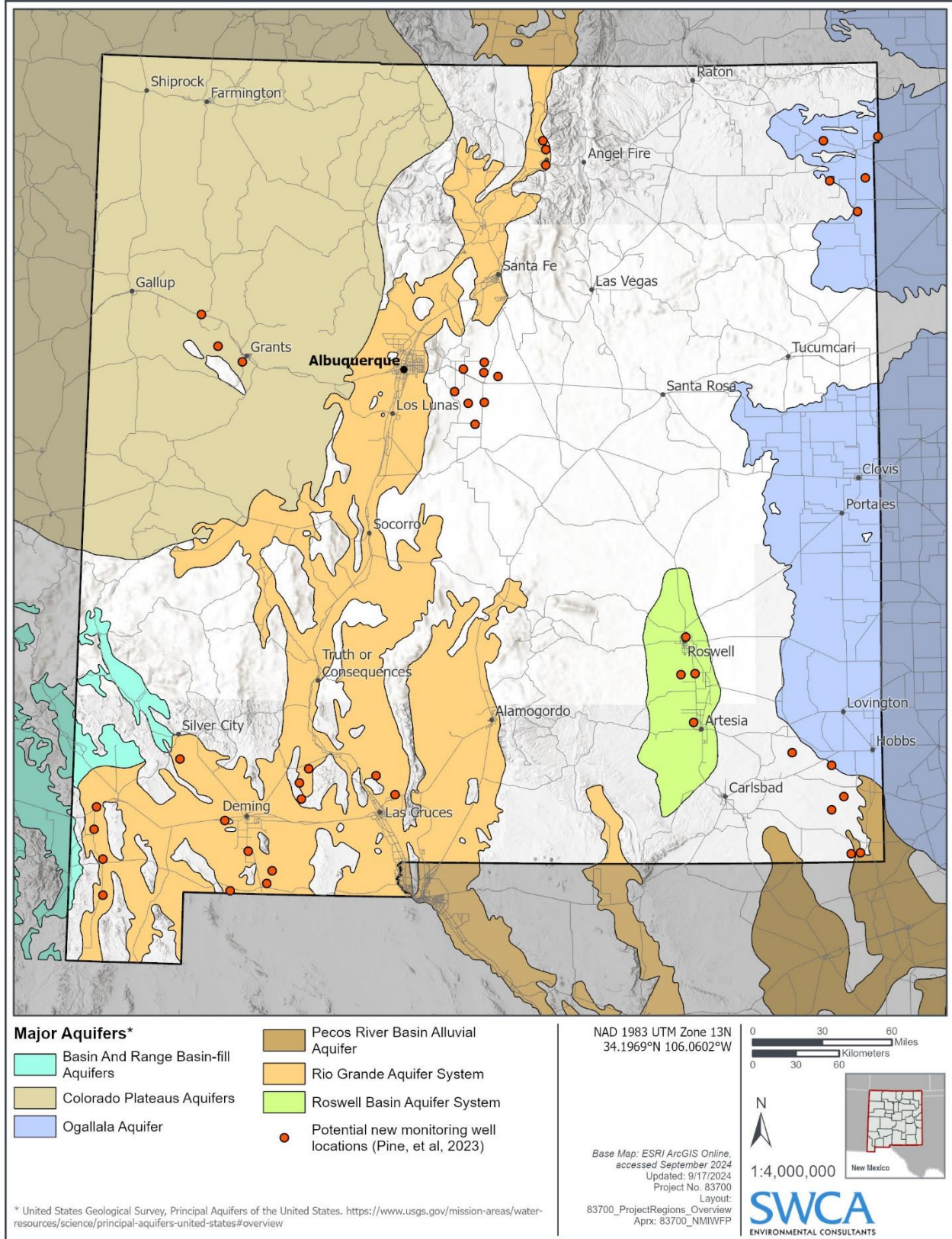


Figure 6. Map of major aquifers and potential new wells supporting aquifer mapping and monitoring.

2.3 RIBBONS OF LIFE: UPPER RIO GRANDE BASIN RIPARIAN CONSERVATION, RESTORATION, AND WATERSHED HEALTH INITIATIVE

2.3.1 BACKGROUND AND OPPORTUNITY STATEMENT

The Upper Rio Grande basin is the headwaters of the Rio Grande, providing drinking water to local communities and supporting critical forest, riparian, and freshwater habitats (Figure 7). Warming and drying of the region, combined with sedimentation from higher intensity wildfires and floods, habitat conversion and fragmentation, and the spread of invasive species, makes the riparian areas of the Upper Rio Grande basin one of the most valuable and threatened ecosystems in the Southwest. Enhancing watershed health in the Upper Rio Grande basin strengthens ecological resilience, preserves healthy headwaters, reduces the risk of catastrophic wildfire, protects critical community water supplies, and both preserves and protects wildlife habitat. Of the 4.6 million acres in the Upper Rio Grande basin, riparian areas cover 207,240 acres and approximately 2,362 miles of streams and rivers. As transitional areas between land and freshwater, healthy riparian areas are important natural infrastructure supporting critical ecological functions that benefit people and wildlife, including improving water quality, bolstering water supply, recharging aquifers, reducing fire impacts, and fostering habitat connectivity for fish and wildlife. Green riparian corridors provide visible representation of the ribbons of life they sustain, and the inspiration for the common name of the Upper Rio Grande Basin Riparian Conservation, Restoration, and Watershed Health Initiative Ribbons of Life (Ribbons of Life Initiative). Note that for the purposes of this Integrated Water Financing Plan, the focus is on the acreage within New Mexico.

Figure 7 includes the Ribbons of Life project boundary within New Mexico; it is the same as the watershed boundary. Additional conservation, restoration, and watershed health designations and land uses are also included; the following are represented in Figure 7.

- “The Rio Chama 2-3-2 Cohesive Strategy Partnership is a conglomerate of place-based collaboratives – a team of teams – whose geography encompasses 2 watersheds, 3 rivers, and 2 states. We strive to work together to protect and preserve the forest health, water quality, wildlife habitat and communities within the San Juan, Chama and Rio Grande Watershed Landscapes.” For more information go to <https://232partnership.org>. The Rio Chama Collaborative Forest Landscape Restoration Program “is the largest project of the 2-3-2 Cohesive Strategy Partnership, which serves as the local collaborative group working with the Forest Service. The Program provides \$30 million in funding over ten years. While the funds from the Forest Service are reserved for federal land, the project is intended to address all lands; private, state, and federal.” For more information, go to <https://232partnership.org/rio-chama-cflrp>.
- The Enchanted Circle Wildfire Crisis Landscape, one of 21 designated in the West, is “the 1.5 million acre USFS designation where a special emphasis has been placed to increase the pace and scale of wildfire risk reduction. The landscape covers land managed by the Forest Service, tribes, state government and thousands of private landowners. Much of the landscape is within some of the highest risk fireheds in the nation.” Funding for the Enchanted Circle Wildfire Crisis Landscape comes from the US Forest Service (USFS) directly to the Carson National Forest, based on a competitive application process. For more information, go to [Water is life: Part 1 | US Forest Service](#).
- “The Río Grande del Norte National Monument is comprised of rugged, wide open plains at an average elevation of 7,000 feet, dotted by volcanic cones, and cut by steep canyons with rivers

tucked away in their depths. The Río Grande carves an 800 foot deep gorge through layers of volcanic basalt flows and ash. Among the volcanic cones in the Monument, Ute Mountain is the highest, reaching to 10,093 feet.” The monument is managed by the BLM, and more information is available at [Río Grande del Norte National Monument | Bureau of Land Management](#).

- The Colorado River Basin Regional Conservation Partnership Program (RCPP) Critical Conservation Area (CCA) is located to the west of the Upper Rio Grande Basin and the Prairie Grasslands RCPP CCA is found to the east. Additional information is found in Section 3.3.2 and at [Regional Conservation Partnership Program | Natural Resources Conservation Service](#).
- The National Wild and Scenic Rivers designated area includes 56 miles of the Rio Grande from the Colorado/New Mexico state line to just beyond the BLM's County Line Recreation Site and the lower 4 miles of the Red River. Designated acreage is considered part of the BLM National Conservation Lands program. Additional information is found in Section 3.3.2 and at [Programs: National Conservation Lands: New Mexico: Rio Grande and Red River WSR | Bureau of Land Management](#).

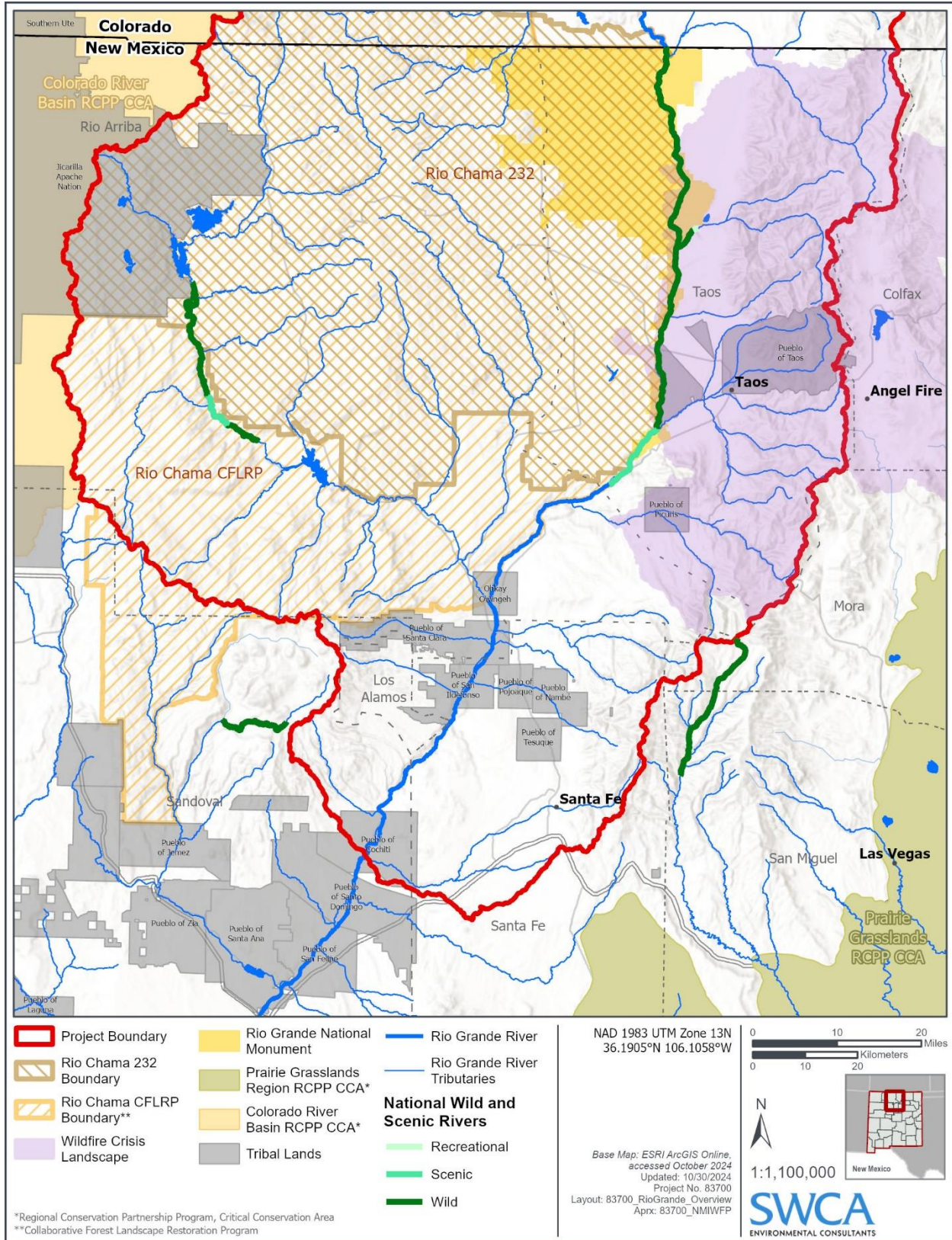


Figure 7. Map of Upper Rio Grande basin in New Mexico.

The hydrology of the Upper Rio Grande basin is largely dependent on snowpack, with most annual precipitation falling as snow during the winter months. Elevated temperatures and reduced precipitation in recent years have led to lower snowpacks and surface water availability. Climate trends indicate a warmer, drier future for the region, which is already affecting streamflow timing and volume through changes in air temperature, precipitation, snowpack, and increased evapotranspiration rates (Llewellyn and Vaddey 2013). It is estimated that temperatures in New Mexico by 2070 will increase by 5 to 7 degrees Fahrenheit, resulting in increasing aridity and risk of wildfires. Streamflow and recharge are projected to decrease by 25% while the timing of precipitation and the earlier melting of snowpack will also impact availability of water for ecosystems and human use (Dunbar et al. 2022).

The Ribbons of Life Initiative is a coalition of organizations, agencies, Pueblos, and others who aim to restore and conserve riparian habitats from the headwaters in the San Juan Mountains of Colorado to the Pueblo of Cochiti in New Mexico. The initiative is being facilitated by the National Wildlife Federation ([Ribbons of Life \[nwf.org\]](https://www.nwf.org)). The watershed contains a mix of federal, Tribal, state, local, and private landowners. The goal of the initiative is to protect and restore “crucial habitat connectivity, with a focus on riparian networks and watersheds, for the wellbeing of people, plants and wildlife.” The initiative also is focused on leveraging “existing habitat connectivity work in the Upper Rio Grande watershed to build a robust and effective coalition specifically focused on riparian conservation and watershed health,” bringing together a network of Pueblos, non-profit organizations, private landowners, and local, state, and federal agencies already active across the region. The Ribbons of Life Initiative presents the following opportunities:

- Accelerate restoration of riparian and wetland areas through process-based and other nature-based solutions, including increases in the number of acres and miles of streams that will be restored to functioning ecological and hydrologic conditions.
- Emphasize the links between riparian health; fish and wildlife habitat; wildfire risk reduction and mitigation of post-wildfire impacts; drinking water; and cultural/social benefits.
- Increase fire resilience of landscapes, including reduced risk of catastrophic wildfire and accelerated post-fire watershed recovery.
- Improve hydrologic function, including aquifer recharge and improved water quality.
- Reduce risks to water supply through reduced erosion potential and improved post-fire stream resilience.
- Support Tribal and Pueblo leadership and community members in their riparian restoration work in the Upper Rio Grande basin.
- Integrate Indigenous knowledge, including the immediate, near-term, and long-term considerations for sustainability.
- Develop a community-led workforce system that invests in local youth.

Excellent progress has been made on the initiative with the following three products:

- **New Mexico’s Upper Rio Grande Riparian Assessment Mapping Tool:** A highly functional geospatial database developed by the University of New Mexico’s (UNM’s) Natural Heritage Program to “identify the best and most intact riparian areas and areas that enhance riparian habitat connectivity either through restoration or conservation.” Potential restoration areas have been identified in an Upper Rio Grande Connectivity Assessment and ranked based on ecological features. [Upper Rio Grande Riparian Assessment \(arcgis.com\)](https://arcgis.com)

- **Who’s Doing What, Where** is a summary of projects and activities from non-governmental organizations. [PUBLIC URG Riparian Who's Doing What Where Assessment.xlsx \(nwf.org\)](#)
- **Action Plan** that summarizes priority next steps to advance the Ribbons of Life Initiative.

The goals of the Ribbons of Life Initiative align with the *Governor’s 50-year Water Action Plan* Action C4 to accelerate watershed restoration projects and is supported by Recommendation 3.3 from the WTF Report (WTF 2022). These goals are summarized in Table 8.

Table 8. Ribbons of Life Alignment with State Water Resources Plans and Goals

Water Task Force Recommendations	50-Year Water Action Plan Recommendations
Rivers, Aquifer and Watershed Health: Recommendation 3.3. Watershed Health: Address climate change impacts to forested watersheds and critical water source areas through strategic investments and better agency coordination and partnership with Tribes and impacted communities.	Action C4: Accelerate watershed restoration projects to reduce risk of catastrophic wildfires, flooding, and large-scale erosion to protect critical surface water sources. Use the Land of Enchantment Legacy Fund and other state appropriations to increase conservation work on private, Tribal, and public lands.

2.3.2 RIBBONS OF LIFE FUNDING NEEDS

The Ribbons of Life Action Plan identified six areas of need for funding and additional resources. Two of these, Coalition Building and Project Implementation, have been the focus of the NM Integrated Water Financing Plan and are summarized below with a focus is on the acreage within the state.

Coalition Building

Funding is needed to provide capacity across Ribbons of Life Initiative partners to build and maintain a strong coalition. This network requires dedicated resources and structure to ensure that the action plan remains current, activities are prioritized, implemented activities are tracked and coordinated, success is monitored and communicated, and the coalition continues to advance restoration goals. Specifically, funding is needed for the following activities:

- **Cross-jurisdictional Collaboration:** Strengthen engagement and collaboration across jurisdictions, with particular attention to state agencies, private landowners and acequias, federal agencies, Pueblos, and Tribal interests. In particular, coordinate with and support the nine Pueblos and the Jicarilla Apache Nation.
- **Tracking and Reporting on Success:** Develop and implement a monitoring program and associated database to track successes, challenges, and lessons learned.
- **Fostering Public Support:** Inform interested, affected, and influential members of the public about the value of riparian systems and maintaining in-stream flows to build support for conservation of riparian species and habitat restoration efforts.

Project Implementation

The largest amount of funding will be needed to implement on-the-ground projects and prepare new project plans that address riparian health along with contributing to wildfire risk reduction. Funds are needed for many types of projects (see Section 3.3.3) and include the following:

- **Project Design:** Support Tribes and non-governmental organizations in the development, design, and planning of restoration projects on federal lands in partnership with federal agencies. Also, support coalition participants in the development, design, and planning of restoration projects on non-federal lands.

- **All Phases of Project Work Implementation:** Support all phases of on-the-ground projects from project scoping, planning, grant writing, permitting, prioritization, implementation, financial management, monitoring, and reporting that result in the conservation and/or restoration of riparian health. Develop new projects that are ready for application submittal as funding opportunities arise.

The National Wildlife Federation and several coalition partners have prepared an initial list of specific needs for both the coalition building and on-the-ground implementation elements of the Ribbons of Life Initiative. Table 9 summarizes the initial coalition building activities, which equal \$2,517,800 over the next 5-years. The order of the activities does not represent priority, and activities were grouped to reflect similar concepts. As described above, estimated cost and timeline were included as submitted and may differ in length of funding to be implemented or cost for similar activities. *Note: As the estimated costs were supplied by different partners, the amounts and timeline (period of performance) are included as submitted; in some instances, there is no consistency in the timeline (for example “annual” versus “three years”) or the cost for similar activities (salaries may differ between agencies and organizations).*

Table 10 summarizes the initial on-the-ground implementation activities, which equal \$6,615,000 over the next 5 years. The order of the activities does not represent priority, and activities were grouped to reflect similar concepts. As described above, estimated cost and timeline were included as submitted and may differ in length of funding to be implemented or cost for similar activities.

Initial activities identified for both coalition building and on-the-ground implementation total \$9,132,800 over the next 5 years.

Table 9. Ribbons of Life Coalition Building Needs and Estimated Costs

Coalition Building Need	Community or Location	Description	Status	Estimated Cost and Timeline*	Critical Partner(s)
Cross-jurisdictional Collaboration	Upper Rio Grande Watershed	Strengthen cross-jurisdictional engagement and collaboration: Invest in a network and conditions that support greater riparian restoration success, building on the existing Ribbons of Life coalition and the existing action plan.	Ready to implement	\$450,000 over 3 years	NWF, NMWF and partners
Tracking and Reporting Success	Upper Rio Grande (and statewide)	Statewide Conservation Action Tracker: Develop and implement an online tool that will allow users to see the spatial extent of where conservation actions outlined in the 2025 revision of the State Wildlife Action Plan for New Mexico have been implemented and associated metadata, including project type, description, and species targeted. The purpose/content could be expanded to include actions undertaken by other agencies/partners.	Detailed scope to be developed	\$250,000 initial and \$100,000 annually. \$650,000 over 5 years	NMDGF, UNM Natural Heritage Program
Fostering Public Support	Upper Rio Grande Watershed	Build widespread support for riparian conservation in the Upper Rio Grande watershed: Develop and implement a communications strategy to effectively communicate about riparian connectivity in the Upper Rio Grande watershed.	Detailed scope to be developed	\$150,000 over 2 years	NWF, NMWF and partners
Beaver Restoration/ Coexistence	Statewide	Strengthen New Mexico’s beaver management capacity and network: Bolster the existing statewide beaver coalition and invest in coexistence tools and capacity to support landowners and encourage beaver restoration.	Detailed scope to be developed	\$300,000 over 3 years	Rio Grande Return and partners
Traditional Ecological Knowledge	Upper Rio Grande Watershed	Traditional Ecological Knowledge trainings and support: Support a series of riparian restoration workshops led by the Santa Clara Pueblo that includes training on Traditional Ecological Knowledge (TEK). Communication and outreach will also include Tribal leaders and community members to further build social support for restoration work across the Upper Rio Grande valley.	Ready to implement	\$150,000 over 3 years	Santa Clara Pueblo and other Pueblos
Native Plant Supply Chain	Upper Rio Grande Watershed	Identify greatest native riparian restoration needs: Survey Upper Rio Grande riparian areas for the most critical species (e.g., willows) and locally adapted varieties that will be in greatest demand for riparian restoration project implementation.	Detailed scope to be developed	\$200,000 over 3 years	University researchers, agency or non-governmental organization biologists
Cooperative Positions	Upper Rio Grande Watershed	Host cooperative positions for federal agencies: Accelerate the ability of federal agencies to prepare and implement on-the-ground restoration activities by supporting cooperative positions that are hosted by non-governmental organizations. Cost estimate is for two full-time cooperative positions with salary and benefits hosted by non-governmental organizations for 3 years.	Prepare concept plan and implement	\$445,000 over 3 years	New Mexico non-governmental, community, and federal agencies
Technical Assistance	Upper Chama, East Rio Arriba, Taos Soil and Water Conservation Districts (SWCDs)	Technical assistance support: Hire technical specialists that are not available through agency partnerships, such as range managers, foresters, hydrologists, certified planners, and others. Cost estimate includes assistance to three SWCDs for 3 years.	Scope to be developed	\$172,800 over 3 years	Upper Chama, East Rio Arriba, Taos SWCDs

Coalition Building Need	Community or Location	Description	Status	Estimated Cost and Timeline*	Critical Partner(s)
Funding Management and Support	Upper Chama, East Rio Arriba, Taos SWCDs	Funding management and support: Application development, financing tracking, grant reporting. Cost estimate is for full-time positions with salary and benefits for 3 years (approximately \$75,000 per year) in three SWCDs.	Scope to be developed	\$675,000 over 3 years	Upper Chama, East Rio Arriba, Taos SWCDs
ESTIMATED TOTAL				\$2,517,800	

*See description above Figure 9 for additional information on estimated cost and timeline.

Table 10. Ribbons of Life On-the-Ground Project Needs and Estimated Costs

Project Need	Community or Location	Description	Status	Estimated Cost and Timeline*	Critical Partner(s)
Restoration Project Development	Upper Rio Grande Watershed	Pueblo riparian restoration project development: Provide critical capacity and support to Pueblo natural resource, forestry, and/or environmental departments in the identification, prioritization, design, and permitting of riparian restoration projects that will build a pipeline of restoration work on Tribal lands across the watershed.	Ready for implementation	\$750,000 over 3 years	Multiple Pueblos via Tribally led consultant
Restoration Project Development	Upper Rio Grande Watershed	Wetland Jewels restoration planning: Concept design planning of three additional Wetland Jewels and project management	Ready for implementation	\$100,000 over 3-5 years	Amigos Bravos
Restoration Project Implementation	Rio San Antonio (Carson National Forest)	Stewart Meadows Project: (total area treated: 336 acres, 1.5 miles). Restore functionality through construction of earthen channel plugs and excavated leadout channels to reduce entrenchment and connect to the floodplain.	Ready for implementation	\$425,000 over 1-2 years	NMDGF, Trout Unlimited
Restoration Project Implementation	Carson National Forest (La Jara Canyon, east of Taos, in Enchanted Circle Landscape)	La Jara (Rio Fernando) Wetland Jewel restoration: The final step in a large-scale wetland restoration project completed in 2023. Project will enhance an additional five wetland acres.	Ready for implementation	\$30,000 over 3-5 years	Amigos Bravos
Restoration Project Implementation	Carson NF (Cruces Basin)	Cruces Basin Wetland Jewel restoration: Project will restore up to 383 wetland acres. Cost estimate is for on-the-ground implementation, project management, and supplies.	Ready for implementation	\$300,000 over 3-5 years	Amigos Bravos
Restoration Project Implementation	Upper Chama, East Rio Arriba, Taos SWCDs	Noxious Weed Eradication Project: At a regional scale, the Upper Chama, Eastern Rio Arriba, and Taos SWCDs have a cooperative agreement that includes eradication of noxious weeds (travel, herbicide, and other equipment). Sufficient funding is not available to complete and maintain the treatments.	Ready for implementation	\$180,000 over 3 years	Upper Chama, East Rio Arriba, Taos SWCDs

Project Need	Community or Location	Description	Status	Estimated Cost and Timeline*	Critical Partner(s)
Restoration Project Implementation	Upper Rio Grande Watershed	Establish a network of improved grazing management projects on public lands: Coordinate with existing efforts like the Rio Chama Collaborative Forest Landscape Restoration Program and Watershed Restoration Action Plans to facilitate the future stewardship of riparian and aquatic resources in conjunction and cooperation with grazing interests.	Ready for implementation	\$65,000 over 2 years	Trout Unlimited
Restoration Project Development and Implementation	Amargo Creek (state lands west of Chama)	William A. Humphries Wildlife Management Area Creek restoration: (total area treated: 220 acres, 2 miles of stream). Construct riffles, beaver dam analogs (BDAs), sod plugs, and enclosure fencing to spread out flows onto the floodplain, create habitat heterogeneity within the creek, and induce meandering of the creek to slow the water velocity and promote infiltration.	Prepare concept plan and implement project	\$1,000,000 over 2-3 years	NMDGF
Restoration Project Development and Implementation	Canada Tio Grande (Carson National Forest, Enchanted Circle Landscape)	Canada Tio Grande Riparian Restoration Project: This project will plan and implement riparian restoration activities to improve 4.75 miles of stream habitat to benefit native species, including a conservation population of Rio Grande cutthroat trout, in the Rio San Antonio watershed.	Prepare concept plan and implement project	\$75,000 over 2 years	Trout Unlimited
Restoration Project Development and Implementation	Upper Rio Grande Watershed	Riparian fencing project: Sporting organizations collaborate with restoration groups, agencies, and private landowners to lead a watershed-level riparian fencing effort.	Prepare concept plan and implement project	\$400,000 over 3 years	New Mexico Wildlife Federation, Trout Unlimited, Backcountry Hunters & Anglers
Restoration Project Development and Implementation	Carson National Forest (north of Red River, Enchanted Circle Landscape)	Midnight Meadows Wetland Jewel restoration: Project will restore 4 miles of streambank and 100 wetland acres. Concept design planning, on-the-ground implementation, project management, and supplies.	Prepare concept plan and implement project	\$640,000 over 3 to 5 years	Amigos Bravos
Restoration Project Development and Implementation	El Rito area	El Rito Wetland Restoration Project: Project will restore 3.8 miles of stream and 100 wetland acres. Funding needed for concept design planning, on-the-ground implementation, project management, and supplies.	Prepare concept plan and implement project	\$500,000 over 3 to 5 years	Amigos Bravos, Trout Unlimited
Restoration Project Development and Implementation	Carson National Forest (Rio Fernando, Enchanted Circle Landscape)	Tienditas Creek (Rio Fernando) Wetland Restoration: Project will restore 75 wetland acres. Funding needed for concept design planning, on-the-ground implementation, project management, and supplies.	Prepare concept plan and implement project	\$350,000 over 3 to 5 years	Amigos Bravos

Project Need	Community or Location	Description	Status	Estimated Cost and Timeline*	Critical Partner(s)
Restoration Project Development and Implementation	Upper Rio Grande Watershed	Fish Passage and Floodplain Connectivity Improvements: Evaluate the current conditions of fish passage and floodplain connectivity in the Upper Rio Grande watershed to improve aquatic and riparian habitat conditions for Species of Greatest Concern. Develop a concept plan that identifies specific restoration approaches and complete one or more projects to enhance wetland habitat, reduce bank erosion, and increase fish habitat.	Research, prepare concept plan, and implement project	\$1,500,000	NMDGF
Monitoring	Canjilon Creek	Canjilon Creek Monitoring Implementation: Draft monitoring plan for restoration activates already prepared with WRRRI assistance. Funding needed for implementation over the next 4 years.	Finalize plan and implement monitoring	\$300,000 over 4 years	Upper Chama SWCD, WRRRI
TOTAL				\$6,615,000	

*See description above Figure 10 for additional information on estimated cost and timeline.



CHAPTER 3 – FINANCING AND FUNDING MECHANISMS

3.1 ACCELERATING SMALL COMMUNITY DRINKING WATER SYSTEM REGIONALIZATION

3.1.1 CURRENT FINANCING BEST PRACTICES

Financing for drinking water systems, including regionalization, often requires pairing of funding from multiple sources. The optimal financing scheme depends on many community specific factors that cannot be generalized. Rather, technical assistance providers such as the Rural Community Assistance Corporation, the Southwest Environmental Finance Center, the Water Finance Exchange, and others are best positioned to advise communities on the best financing combinations available to them. Technical assistance providers have already compiled multiple funding tables for this purpose. Rather than replicate these tools here, references are provided to those resources below:

- [New Mexico Water and Wastewater Funding Sources](#). Compiled by the Southwest Environmental Finance Center, 2023.
- [Infrastructure Funding for Community Water Systems in New Mexico, including Tribal Community Systems](#). Prepared by the Southwest Environmental Finance Center.
- **New Mexico Infrastructure Funding Programs**. Water and Wastewater Infrastructure. Compiled by Rural Community Assistance Corporation. For access contact: Ramón Lucero, RCAC, ramon.lucero@rcac.org.

3.1.2 GRANT FUNDING TO LEVERAGE EXISTING LOANS

Revolving loan funds are among the largest and most available forms of financing programs for drinking water infrastructure projects. However, loan financing, even with favorable low or no interest terms, can be unaffordable for most small communities. As a result, many revolving loan fund programs retain healthy balances that are difficult to disperse to communities in need of financing assistance. One solution to this challenge is to identify additional grant funding that can be paired with existing revolving loan funds to better leverage existing resources and expand the reach of federal and state infrastructure funds. Many grant programs are already considered in the financing strategies described in the previous section. However, there are several additional grant programs that communities may want to consider to help make projects more affordable and able to bundle with revolving loans. These programs are outlined below.

WaterSMART Drought Response Program

- **Purpose:** “Supports a proactive approach to drought by providing financial assistance to develop and update comprehensive drought plans (Drought Contingency Planning) and implement projects that will build long-term resilience to drought (Drought Resiliency Projects).”
- **Applicability to Drinking Water Regionalization:** Disadvantaged communities can apply for funds to construct domestic water supply projects for communities that do not have reliable access to water supplies.
- **Most relevant constraints:** 5% cost-share (potential to waive)
- **Total funding available:** 20 – 40 awards.
- **Typical award amounts:** \$10,000,000 per project.
- **Application Process:** Apply through NOFO by 10/7/2024.
- **Contacts/More Information:** [WaterSMART | Bureau of Reclamation \(usbr.gov\)](#); John Nazario, Albuquerque Office, jirizarrynazario@usbr.gov

Environmental Infrastructure, Resource Protection, and Development Program – Section 595 of the Water Resources Development Act of 1999 (USACE)

- **Purpose:** The U.S. Army Corps of Engineers (USACE) 595 Program’s primary objective is to “provide design and construction assistance to non-federal sponsors for carrying out water-related environmental infrastructure projects and resource protection and development projects.”
- **Applicability to Drinking Water Regionalization:** Projects for wastewater treatment and related facilities, water supply and related facilities, environmental restoration, and surface water resource protection and development.
- **Most relevant constraints:** Cost sharing is 75% federal and 25% non-federal contribution. The proposed project is/will not be connected to another federal agency or USACE project.
- **Total funding available:** Varies based on congressional appropriations.
- **Typical award amounts:** Typically less than \$5,000,000.
- **Application Process:** The non-federal sponsor must submit a letter requesting assistance under the 595 Program to the USACE Albuquerque District office. If the project is deemed eligible and funding is appropriated, the 595 Program Manager will coordinate with the non-federal sponsor to complete a Project Partnership Agreement package.
- **Contacts/More Information:** Brian Sanchez, USACE, Albuquerque District, 505-234-9116, brian.e.sanchez@usace.army.mil.

Building Resilient Infrastructure and Communities (FEMA)

- **Purpose:** Grant that supports states, communities, Tribes, and quasi-governmental organizations to reduce their hazard risk by building capability and capacity, implementing projects, and preparing hazard mitigation plans and related activities. BRIC is annual nationwide, long-term natural hazard risk reduction funding.
- **Applicability to Drinking Water System Regionalization:** Drought mitigation and improved resilience in water supply.

- **Most relevant constraints:** Projects must be completed within 4 years of the application deadline. Typically, 75-25 cost share (can be reduced if requirements are met). Must include studies and engineered plans for construction projects. A FEMA Hazard Mitigation Plan must be active in the location of the land disturbance project.
- **Total funding available:** \$2 to \$4M set-aside for New Mexico plus national competition (amount is dependent on the previous federal fiscal year disaster response).
- **Typical award amounts:** Wide range of award amounts.
- **Application Process:** State set-aside, national level Tribal set-aside, plus national competition. Tribes may work directly with FEMA. All other applicants must coordinate with NMDHSEM.
- **Contacts/More Information:** [Building Resilient Infrastructure and Communities | FEMA.gov](#). For Tribes contact Wyatt Jones, Region 6 FEMA Mitigation Division, wyatt.jones@fema.dhs.gov; all other applicants contact DHSEM.mitigation@DHSEM.state.gov.

Hazard Mitigation Grant Program (FEMA)

- **Purpose:** Grant that supports states, communities, Tribes, quasi-governmental organizations, and non-profit organizations to reduce natural hazard risk by implementing projects, preparing hazard mitigation plans, and carrying out related activities. HMGP is long-term natural hazard risk reduction funding that is requested for each major presidential disaster declaration and Fire Management Assistance Grant. HMGP funding and administration is state-specific.
- **Applicability to Drinking Water System Regionalization:** Drought mitigation and improved resilience in water supply.
- **Most relevant constraints:** Projects must be completed within 4 years of the application deadline. Typically, 75-25 cost share. Must include studies and engineered plans for construction projects. A FEMA Hazard Mitigation Plan must be active in the location of the land disturbance project.
- **Total funding available:** Depends on the total federal assistance FEMA provides for disaster recovery from a presidential disaster declaration in New Mexico. HMGP post-fire grant funding is based on the number of Fire Management Assistance Grants per federal fiscal year in New Mexico.
- **Typical award amounts:** Wide range of award amounts.
- **Application Process:** Notice of Intent submitted to NMDHSEM. For any Tribal presidential disaster declaration or Fire Management Assistance Grant, Tribes work directly with FEMA.
- **Contacts/More Information:** [Hazard Mitigation Grant Program \(HMGP\) | FEMA.gov](#). For Tribes contact Wyatt Jones, Region 6 FEMA Mitigation Division, wyatt.jones@fema.dhs.gov. All other applicants contact DHSEM.mitigation@DHSEM.state.gov.

Sentinel Landscapes (DOD, USDA, DOI Coalition)

- **Purpose:** Coalition of federal agencies, state and local governments, and non-governmental organizations that work with willing landowners and land managers to advance sustainable land use practices around military installations and ranges. Ensures the long-term viability of this crucial water source, promoting both agricultural productivity and environmental health.

- **Applicability to Aquifer Mapping and Monitoring:** Eastern New Mexico Sentinel Landscapes (Ogallala Aquifer) aims to manage water resources and mitigate impacts of declining water supply. Infrastructure for communities within boundary may be eligible.
- **Most relevant constraints:** Wells must be within the boundary of the Eastern New Mexico Sentinel Landscape.
- **Total funding available:** Variable based on 26 different funding partners.
- **Typical award amounts:** Unknown.
- **Application Process:** New program. TBD.
- **Contacts/More Information:** [Eastern New Mexico | Sentinel Landscapes](#); Ladona Clayton, Ogallala Land and Water Conservancy, ladona.clayton@ogalwc.org

3.1.3 COMPETITIVE FEDERAL LOAN FUNDS AVAILABLE TO STATE OF NEW MEXICO

Additional revolving loan fund programs are available to the State of New Mexico through two competitive federal programs. For these programs to be attractive, New Mexico would likely first want to disperse revolving loan funds from existing accounts.

Safeguarding Tomorrow Revolving Loan Fund Program (STORM Act) (FEMA)

- **Purpose:** Fund mitigation projects at the local government level to increase the nation's resilience to natural hazards and climate change. States and federally recognized Tribes that received a direct major disaster declaration may also apply. The program is funded with \$500 million through Fiscal Year 2026.
- **Administered by:** FEMA, after the state legislature approves the fund and approach.
- **Eligible Projects:** Infrastructure activities that are supported in a FEMA-approved Hazard Mitigation Plan. This funding can be used in combination with other FEMA hazard mitigation grants and funding sources.
- **Benefits:** This local funding can support previously identified local priorities. The funding parameters are open to support local priorities.
- **More information:** [Safeguarding Tomorrow Revolving Loan Fund Program | FEMA.gov](#)

State Water Infrastructure Financing Authority (SWIFIA) (EPA)

- **Purpose:** Loan program to fund projects identified by a State infrastructure financing authority. The minimum SWIFIA project size is \$20 million, of which the EPA can finance up to 49%. The project priorities are 1) Increasing Investment in Economically-Stressed Communities; 2) Making Rapid Progress on Lead Service Line Replacement; 3) Addressing PFAS and Emerging Contaminants; and 4) Supporting One Water Innovation and Resilience.
- **Administered by:** EPA
- **Eligible Projects:** State infrastructure financing authorities are eligible for SWIFIA funding when financing drinking and wastewater treatment projects. The projects should be bundled and may include design, construction, property acquisition, and interest payments.

- **Benefits:** Low-cost loans are eligible to state financing authorities to fund drinking and wastewater projects.
- **More information:** [SWIFIA - EPA](#)

3.1.4 PUBLIC-PRIVATE PARTNERSHIPS

Infrastructure as a Service: Sustainability Partners

Infrastructure as a Service (IaaS) is a model developed by Sustainability Partners to invest private equity funding to public infrastructure needs using a usage-based utility model. Under this model, infrastructure is converted into a utility service that is “reliable, safe, and efficient in a manner that protects institutions, the assets, and taxpayers.” Sustainability Partners works with durable entities, including municipalities and water districts. The IaaS model can pay 100% or any combination of design, materials, and installation costs and also takes on maintenance of the infrastructure. Sustainability Partners assumes ownership responsibilities of essential infrastructure and provides services from the infrastructure back to the community or utility through a negotiated usage charge. Cost savings are realized in the form of robustly engineered design requirements, direct procurement, and uncompromising maintenance yield and can allow projects to move forward more quickly to avoid escalating construction costs.

Environmental Impact Bonds: Quantified Ventures

An Environmental Impact Bond (EIB) is a “type of municipal bond label which signals to investors that the issuer has market-leading ESG transparency and accountability in their bond. The EIB commits to the prediction, evaluation, and disclosure of environmental outcomes of funded projects” (Quantified Ventures 2024). Benefits of EIBs include expanding a bond’s investor base to include ESG funds, funding nature-based solutions, and enabling capital spending decisions to be better informed by project outcomes data. In 2016, [Quantified Ventures](#) issued an EIB with [DC Water](#) to fund a \$25 million green stormwater infrastructure project. The project was successful and the city paid back the bond in full. The same organization has worked with several other municipalities on water infrastructure projects.

Environmental Markets: Environmental Policy Innovation Center

The Environmental Policy Innovation Center supports innovative opportunities for public and private financing of conservation including establishment of environmental markets, improving procurement efficiency and delivering on environmental outcomes, and enabling private investment in restoration and conservation. More information is available here: [Procurement & Finance — Environmental Policy Innovation Center](#).

Non-profit Investments: Community Foundations

Community foundations are another source of potential funding, support, and partnering for rural communities in New Mexico. For example, the New Mexico Foundation could work with partners, including agencies, to determine funding to support drinking water regionalization coalition building; the New Mexico Foundation also has a Tribal focus. Additional community foundations that serve rural communities and may support drinking water regionalization are Albuquerque Community Foundation, Las Cruces Community Foundation, Santa Fe Community Foundation, and Taos Community Foundation.

3.2 AQUIFER MAPPING AND MONITORING

3.2.1 OPTIMAL FEDERAL FUNDING OPPORTUNITIES

The following federal funding programs are available to states and could be applicable to the Aquifer Mapping and Monitoring needs. Whereas some opportunities are broadly applicable to aquifer characterization activities, others are specific to particular types of aquifers.

Building Resilient Infrastructure and Communities (FEMA)

- **Purpose:** Grant that supports states, communities, Tribes, and quasi-governmental organizations to reduce their hazard risk by building capability and capacity; implementing projects; preparing hazard mitigation plans; and carrying out related activities. This is annual nationwide long-term natural hazard risk reduction funding.
- **Applicability to Aquifer Mapping and Monitoring:** Drought mitigation and improved resilience in water supply, including aquifer storage and recharge. Includes drought mitigation plans, infrastructure improvements, and community outreach programs.
- **Most relevant constraints:** Projects must be completed within 4 years of the application deadline. Typically, a 75-25 cost share (can be reduced if requirements are met). Must include studies and engineered plans for construction projects. A FEMA Hazard Mitigation Plan must be active in the location of the land disturbance project (a state Hazard Mitigation Plan may suffice for a state agency application).
- **Total funding available:** Likely \$2 million to \$4 million set-aside for New Mexico plus national competition (amount is dependent on the previous federal fiscal year disaster response nationwide).
- **Typical award amounts:** Wide range of award amounts.
- **Application process:** State set-aside, national-level Tribal set-aside, plus national competition. Tribes work directly with FEMA. All other applicants coordinate with NMDHSEM.
- **Contacts/More Information:** [Building Resilient Infrastructure and Communities | FEMA.gov](#). For Tribes contact Wyatt Jones, Region 6 FEMA Mitigation Division, wyatt.jones@fema.dhs.gov. All other applicants contact DHSEM.mitigation@DHSEM.state.gov.

Hazard Mitigation Grant Program (FEMA)

- **Purpose:** Grant that supports states, communities, Tribes, quasi-governmental organizations, and non-profit organizations to reduce natural hazard risk by implementing projects, preparing Hazard Mitigation Plans, and carrying out related activities. HMGP is long-term natural hazard risk reduction funding that is requested for each major presidential disaster declaration and Fire Management Assistance Grant. HMGP funding and administration is state-specific.
- **Applicability to Aquifer Mapping and Monitoring:** Drought mitigation and improved resilience in water supply; must link to aquifer recharge, storage, and recovery. Includes drought mitigation plans, infrastructure improvements, and community outreach programs.
- **Most relevant constraints:** Projects must be completed within 4 years of the application deadline. Typically, 75-25 cost share. Must include studies and engineered plans for construction projects. A FEMA Hazard Mitigation Plan must be active in the location of the land disturbance project (a state Hazard Mitigation Plan may suffice for a state agency application).

- **Total funding available:** Depends on the total federal assistance FEMA provides for disaster recovery from a presidential disaster declaration in New Mexico. HMGP post-fire grant funding is based on the number of Fire Management Assistance Grants per federal fiscal year in New Mexico.
- **Typical award amounts:** Wide range of award amounts.
- **Application process:** Notice of intent submitted to NMDHSEM.
- **Contacts/More Information:** [Hazard Mitigation Grant Program \(HMGP\) | FEMA.gov](#). For Tribes contact Wyatt Jones, Region 6 FEMA Mitigation Division, wyatt.jones@fema.dhs.gov. All other applicants contact DHSEM.mitigation@DHSEM.state.gov.

Planning Assistance to States and Tribes Program – Section 22 of the Water Resources Development Act of 1974 (USACE)

- **Purpose:** The Planning Assistance to States (PAS) program provides assistance to states, federally recognized Tribes, or non-profit organizations (with the support of the affected local government) for comprehensive planning and technical assistance related to water resource needs.
- **Applicability to Aquifer Mapping and Monitoring:** Comprehensive and/or technical support related to water resources planning.
- **Most relevant constraints:** The PAS program is limited to providing planning-level assistance; detailed design, specification, and construction are not included in this program. Projects under PAS are cost shared with the study partner at 50% federal funding and 50% non-federal funding. The non-federal cost share for comprehensive planning may be provided either by direct funds or by in-kind support. The cost share for technical assistance must be provided in funds by the project partner and cannot be met via in-kind services. A cost share waiver is available for eligible economically disadvantaged communities as defined in the Implementation Guidance for Section 160 of the Water Resources Development Act (WRDA) of 2022.
- **Total funding available:** Varies based on congressional appropriations.
- **Typical award amounts:** Varies based on scope of study but typically less than \$300,000.
- **Application process:** The non-federal sponsor must submit a letter requesting assistance under the PAS Program to the USACE Albuquerque District office.
- **Contacts/More Information:** Ryan Gronewold, USACE Albuquerque District, ryan.p.gronewold@usace.army.mil, 505-342-3340.

Enhanced Aquifer Recharge Research State and Tribal Assistance Grants (EPA)

- **Purpose:** This funding aims to support projects that enhance the sustainability and resilience of water supplies through enhanced aquifer recharge and is supported by the EPA's Water Reuse Action Plan. Funding is available for research to develop methods to increase groundwater storage, improve water quality, and provide drought mitigation.
- **Applicability to Aquifer Mapping and Monitoring:** Projects that augment water supplies, replenish groundwater, and restore streamflow in the face of increasing populations, urban development, and climate change.
- **Most relevant constraints:** Funding opportunities are intermittent. Best opportunity could be through selection of New Mexico for a pilot study.

- **Total funding available:** \$5 million.
- **Typical award amounts:** Unknown.
- **Application process:** Respond to competitive Notice of Funding Opportunity STAGs will be available to states, although the EPA has not yet determined the method of implementation for this program.
- **Contacts/More Information:** [Enhanced Aquifer Recharge Research | US EPA](#), Cissy Ma, US EPA ORD, Ma.cissy@epa.gov.

National Alliance for Water Innovation (DOE)

- **Purpose:** Research program and public-private partnership between government, industry, and academic partners to examine the critical technical barriers and research needed to radically lower cost, greenhouse gas emissions, and energy for beneficial use of non-traditional water sources.
- **Applicability to Aquifer Mapping and Monitoring:** Aquifers with proposed brackish groundwater projects, including Estancia Basin and Roswell Basin in New Mexico. A new opportunity related to Energy Water Resilience is being developed and scheduled to become available in June 2025.
- **Most relevant constraints:** Must include a research element relevant to desalination.
- **Total funding available:** \$75 million Fiscal Year 2025.
- **Typical award amounts:** Range from less than \$1 million for research and development projects to over \$1 million for regional deployment projects.
- **Application process:** Respond to competitive request for proposal (RFP) once released.
- **Contacts/More Information:** [National Alliance for Water Innovation \(NAWI\) – Innovating for a water and energy secure future for the United States \(nawihub.org\)](#). Mike Rinker, Water Power Technologies Office, U.S. Department of Energy, michael.rinker@ee.doe.gov.

Sentinel Landscapes (DOD, USDA, DOI coalition)

- **Purpose:** Coalition of federal agencies, state and local governments, and non-governmental organizations that work with willing landowners and land managers to advance sustainable land use practices around military installations and ranges. Ensures the long-term viability of this crucial water source, promoting both agricultural productivity and environmental health.
- **Applicability to Aquifer Mapping and Monitoring:** Eastern New Mexico Sentinel Landscapes (Ogallala Aquifer) aims to manage water resources and mitigate impacts of declining water supply.
- **Most relevant constraints:** Wells must be within the boundary of the Eastern New Mexico Sentinel Landscape.
- **Total funding available:** Variable based on 26 different funding partners.
- **Typical award amounts:** Unknown.
- **Application process:** New program. TBD.
- **Contacts/More Information:** [Eastern New Mexico | Sentinel Landscapes](#); Ladona Clayton, Ogallala Land and Water Conservancy, ladona.clayton@ogalwc.org.

WaterSMART Grants (USBR)

- **Purpose:** Many programs including the following examples: Applied Science Grants and Drought Resilience Projects
- **Applicability to Aquifer Mapping and Monitoring:** Applied Science Grants: Developing hydrologic information. Drought Resilience Projects: Support for drought planning and project implementation to increase drought resiliency.
- **Most relevant constraints:** No explicit funding for drilling wells. Need to make a strong connection to drought planning and resiliency.
- **Total funding available:** \$10 million to \$40 million.
- **Typical award amounts:** Up to \$400,000 per project.
- **Application process:** Respond to NOFOs released from the USBR.
- **Contacts/More Information:** [WaterSMART | Bureau of Reclamation \(usbr.gov\)](https://www.usbr.gov); John Nazario, Albuquerque Office.

System Conservation and Efficiency Program (USBR)

- **Purpose:** Provides funding to public entities and Tribes for projects that provide general environmental benefits or ecosystem/habitat restoration benefits that address issues directly caused by drought.
- **Applicability to Aquifer Mapping and Monitoring:** Applicable to aquifers in the San Juan Basin or Gila Basin (Upper Colorado River basin) that are critical to addressing water security issues caused by drought.
- **Most relevant constraints:** No explicit funding for drilling wells. Need to make a strong connection to drought planning and resiliency.
- **Total funding available:** \$450 million.
- **Typical award amounts:** \$300,000+.
- **Application process:** Respond to Request for Applications (RFA) by October 14, 2024.
- **Contacts/More Information:** [Upper Colorado River Basin System Conservation and Efficiency Program](https://www.usbr.gov).

Emerging Contaminants BIL Funding (EPA)

- **Purpose:** Addresses contamination issues in aquifers, particularly from emerging pollutants like per- and polyfluoroalkyl substances (PFAS).
- **Applicability to Aquifer Mapping and Monitoring:** Funds could be used to characterize aquifers contaminated with emerging contaminants.
- **Most relevant constraints:** Project eligibility must be approved by the EPA.
- **Total funding available:** \$1 billion Clean Water State Revolving Fund (CWSRF) over 5 years; \$2 billion for Small or Disadvantaged Communities. New Mexico Fiscal Year 2024 CWSRF Emerging Contaminant Allocation: \$1,054,000.

- **Typical award amounts:** New Mexico Fiscal Year 2024 Drinking Water State Revolving Fund (DWSRF) Emerging Contaminant Allocation: \$7,460,000. New Mexico Fiscal Year 2024 BIL Emerging Contaminants in Small or Disadvantaged Communities: \$9,457,000.
- **Application process:** Formulaic state set-aside awarded through the DWSRF program.
- **Contacts/More Information:** Chloe Adelman, adelmann.chloe@epa.gov; EPA Region 6.
 - [Emerging Contaminants \(EC\) in Small or Disadvantaged Communities Grant \(SDC\) | US EPA](#)
 - [Drinking Water Bipartisan Infrastructure Law \(BIL\) Emerging Contaminant \(EC\) Funding Options | US EPA](#)
 - [Clean Water State Revolving Fund Emerging Contaminants | US EPA](#)

3.2.2 PRIVATE INVESTMENT

Infrastructure as a Service: Sustainability Partners

Infrastructure as a Service (IaaS) is a model developed by Sustainability Partners to invest private equity funding to public infrastructure needs employing a usage-based utility model. Under this model, infrastructure is converted into a utility service that is “reliable, safe, and efficient in a manner that protects institutions, the assets, and taxpayers.” Sustainability Partners works with durable entities, including municipalities and water districts. The IaaS model can pay 100% or any combination of design, materials, and installation costs and also takes on maintenance of the infrastructure. Sustainability Partners assumes ownership responsibilities of essential infrastructure and provides services from the infrastructure back to the community or utility through a negotiated usage charge. Cost savings are realized in the form of robustly engineered design requirements, direct procurement, and uncompromising maintenance yield and can allow projects to move forward more quickly to avoid escalating construction costs.

3.2.3 OTHER RESOURCES AND OPPORTUNITIES

The in-kind resources listed below may be available to support the aquifer mapping and monitoring initiative.

Groundwater Data Sharing (BLM)

- **Description:** The Bureau of Land Management (BLM) maintains an internal database containing groundwater data for 1,100 wells in New Mexico.
- **Opportunity:** If the BLM leverages existing wells for the Aquifer Mapping and Monitoring Program, data collection and monitoring can be enhanced without the need for new drilling. In addition, data from active wells could be shared with the state to extend coverage of existing data.
- **Benefits:** Uses existing infrastructure to gather crucial groundwater data, reducing costs and expanding the data pool for Aquifer Mapping and Monitoring.
- **Contacts:** Peter Burck, Hydrologist, BLM National Operations Center. pburck@blm.gov.

National Groundwater Monitoring Network (USGS)

- **Description:** Compiles selected groundwater monitoring wells from federal, state, and local networks nationwide.

- **Opportunity:** Relevant groundwater data from this network may be accessible and beneficial to the Aquifer Mapping and Monitoring Program.
- **Benefits:** Provides a comprehensive data set that can complement Aquifer Mapping and Monitoring efforts, ensuring a robust monitoring network without duplicating efforts.
- **Contacts:** Chad Wagner, cwagner@usgs.gov

Drought Toolbox (NIDIS)

- **Description:** A future product from the National Integrated Drought Information System (NIDIS), tied to the drought risk and resilience planning platform.
- **Opportunity:** This platform could be used to showcase the tools and data generated through the Aquifer Mapping and Monitoring Program.
- **Benefits:** Highlights Aquifer Mapping and Monitoring Program contributions to drought resilience, increasing visibility and integration with national drought management efforts.
- **Contacts/More information:** National Oceanic and Atmospheric Administration/NIDIS, www.drought.gov, Gretel Follingstad, Ph.D., gretel.follingstad@noaa.gov.

WaterSTAR (Ground Water Protection Council)

- **Description:** Risk-based data management system that has been trialed in other states and is supported with funding from the Department of Energy (DOE).
- **Opportunity:** Potential supported and tested database structure for statewide groundwater data.
- **Benefits:** Pilot project has already been implemented to monitor produced water use as part of the New Mexico Water Data Initiative.
- **Contacts/More information:** Dan Yates, Executive Director, Ground Water Protection Council, dyates@gwpc.org.

3.2.4 SUMMARY OF OPPORTUNITIES FOR STATEWIDE SUPPORT AND SPECIFIC TYPES OF AQUIFERS

A summary of the best funding opportunities and in-kind resources identified for the Aquifer Mapping and Monitoring project are summarized in Table 11. Some of these opportunities are relevant to specific geographies or aquifer types. These opportunities, along with planning and policy solutions, are further reflected in the Integrated Water Financing Plan for this initiative outlined in Section 5.2.

Table 11. Overview of Best Funding Opportunities and Other Resources for Aquifer Mapping and Monitoring

Applicability	No. of Wells	Priority Basins in New Mexico	Nexus with Federal Programs Nexus	Potential Funding
Infrastructure components of AMM	100	All	Private investment through Sustainability Partners can be combined with and used to match federal grants.	Dependent on state infrastructure need.
Planning – statewide	NA	All basins in state	Planning Assistance to States (USACE)	\$200,000 ongoing support
Cooperative monitoring	1,100	All basins in state	BLM data shared with state; BLM wells repurposed	In kind

Applicability	No. of Wells	Priority Basins in New Mexico	Nexus with Federal Programs Nexus	Potential Funding
Aquifers that serve communities experiencing water stress or scarcity	100	All basins in state	WaterSMART (USBR)	\$400,000 per project
			HMGF (FEMA)	Variable amounts
			BRIC (FEMA)	\$1 million+
			NIDIS Drought Toolbox	In kind
Candidate aquifers for desalination water supply	12	Estancia Basin Roswell Area	NAWI (DOE)	\$1 million+
Sole Source Aquifers	TBD	TBD	Enhanced Aquifer Recharge Research STAGs (EPA)	\$5 million
Aquifers in the Upper Colorado River Basin	TBD	Wells in San Juan River basin	Upper Colorado River Basin System Conservation and Efficiency Program	Multiple millions
Ogallala Aquifer	TBD	To be identified; no priority basins in boundary.	Sentinel Landscapes	TBD
ASR Potential	2	Lower Rio Grande	WaterSMART (USBR)	\$400,000 per project
			Enhanced Aquifer Recharge Research STAGs (EPA)	\$5 million
Contaminated Aquifers	3	Bluewater Basin	Office of Land and Emergency Management funding TBD	Unknown
Contaminated Aquifers	TBD	Aquifers with PFAS or other emerging contaminants	EPA Emerging Contaminants Funding (DWSRF, CWSRF, and Small and Disadvantaged Communities)	\$17,850,000 allocated for New Mexico Fiscal Year 2024

3.3 RIBBONS OF LIFE

Many federal and state funding opportunities support watershed health, riparian restoration and conservation, and watershed coalition building. To advance the Ribbons of Life Initiative, these have been divided into three categories. Note that the opportunities described below will be vetted with Ribbons of Life coalition partners to determine which are the highest priority to pursue; what partner may serve as the primary applicant or lead; and when the appropriate milestones will occur.

- First, innovative or relatively new federal funding programs that have been infused with recent congressional funding and/or have not previously been explored for the Upper Rio Grande Basin in New Mexico are summarized. These opportunities represent time-sensitive funding that may not persist beyond the BIL and IRA congressionally set time frames.
- Second, several watershed designations are tied to specific federal funding programs. Pursuing such designations and associated funding could bring significant resources to the basin.
- Third, a summary of more traditional funding opportunities with regular recurring application processes are also summarized; some of these funding opportunities have been supplemented with BIL or IRA funding. These represent good long-term funding for the program into the more distant future.

3.3.1 OPTIMAL FEDERAL FUNDING OPPORTUNITIES

A summary of relatively new federal funding opportunities for the Ribbons of Life Initiative, primarily associated with one-time BIL and IRA funding, that are most applicable to the Ribbons of Life Initiative is

provided below in Table 12. The applicability of each opportunity to coalition building needs and on-the-ground project implementation are also summarized. Opportunities described below will be vetted with Ribbons of Life coalition partners to determine which are the highest priority to pursue; what partner may serve as the primary applicant or lead; and when the appropriate milestones will occur.

Opportunities with the most promise are flagged and included in the Integrated Water Financing Plan for Ribbons of Life in Section 5.3.

Table 12. Overview of Best Funding Opportunities and Other Resources for Ribbons of Life

Program	Purpose	Applicability to Ribbons of Life	Most Relevant Constraints	Funding Amounts	Contacts and More Information
Collaborative Capacity Program for Forests and Communities (USFS, NFF)	Invests in resources, skills, tools and support activities that make collaboration for forest stewardship successful through a financial awards program.	Collaboration to support long-term strategy for achieving stewardship outcomes benefiting USFS lands.	Requires USFS letter of support.	\$800,000 per funding cycle Typical award is \$10,000 to \$150,000	Respond to RFP when available. Contact the USFS Southwest Region Community Navigator sean.foran@usda.gov
Aquatic Ecosystem Restoration Program WaterSMART grant (USBR)	Funding to “study, design, and construct aquatic ecosystem restoration projects that are collaboratively developed, have widespread regional benefits, and result in the improvement of the health of fisheries, wildlife, and aquatic habitat.”	Restoration of connectivity and of aquatic habitat (including monitoring) is eligible.	35% cost-share	Design from \$500,000 to \$2 million Construction grants from \$3 million to \$20 million.	Apply for NOFO once posted (anticipated for late Fall2024 release with applications due January 28, 2025). Genevieve Allan, Albuquerque Office, gallan@usbr.gov WaterSMART Aquatic Ecosystem Restoration Program Bureau of Reclamation (usbr.gov) Contact Katherine Tucker ktucker@usbr.gov
Environmental Water Resources Projects WaterSMART grant (USBR)	Funding for projects focused on collaboratively developed ecological value or watershed health projects to increase the reliability of water resources and increase water savings.	Watershed restoration projects benefiting ecological values or watershed health that have a nexus to water resources or water management.	Eligible applicants must include one or more organizations with water/power delivery authority. For a watershed group, projects must be completed within 5 years, and can be implemented on non-federal land.	In general, applicants can request up to \$3 million for projects with total project cost less than \$6M, with 25% match. A watershed group can apply for up to \$5 million with no total project limit.	Annual congressional allocation augmented with BIL funding (\$45 million). Cost share required. Next application due March 2025. Contact Robin Graber rgrab@USB.R.gov

Program	Purpose	Applicability to Ribbons of Life	Most Relevant Constraints	Funding Amounts	Contacts and More Information
<p>Building Resilient Infrastructure and Communities (FEMA)</p>	<p>Annual nationwide long-term natural hazard risk reduction funding. Supports states, communities, Tribes to reduce their hazard risk; capability and capacity building plus projects, plans, and related activities.</p>	<p>Watershed stabilization, flood and wildfire risk reduction, mitigation planning, education, outreach, and capacity/capability building are eligible. Phased projects can include design and implementation.</p>	<p>Projects must be completed within 4 years of the application deadline. Typically 75-25 cost share (can be reduced if requirements are met). Must include studies and engineered plans for construction projects. A FEMA Hazard Mitigation Plan must be active in the location of the land disturbance project.</p>	<p>\$2 to \$4 million set-aside for New Mexico, nationwide Tribal set-aside plus national competition (amount is dependent on the previous federal fiscal year disaster response nationwide).</p>	<p>Tribes may work directly with FEMA (wyatt.jones@fema.dhs.gov). All other applicants must coordinate with NMDHSEM (DHSEM.mitigation@DHSEM.state.gov). Building Resilient Infrastructure and Communities FEMA.gov</p>
<p>Hazard Mitigation Grant Program (FEMA)</p>	<p>Long-term natural hazard risk reduction funding is associated with each presidential disaster declaration and Fire Management Assistance Grant (FMAG); HMGP is state-specific.</p> <p>Supports states, communities, Tribes, quasi-governmental organizations, and non-profit organizations to reduce their hazard risk through projects, plans, and related activities.</p>	<p>Watershed stabilization, flood and wildfire risk reduction, mitigation planning, education, and outreach are eligible. Phased projects can include design and implementation.</p>	<p>Projects must be completed within 4 years of the application deadline. Typically 75-25 cost share (can be reduced if requirements are met). Must include studies and engineered plans for construction projects. A FEMA Hazard Mitigation Plan must be active in the location of the land disturbance project, education/outreach effort, and similar.</p>	<p>Depends on the total federal assistance FEMA provides for disaster recovery from a presidential disaster declaration. Number of Fire Management Assistance Grants per federal fiscal year within the state for the HMGP post-fire grant.</p>	<p>Tribes may work directly with FEMA (wyatt.jones@fema.dhs.gov). All other applicants must coordinate with NMDHSEM (DHSEM.mitigation@DHSEM.state.gov). Building Resilient Infrastructure and Communities FEMA.gov</p>

Program	Purpose	Applicability to Ribbons of Life	Most Relevant Constraints	Funding Amounts	Contacts and More Information
Forest Landowner Support FLS-003 (USFS, NFF)	Issues payments to landowners for the implementation of climate mitigation and forest resilience practices	Collaboration to support long-term strategy for achieving stewardship outcomes benefiting USFS lands.	Cost-share program must be endorsed by NMFD. \$5 million cap for proposals in each state. 80% of funds must go to direct landowner payments. 20% match requirement may be reduced for underserved landowners.	\$140 million available; typical award amounts \$10,000 to \$150,000	Applications due to USFS 9/30/2024. May be offered in 2025. NMFD contact erin.mcelroy@emnrd.nm.gov
Forest Landowner Support FLS-004 (USFS, NFF)	Direct payments to private forest landowners to implement practices that drive measurable increase in carbon sequestration and storage	Collaboration to support long-term strategy for achieving stewardship outcomes benefiting USFS lands.	Cost-share program must be endorsed by NMFD. \$5 million cap for proposals in each state. 80% of funds must go to direct landowner payments. 20% match requirement may be reduced for underserved landowners.	\$50 million available; typical award amounts \$10,000 to \$150,000	Applications due to USFS 9/30/2024. May be offered in 2025. NMFD contact erin.mcelroy@emnrd.nm.gov

3.3.2 WATERSHED DESIGNATIONS TIED TO FEDERAL FUNDING PROGRAMS

The following watershed designations could bring substantial resources, both financial and in kind, as well as added conservation protections, to the Upper Rio Grande basin.

Regional Conservation Partnership Program (NRCS)

- **Description:** The Regional Conservation Partnership Program (RCPP) is a partner-driven approach to conservation that funds solutions to natural resource challenges on agricultural land. By leveraging collective resources and collaborating on common goals, RCPP demonstrates the power of public-private partnerships in delivering results for agriculture and conservation.
- **Designation Status:** The Colorado River Basin RCPP CCA is located to the west of the Upper Rio Grande Basin and the Prairie Grasslands RCPP CCA is found to the east (see Figure 7). Without the CCA designation for the Rio Grande, Ribbons of Life partners could submit for the state/multistate or the non-CCA funding.
- **Resource benefits:** \$1.5 billion available in Fiscal Year 2024. If the RCPP application is accepted, the NRCS reimburses producers or partners for projects. The NRCS also provides technical assistance through existing NRCS programs.
- **Contacts:** Jason Martin, NRCS. jason.martin2@usda.gov

National Water Quality Initiative Designation (NRCS, NMED)

- **Description:** The National Water Quality Initiative (NWQI) is a “partnership among NRCS, state water quality agencies and the U.S. Environmental Protection Agency to identify and address impaired water bodies through voluntary conservation. NRCS provides targeted funding for financial and technical assistance in small watersheds most in need and where farmers can use conservation practices to make a difference.”
- **Designation Status:** There are currently only three watersheds designated as NWQI in New Mexico, none of which are in the Upper Rio Grande basin.
- **Resource benefits:** “NRCS provides targeted funding for financial and technical assistance in small watersheds most in need and where farmers can use conservation practices to make a difference. State water quality agencies and other partners contribute additional resources for watershed planning, implementation and outreach. They also provide resources for monitoring efforts that help track water quality improvements over time.”
- **Contacts:** Jason Martin, NRCS. jason.martin2@usda.gov

Wild and Scenic River Designation to leverage existing funding (BLM)

- **Description:** The National Wild and Scenic Rivers System was created by Congress in 1968 to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. Rivers may be designated by Congress or, if certain requirements are met, the Secretary of the Interior. Each river is administered by either a federal or state agency.
- **Designation Status:** The Rio Grande was one of the original eight rivers designated by Congress as wild and scenic in 1968. In 1994, the designation was extended by legislation to include an additional 12.5 miles. The designated area includes 56 miles of the Rio Grande from

the Colorado/New Mexico state line to just beyond the BLM's County Line Recreation Site and the lower 4 miles of the Red River. These locations can be seen in Figure 7. Designated acreage is considered part of the BLM National Conservation Lands program.

- **Resource benefits:** Wild and Scenic designation provides for specific management goals and protections that are implemented through The Rio Grande Corridor Final Plan by the BLM. Although the designation does not come with specific funding, it may help make applications for other federal program funding more competitive. For example, through the Management Studies Support Program, up to \$40,000 is awarded on an annual basis for management and science projects on National Conservation Lands (see summary in Table 12).
- **Contacts:** The Rio Grande Wild and Scenic designation is co-managed by the BLM Taos Field Office and the Carson National Forest.

Clean Water Act Section 319(h) and Watershed-Based Planning Areas (NMED, EPA)

- **Description:** The 1987 amendments to the federal Clean Water Act (CWA) established the CWA Section 319 Nonpoint Source Management Program. Under Section 319, states, territories, and Tribes receive grant money from the EPA that supports a wide variety of activities, including technical assistance, financial assistance, education, training, technology transfer, demonstration projects, and monitoring to assess the success of specific nonpoint source implementation projects. The leading causes of pollution in rivers and streams derive from nonpoint sources of pollution.
- **Designation Status:** There are currently six EPA accepted watershed-based plans (WBPs) within the Upper Rio Grande basin. They include the Comanche Creek WBP, Rio Fernando de Taos WBP, Rio Nutrias WBP, Lower Rio Embudo WBP, Rio San Antonio WBP, and Rio Santa Barbara WBP, which together total 14 HUC-12 watersheds. Projects that have been identified in these WBPs are eligible for funding from NMED. There is a significant need for additional WBPs in the Upper Rio Grande basin. To be eligible to receive funding from NMED for WBP development, the waterbody needs to be listed as impaired under CWA Section 303(d), meaning that the waterbody does not meet one or more water quality standards needed to support a designated use, and also have a Total Maximum Daily Load – there are approximately 70 HUC-12 watersheds in the Upper Rio Grande basin that would benefit from a WBP but do not currently have one.
- **Resource Benefits:** NMED awards approximately \$1 million annually to fund the development of WBPs and the implementation of projects that have been identified in WBPs. These projects are designed to improve water quality and help ensure that water quality meets surface water standards that support designated uses that include aquatic life uses, primary contact (e.g., swimming), secondary contact (e.g., fishing and boating), wildlife habitat, livestock watering, irrigation, industrial water supply, public water supply, and domestic water supply. Additional measures include increasing riparian canopy and shade to protect water temperature, erosion management to reduce sedimentation, grazing management, and wetland restoration. Critical partners for each sub-basin would be NMED, the appropriate land management agency (if government owned/managed), private property owners, and local community and/or watershed organizations.
- **Contacts:** Kate Lacey-Younger, Watershed Protection Section Program Manager, NMED-SWQB, kathryn.lacey@env.nm.gov.

3.3.3 RECURRING RESOURCE-SPECIFIC IMPLEMENTATION FUNDING

There are substantial recurring funds available for on-the-ground projects and watershed coalition building through a variety of federal and state programs. These opportunities provide opportunities for matching and ongoing, longer-term funding. A summary of each program is provided in Table 13.

Table 13. Recurring Funding Opportunities Relevant to the Ribbons of Life Initiative

Agency/ Entity	Program	Description	Project Support	Coalition/ Capacity Support	Notes	Contacts/More Information
USBR	Cooperative Watershed Management Program	Competitive funding to develop watershed groups, restoration planning, and project design. Two types of awards: Watershed Group Development and Watershed Restoration Planning plus Implementation of Watershed Management Projects. This is phased funding to help with project development prior to implementation.	Yes	Yes	Up to \$300,000 available without a non-federal cost share. Watershed group development can be used for building capability. NWF has been aware of this funding and is submitting this fall.	Cooperative Watershed Management Program Contact Robin Graber rgrab@USBR.gov
EPA and NMED	CWA Section 319(h) Funding Program (319 Grant Program)	NMED receives and awards federal funds from the EPA to implement New Mexico's Nonpoint Source Management Plan. NMED awards funds to develop 9-element watershed-based plans (WBPs) which, among other things, describe management measures that can improve water quality in watersheds that have been impaired by nonpoint sources of pollution. NMED also awards funds to implement projects and management measures that have been described in a WBP.	Yes	Yes	10% to 40% non-federal match required. The CWA Section 319 program funds two phases of work, 1) the watershed-based planning phase, which includes identifying management measures, projects, schedules, education components, milestones, technical assistance, and financial assistance needed to carry out the plan and improve water quality; and 2) the implementation phase, for WBPs, which can include funding for detailed project designs. For more information, please visit https://www.env.nm.gov/surface-water-quality/watershed-protection-section/ .	319 Grant Program
BLM	Management Studies Support Program	Purpose is to promote, conduct, and provide research, studies, assessments, monitoring, technical assistance, and educational services. Part of the National Conservation Lands program, this funding is available to support National Monuments and National Conservation Areas, Wilderness/Wilderness Study Areas, National Wild and Scenic Rivers, National Scenic and Historic Trails, Outstanding Natural Areas, National Scenic Areas, Cooperative Management Areas, and similar congressional designations. It is administered by BLM headquarters.	No	Yes	2023 NOFO allowed for up to \$40,000 annually as a Cooperative Agreement. Would benefit Rio Grande del Norte National Monument plus Wild and Scenic Rivers. Hiring of interns and crews are not eligible activities.	Financial Assistance and Grants Bureau of Land Management (blm.gov)

Agency/ Entity	Program	Description	Project Support	Coalition/ Capacity Support	Notes	Contacts/More Information
USFS and NMFD	Community Wildfire Defense Grant	Community Wildfire Protection Plans (CWPPs), partnerships and on-the-ground projects are eligible. Project must be in the CWPP or Hazard Mitigation Plan. Funded by BIL at \$1 billion; being implemented at \$250 million per round. Administered by NMFD. By full opt-in, NMFD was able to get funding to cover the salary of a Community Wildfire Defense Grant Program (CWDG) coordinator.	Yes	Yes	10% match for CWPPs and 25% match for implementation projects. Match can be waived for underserved communities. \$250,000 limit to CWPPs and \$10 million limit for implementation projects.	Community Wildfire Defense Grant - USFS Community Wildfire Defense Grant - NMFD
USFS and NMFD	Landscape Scale Restoration	Competitive annual grant that “supports high impact projects that promote collaborative, science-based restoration of priority forest landscapes, leverage public and private resources, and advance priorities identified in a State Forest Action Plan or other restoration strategy.” Administered by the Western Forestry Leadership Coalition.	Yes	Yes	Fuels management and creation of riparian habitat are eligible. Formally is a 50-50 match. Expect renewed interest after CWDG ends. Up to \$300,000.	Landscape Scale Restoration - USFS Landscape Scale Restoration - NMFD
USFS and NMFD	Wildland Urban Interface (WUI) Grant	Reduces fire threat to WUI communities. “Outcomes include improving wildfire prevention and suppression, reducing hazardous fuels, and restoring fire-adapted ecosystems.” Administered by the Council of Western State Foresters.	Yes	Yes	Hazardous fuels reduction in WUI, education programs, and CWPPs are eligible. Up to \$300,000. 50:50 match	Wildland Urban Interface Grant - CWFS Wildland Urban Interface Grant - NMFD
USFWS	Partners for Fish and Wildlife	“Provides free technical and financial assistance to plan, design, supervise and monitor customized habitat restoration projects. Projects are customized to meet landowners’ needs. Landowners continue to own and manage their land.” Priority given for rare, threatened, and endangered species habitat.	Yes	No	As per NWF, not a great fit for Ribbons of Life at this time.	Partners for Fish and Wildlife
USFWS	National Fish Passage Program	The program provides “financial and technical assistance to support projects that improve fish passage - the ability of fish and other aquatic wildlife to move freely throughout their life.” Typically, very large-scale projects. Letter of intent is the first step in the application process.	Yes	Yes		National Fish Passage Program
NMDFA	Water Trust Board, New Mexico Finance Authority	Planning, design, and construction can all be funded. Up to 90% grant (60% grant). 0.25% administrative fee. \$100 million in 2023.	Yes	Yes	Priority for matching contributions and projects that have already obtained permits and authorizations. Can be used as match.	Water Trust Board New Mexico Finance Authority (nmfinance.com)
NMDFA	Capital outlay appropriations	Annual allocation based on legislative award. Requests are submitted by local governments, Nations, Pueblos, Tribes, and state agencies. Funded by severance tax bonds.	Yes	No	More requests than funding. Challenges with expending funds within period of performance.	Capital outlay appropriations

Agency/ Entity	Program	Description	Project Support	Coalition/ Capacity Support	Notes	Contacts/More Information
NMFA and Water Trust Board	Water Project Fund	“The Water Project Fund annually receives 9% of Senior Severance Tax Bond proceeds as well as a distribution from the Water Trust Fund. These monies are used to fund a variety of water projects recommended by the Water Trust Board and authorized by the Legislature.”	Yes	Yes	Increased funds anticipated. Loans and grants. Eligible activities are flood prevention, Endangered Species Act collaborative projects, and watershed restoration and management. Can be used as match.	Water Project Fund
DOD, DOI, USDA and National Fish and Wildlife Foundation (NFWF)	America the Beautiful Challenge	“Public-private grant program for locally led ecosystem restoration projects that invest in watershed restoration, resilience, equitable access, workforce development, corridors and connectivity, and collaborative conservation.” Administered by the NFWF.	Yes	Yes	Funding is from BIL. Freshwater Challenge is recent additional program. NFWF has been aware of this funding.	America the Beautiful Challenge
NFWF	Southwest River Headwaters Fund	“The Southwest Rivers Headwaters Fund was launched in 2019 to support projects that produce measurable outcomes for species of conservation concern in the riparian corridors of the headwaters region of the Rio Grande and Colorado River watersheds. [...] Selected projects will produce measurable outcomes for species such as Rio Grande cutthroat trout and North American beaver.”	Yes	Yes	NFWF, Rio Grande Return, and Trout Unlimited have been awarded some of this funding.	Southwest River Headwaters Fund
NRCS	Environmental Quality Incentives Program	Provides financial assistance and/or technical assistance to agricultural producers and forest landowners to address natural resource concerns and provides opportunities through Conservation Innovation Grants. These opportunities are for private property/agricultural producers.	Yes	No	Used in conjunction with 319 funds to maximize accomplishments. Received \$30 million from the IRA and expect to have additional application period open.	Environmental Quality Incentives Program
USACE	Rio Grande Environmental Management Program, Section 5056, WRDA 2007	The program authority includes the entire Rio Grande basin and tributaries and their headwaters from the Rio Grande Reservoir (near Creede, Colorado) to the Gulf of Mexico. Program features include interagency collaboration, planning, design, construction, and evaluation of measures for fish and wildlife habitat rehabilitation and enhancement.	Yes	TBD	Requires a non-federal sponsor. Funding depends on project scope and is typically less than \$5,000,000. Cost sharing is 75% federal and 25% non-federal contribution.	Rio Grande Environmental Management Program

Agency/ Entity	Program	Description	Project Support	Coalition/ Capacity Support	Notes	Contacts/More Information
USACE	Continuing Authorities Program (CAP) Sec. 206 and Sec. 1135	<p>CAP Sec 206: Allows the USACE to partner with a non-federal sponsor to study, design, and construct restoration projects in aquatic ecosystems (such as rivers, lakes and wetlands). Projects are broken into two phases, a feasibility phase and a design and implementation phase. The Design and Implementation phase is cost shared at 65% federal and 35% non-federal.</p> <p>CAP Sec 1135: Allows the USACE to study, design, and construct aquatic ecosystem restoration projects where ecosystem degradation is associated with an existing USACE project. The Design and Implementation phase is cost shared at 75% federal and 25% non-federal.</p>	Yes	No	Requires a non-federal sponsor to partner with the USACE. Cost shared program that leads to a constructed project. Design and Implementation phase requires a second cost share agreement. \$10 million federal per-project limit; first \$100,000 of the feasibility phase is 100% federal cost, remainder of feasibility phase is cost shared 50/50. Submit a letter requesting assistance to the Albuquerque District Office.	Continuing Authorities Program
USACE	Planning Assistance to States Section 22 of WRDA 1974	USACE provides planning level assistance to eligible non-federal partners in managing their water resources. There are two types of planning assistance offered: Comprehensive Plans and technical assistance. Comprehensive Plans include planning for the development, utilization, and conservation of the water and related resources of drainage basins, watersheds, or ecosystems located within the state boundaries. Technical assistance includes support of planning efforts related to the management of state water resources, including the provision and integration of hydrologic, economic, or environmental data and analysis in support of the state's water resources management and related land resources development plans.	Yes	Yes	Cost shared program that requires a non-federal sponsor.. A cost share waiver is available for eligible economically disadvantaged communities. Not eligible for funding is detailed design for project construction, and implementation of the plan; these tasks are the responsibility of the non-federal sponsor. Submit a letter of interest to the Albuquerque District Office.	Planning Assistance to States
USACE	Tribal Partnership Program (TPP) Section 203 of the WRDA 2000	Provides authority for the USACE in cooperation with Tribes and heads of other federal agencies to study and determine the feasibility of carrying out projects that will substantially benefit Indian Tribes. The TPP provides an opportunity to assist with water resources projects that address economic, environmental and cultural resource needs through studies that may include flood damage reduction, environmental restoration, and protection and preservation of natural and cultural resources. Congress has authorized the TPP for \$5,000,000 annually. Each Tribe would be limited to \$1,000,000 per project per year. Coordination through congressional contacts regarding specific appropriations would be necessary.	Yes	Yes	Requires a federally recognized Tribe to enter a partnership agreement with the USACE. Cost shared program based on ability to pay. Submit a letter requesting assistance to the Albuquerque District Office.	Tribal Partnership Program

Agency/ Entity	Program	Description	Project Support	Coalition/ Capacity Support	Notes	Contacts/More Information
NRCS and NMDA	Healthy Soils Program	Funds implementation of on-the-ground projects that involve one or more of the five soil health principles. Also gets state appropriations and \$100,000 annually from the NRCS.	Yes	Yes	Land of Enchantment Legacy Funds contribute. Wide range of eligible applicants.	Healthy Soils Program
NRCS and NMDA	Noxious Weeds Program	Funding for projects that “improve the state economy and environment by managing noxious weeds. Must include prevention, or control/eradication of state-listed noxious plant species.” Surveying and mapping, Early Detection Rapid Response, or integrated weed management required.	Yes	Yes	Land of Enchantment Legacy Funds contribute. \$10,000 to \$60,000 awards. Eligible activities include education/outreach, planning, capacity development, and partnership building. Wide range of eligible applicants.	Noxious Weeds Program
USFS	BIL Noxious Weed Funding	This funding is administered by the USFS Southwestern Region (Region 3).	Yes	No	Available annually through Fiscal Year 2026 for regional priority projects; there are two projects in New Mexico for Fiscal Year 2024 (Taos and Colfax SWCDs).	
NRCS and NMDA	Soil and Water Conservation District Program	Four types of grants (i.e., Landscape Scale Restoration, Capacity Building, Education and Outreach, Conservation Planning). There is high demand and insufficient funding for many landscape-scale restoration projects.	Yes	Yes	Land of Enchantment Legacy Funds contribute. Application cycle timing is similar to the America the Beautiful grant and can be used as match.	Soil and Water Conservation District Program
NMED	River Stewardship Program	Funds design and construction that “enhance the economic benefits of healthy rivers and restore/maintain hydrology to better handle overbank flows and reduce flooding downstream.” Used as a match for EPA 319 to encourage smaller entities and all applicants to stay engaged. Also receives capital outlay funds.	Yes	No	Land of Enchantment Legacy Funds contribute. In the past, received \$10 million in ARPA funds with \$30 million in applications. Used as match for federal programs like EPA 319.	River Stewardship Program
NMDFA	New Mexico Match Fund	Provides eligible entities with funding to increase competitiveness for federal grant program opportunities that require a local match. \$75 million funded by the legislature in the first year.	Yes	Yes	New program with policies forthcoming.	New Mexico Match Fund
NM ONRT	Office of the Natural Resources Trustee	Assesses “injury to natural resources caused by the release of hazardous substances ... and then seeks compensation from ... responsible parties for restoration of the injured resources.... Compensation is used to restore, replace, or acquire the equivalent of injured, destroyed or lost natural resources and the services they provide.”	Yes	No	Funds are made available from each individual settlement. Each settlement has specific geography, activity eligibility, and additional detail.	Office of the Natural Resources Trustee

Agency/ Entity	Program	Description	Project Support	Coalition/ Capacity Support	Notes	Contacts/More Information
NMFD	Forest and Watershed Restoration Act	Funds "high-priority forest and watershed restoration projects including water source protection, wildfire risk reduction and fish and wildlife habitat conservation." Once the landscape is designated as 'high priority,' funding is available for application. Created specifically for the Rio Grande.	Yes	No	Land of Enchantment Legacy Funds contribute. Can be match for other WUI, LSR, CWDG funding. Eligible activities include thinning, cultural resource surveys, workforce development (trainings have been funded), and producing fire wood.	
NMFD	Natural Heritage Conservation Act Program	Funds "conservation and agricultural easements and land restoration to protect the land and water available for forests and watersheds, natural areas, wildlife and wildlife habitat, agricultural production on working farms and ranches, outdoor recreation and trails, and land and habitat restoration and management."	Yes	No	Land of Enchantment Legacy Funds contribute. Could be used as match.	Natural Heritage Conservation Act Program

3.3.4 OTHER RESOURCES AND OPPORTUNITIES

Environmental Policy Innovation Center: The Environmental Policy Innovation Center supports innovative opportunities for public and private financing of conservation, including establishment of environmental markets, improving procurement efficiency and delivering on environmental outcomes, and enabling private investment in restoration and conservation. More information is available here:

[Procurement & Finance — Environmental Policy Innovation Center.](#)

USFS Community Navigator Initiative: The Community Navigator Initiative was created by the USFS to assist groups that have been historically underserved to access funding and technical assistance opportunities available through the IRA and the BIL. Below is a list of partner agencies and organizations that have specialized knowledge or cultural competencies to assist with reaching and supporting various communities. The appropriate partner is identified and the level of assistance is provided based on the individual community need. For example, the USFS Community Navigator Program contact has provided assistance in application scoping and has given direct feedback on application drafts; Hispanic Access has a grant training program to educate organizations in submitting applications and doing reporting; Coalitions and Collaboratives Inc. has provided organizations with strategic planning support and capacity-building grants; and First Nations has a rolling Capacity Support Grant that can be used for staffing, hiring a consultant, or other organizational needs. Links to these organizations are provided below:

- [Community Navigation Initiate – USFS](#)
- [American Indian Alaska Native Tourism Association](#)
- [Coalitions and Collaboratives Inc.](#)
- [First Nations Development Institute](#)
- [Forest Stewards Guild](#)
- [Hispanic Access Foundation](#)
- [The Watershed Research and Training Center](#)

USBR Funding Opportunity Calendar: The detailed status for all current and upcoming WaterSMART funding opportunities is found at [WaterSMART | Bureau of Reclamation \(usbr.gov\)](#). A link to this information, which is updated monthly, is on the right-hand column of the website, just below the “open Funding Opportunities” listing. Each program has a description of the eligible applicants, federal/non-federal cost share, funding source, and the current status.

USBR Water Operations Dashboard: Displays real-time information in multiple formats for reservoir and streamflow data along the Rio Grande and Pecos River to assist with water operations. Current [conditions at various gages and reservoirs on the Rio Grande and Pecos River](#). POC for Water Operations: Carolyn Donnelly, Supervisory Civil Engineer, Bureau of Reclamation, cdonnelly@usbr.gov

USBR Rio Grande Annual Operating Plan Projections: Displays the results of USBR's Annual Operating Plan runs on the Rio Grande using NRCS snowmelt forecast and historical data to create projections for reservoirs and streamflows to the end of the calendar year. [2024 Annual Operating Plan Projections](#)

USFS Conservation Finance Project Workshop Week: The USFS is funding participation for an April 2025 in-person team capacity-building and funding-focused workshop. It is intended to support USFS staff and partners in specific geographic locations who have more than \$1 million in project work to

accomplish. Project ideas were due on August 14, 2024, with applications due September 6, 2024. A similar opportunity for future workshop dates would be an excellent opportunity for Ribbons of Life partners.

The National Park Service Rivers, Trails, and Conservation Assistance Program: This program provides technical support and capacity for coalition building, developing partnerships, scoping for projects, and designing capacity for human resources. [Rivers, Trails, and Conservation Assistance Program \(U.S. National Park Service\) \(nps.gov\)](#)

Environmental Justice Thriving Communities Technical Assistance Centers (TC TACs). New Mexico State University TC TAC provides technical assistance to all EPA Region 6 states (New Mexico, Texas, Oklahoma, Arkansas, Louisiana). [The Environmental Justice Thriving Communities Technical Assistance Centers Program | US EPA](#)

The BLM's Science Plan for Rio Grande del Norte National Monument was released in 2019. It is available at [RioGrandedelNorteNM_SciencePlan2019_0.pdf \(blm.gov\)](#).

NASA's Western Water Applications Office released the [Rio Grande River Basin Needs Assessment Report](#).

New Mexico Forest and Watershed Restoration Institute provides vegetation monitoring on a contract basis. The costs vary and depend on the monitoring needed, project size, duration, access, coordination needs, available spatial data, and similar. There is a short application to request support. For more information, see [Monitoring - New Mexico Forest and Watershed Restoration Institute \(nmfwri.org\)](#).

Community Foundations are another source of potential funding, support, and partnering for rural communities in New Mexico. For example, the New Mexico Foundation has areas of interest that could provide funding to support Ribbons of Life projects and coalition building as well as fiscal sponsorship for nonprofit start-ups. The New Mexico Foundation also has a Tribal focus. Additional community foundations that serve rural communities and may support the Ribbons of Life Initiative are Albuquerque Community Foundation, Las Cruces Community Foundation, Santa Fe Community Foundation, and Taos Community Foundation.

Private donors, even corporations, are often interested in contributing to a landscape-scale effort that protects the water so important to their industries. Private corporations could contribute to hard-to-cover costs like long-term capacity, grant management, field monitoring, long-term coalition sustainability, and similar activities. Entities downstream of the Upper Rio Grande basin have expressed an interest in investing to protect upstream resources.

Pursue designation of federal funding explicitly for the Rio Grande Basin. This could be modeled after other basin-wide programs (like Puget Sound or Delaware River Basin Restoration Program). Theodore Roosevelt Conservation Partnership, Trout Unlimited, the National Wildlife Federation, and other partners are already discussing this concept. Ideally, one federal agency would take the lead on this effort.

Neither the Rio Grande Basin nor the Colorado River Basin have dedicated, coordinated funding to support water-related investments. These two basins represent New Mexico's most critical water resources and would benefit from long-term reliable funding similar to other watersheds in the United States. For example, the Delaware River Basin Restoration Program, established by an act of Congress, provides annual funding to improve and sustain water quality, upgrade water infrastructure, conserve and restore fish and wildlife habitat, and enhance recreational opportunities. These unique watershed-based funding programs provide critical base funding to leverage other public and private funding. Currently,

neither the Colorado River nor the Rio Grande has such a program, which means water project funding, other than formula-based programs, relies extensively on competitive funding processes. Establishing basin-specific funding programs for the Rio Grande and Colorado River basins could help address the long list of identified water-related funding needs.



CHAPTER 4 – ENABLING POLICIES AND PLANNING

4.1 BARRIERS AND CHALLENGES TO ACCESSING FUNDING

The sections below provide a summary of the barriers and challenges to accessing funding that were provided by participants in the workshops for the three demonstration projects. Additional information on many of these barriers has already been summarized in other publications including the following:

- [Report on Infrastructure Funding for Community Water Systems \(Southwest Environmental Finance Center 2022\).](#)
- [New Mexico Legislative Finance Committee. Policy Spotlight: State-funded water projects \(2024\).](#)
- [New Mexico Legislative Finance Committee report on State-Funded Water Projects \(2021\).](#)
- [Ten Strategies for Climate Resilience in the Colorado River Basin.](#)

4.1.1 COMPLEXITY OF FUNDING PROGRAMS

The complexity of accessing Bipartisan Infrastructure Law (BIL)/Inflation Reduction Act (IRA) funding is one of the primary challenges in taking advantage of the funding that is available. Potential applicants need to understand and navigate the details of each federal agency's programs, grants, and application processes. Many applicants do not have the capacity to conduct the necessary research to identify the best funding opportunity for a specific activity of interest. Although webinars that present the detail of one funding source are helpful, applicants often do not have the capacity to attend multiple agency webinars.

Two recent reports released by the New Mexico Legislative Finance Committee on State-Funded Water Projects (2021 and 2024) found that among available state funding programs, there is a lack of central strategy to guide infrastructure investments which can be complicated by the overlapping purposes and eligibility timelines for state and federal funding programs (Figure 8). This includes different application deadlines and requirements and varying capacity to conduct oversight. The report also found that communities often decide which funding sources to pursue based on their familiarity with funds, by trusted colleagues, or through the advice of private engineers/consultants.

The challenge of funding complexity applies to all three demonstration projects.

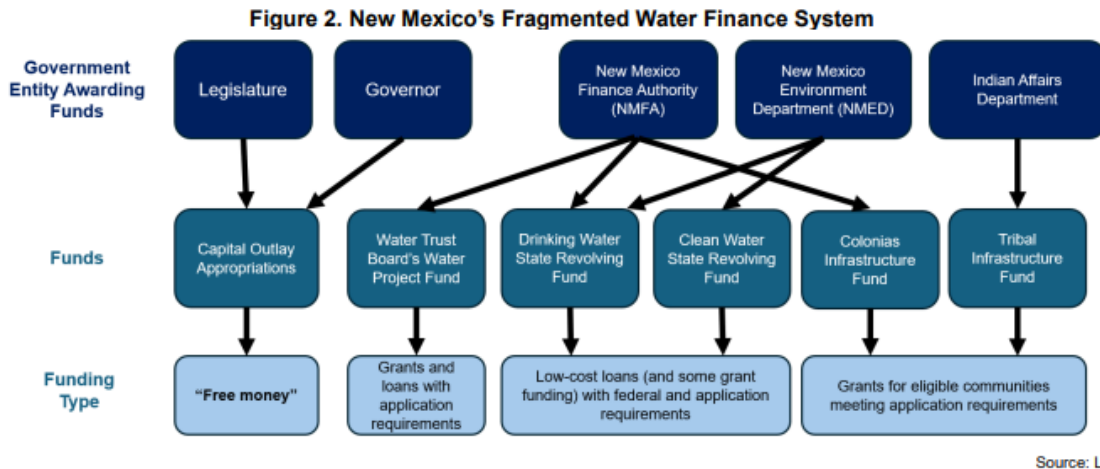


Figure 8. Overview of New Mexico's Water Finance System (NMLFC 2024).

4.1.2 INSUFFICIENT AND UNAFFORDABLE FINANCING OPTIONS

Accelerating Small Community Drinking Water and Regionalization

One primary obstacle hindering small communities from advancing drinking water regionalization projects is the lack of accessible and affordable financing. The majority of funds available for drinking water infrastructure, including regionalization, are loan funds available through the Drinking Water State Revolving Fund. However, even with very low or zero interest rate packages, small communities often cannot afford loan payments considering the cost of the project. There are insufficient grant funds, or principal forgiveness opportunities, to reduce the amount of loans required to below hardship criteria especially for disadvantaged communities across the state. There also appears to be a hierarchy among the available state funds, with many communities pursuing capital outlay appropriations or “free money” first, and only pursuing other sources if they are willing and able to take on debt (New Mexico Legislative Finance Committee 2021). The disincentive to consider loans means that there are often meaningful balances in New Mexico’s loan programs that cannot be dispersed to communities in need. These issues are further complicated by the cost of compliance with federal loan programs, escalating project costs, absence of initial revenue mechanisms for new public water systems, and existing debts. The Legislative Finance Committee found that only recently have NMED’s and NMFA’s loan funds been fully committed (NMLFC 2024).

Aquifer Mapping and Monitoring

Federal funding is generally not available for drilling exploratory wells to characterize aquifers across the state. The opportunities that are available are focused on specific issues such as contamination, drought mitigation, desalination, or the potential for aquifer recharge.

Ribbons of Life

Funding for watershed health, stabilization, and restoration is not sufficient to meet the demand for the necessary large number of acres to be treated. For example, when the State’s River Stewardship Fund received \$10 million in ARPA funding, \$30 million in project costs were submitted by applicants for funding. Not having consistently high levels of funding in the State River Stewardship Fund make it difficult for potential applicants to build capacity because they are not sure when or if the funding will be sufficient to sustain projects and staffing.

Funding from BIL and IRA has the potential to contribute significant support for restoration activities, but the deadline to apply for and spend these funds limits the ability to plan, permit, and implement projects effectively. In some instances, coalition partners have not yet had the capacity to prioritize the projects that will be most impactful across all partners in order to focus application efforts.

4.1.3 CAPACITY AND RESOURCE CONSTRAINTS

Accelerating Small Community Drinking Water Regionalization

Small communities often struggle with insufficient staffing, management, and resources, making federal grant competition and regionalization efforts challenging. The lack of capacity for developing Preliminary Engineering Reports (PERs) and managing grant applications and finances—often reliant on volunteer efforts—highlights the need for more substantial planning grants and administrative support funding. Different size communities across a region may have different infrastructure and capacities, which can be a challenge when considering regionalization. These systems may need to be on the same level across a region to effectively regionalize the administrative functions of their drinking water infrastructure and/or the physical infrastructure.

Other capacity challenges to access funding were captured in the Report on Infrastructure Funding for Community Water Systems by the Southwest Environmental Finance Center. The top challenges that respondents agreed with include obtaining or paying for the preliminary professional engineering report, compiling the required documentation, and the timing and frequency of funding cycles (SWEFC 2022).

Aquifer Mapping and Monitoring

In the past few decades, there has been a steady decline in coverage of groundwater level measurements statewide which impact water management and may be attributed to lack of capacity, changing priorities, and lack of funding. Enhancing capacity through specific funding for staffing, exploratory drilling, strategic planning, grant writing, and long-term monitoring is essential for sustainable water management.

Ribbons of Life

Similar to above, many communities often struggle with insufficient staffing, management, and resources, making federal grant applications and competition very challenging. There are also capacity constraints in some of the federal agency programs that lead to fewer projects getting approved and implemented. For example, in New Mexico, the NRCS does not have sufficient full time staffing to support technical positions for archeological studies (particularly on Tribal lands) or land grant projects.

There is not sufficient funding or staffing to monitor post-restoration acreage to accomplish adaptive management. Learning from other project challenges is an excellent way to improve effective long-term sustainability. A tracking system or communication exchange is lacking to catalog monitoring lessons.

Another resource constraint for Ribbons of Life is not having economically viable systems to produce sufficient and consistent supplies of locally adapted and climate-resilient native vegetation for riparian restoration activities. In order to successfully implement invasive species control and establish native plants, the supply must be adequate to meet the need. One critical need is to survey Upper Rio Grande riparian areas for the most critical species and locally adapted varieties and varieties adapted to predicted future climate conditions that will be in greatest demand for riparian restoration project implementation.

4.1.4 COMMUNITY CHALLENGES

Accelerating Small Community Drinking Water Regionalization

Community resistance to regionalization can stem from various concerns, including reluctance to abandon private wells and fears of gentrification. There is a lack of clear incentive for joining public water systems and concerns over federal program compliance further complicate efforts towards regionalization. Improving coordination across jurisdictions and incentivizing administrative regionalization, as seen with the Regional Water System Resiliency Act of 2023, alongside fostering informal, trust-building partnerships can help overcome these barriers.

Some communities may face resistance to participating in federal programs due to concerns about audits, reliance on the federal government, and staff capacity needed to meet compliance requirements.

Some concerns captured in a survey by the Report on Infrastructure Funding for Community Water Systems (SWEFC 2022) about potential consolidation with other water utilities include loss of decision-making authority about water, lack of trust in outsiders to make the best decisions for the community, potential rate increases, sharing the financial burden, and insufficient source of water supply. And, of those who said they would consider consolidation with other water utilities, they would prefer to share some administrative tasks but retain management authority (SWEFC 2022). The New Mexico Rural Infrastructure Needs Study of 2021 also echoes the concern for small water systems worry about the loss of control and autonomy that system consolidation may bring (New Mexico Legislative Council Services 2021).

Ribbons of Life

The need to strengthen working relationships and coordination across jurisdictions can be a challenge. For example, in developing “trans-boundary collaborative efforts” for Ribbons of Life, there are many jurisdictions, agencies, non-profits, and private sector companies involved. The coalition is in the process of building the partnership and collaborative efforts but it is a complex effort which takes time and capacity.

4.1.5 ADMINISTRATIVE CHALLENGES

Accelerating Small Community Drinking Water Regionalization

Water rights, the need for joint powers agreements (JPAs), and misaligned funding application timelines represent significant administrative challenges to regionalization among small communities. The absence of administrative cost coverage in grants further strains community resources. Closed basins have additional challenges in managing water rights necessary for regionalization or additional water resources development. Another administrative challenge is that state funding application calendars do not always align with federal programs.

Ribbons of Life

One of the priorities of Ribbons of Life is to build out capacity of Pueblos and rural communities to lead, engage, and inform this work. Riparian conservation and restoration work must address the wellbeing of the people of the Upper Rio Grande and incorporate key community values, perspectives, traditions, and traditional ecological knowledge. The Pueblos and rural communities do not have sufficient capacity to engage in each project or initiative that could benefit from their involvement.

The [Ten Strategies for Climate Resilience in the Colorado River Basin](#) report states that in order to advance restoration efforts, support for studies to better understand and quantify the positive benefits of

these activities, along with the necessary financing and stakeholder support to implement the actions, is needed (Martin et al. 2021). Additionally, NCRS does not include administrative/management costs with most grants. It is a challenge for the Soil and Water Conservation Districts to produce the necessary funds to administer programs and grants. Even for federal agencies that do allow for administrative costs, the funding is often not sufficient to cover all costs associated with oversight and reporting.

4.1.6 WORKFORCE CHALLENGES

Accelerating Small Community Drinking Water Regionalization

Small, rural communities face a shortage of trained drinking water operators. Regional water systems often require a higher level of certification to operate and maintain larger and more complex treatment systems. Further, there is a deficit in skilled labor for construction and restoration projects, compounded by the difficulty of attracting contractors to working in rural areas. Developing workforce training programs tailored to rural needs and exploring technical assistance centers as potential community watch centers to provide oversight can enhance local capacity and support future regionalization efforts.

Ribbons of Life

Funding is needed to build out staffing and capacity to support priority activities from the Action Plan for project development, permitting, and implementation of on-the-ground enhancements in the short-term and develop programmatic structure for longer-term implementation. In some instances, even if there is funding to hire crews, communities often lack sufficient field labor to implement the required thinning and restoration work for watershed and stream restoration projects.

Attracting and keeping skilled field laborers and technical experts who can develop and shepherd the approval of projects for extended time periods for long-term restoration projects has been a challenge. With so many acres that need to be treated and numerous restoration projects being implemented with a need for long-term monitoring and maintenance, there is not sufficient work force to keep up with the demand.

Also, due to the remote area, travel costs (which often are not accounted for in initial funding applications) increase the project cost. Bringing in crews from out of state is typically more expensive due to the travel costs and time. Without having sufficient funds to cover the additional cost, less acreage is being treated, and some projects are not getting implemented.

4.2 STATE POLICY RECOMMENDATIONS

4.2.1 INCENTIVIZING DRINKING WATER SYSTEM REGIONALIZATION

An incentive program is a structured initiative designed to motivate or encourage individuals, organizations, or communities to take specific actions or achieve outcomes by offering rewards or benefits in return. Incentives can take various forms, such as financial rewards, free access to materials, discounts, rebates, or social recognition, aiming to promote desired behaviors or results. For the State of New Mexico, programs to incentivize communities to participate in drinking water system regionalization collaboration will help accelerate regionalization of small community water systems. Elements that could be incorporated into an incentive program are described in Table 14.

Table 14. Incentive Types Summary

Incentive Type	Incentive	Description	Relevance to New Mexico
Financial Incentives	Conditional Grants and Subsidies	Provide additional financial assistance specifically for costs (administrative and infrastructure) related to regionalization. Limit eligibility for some funding sources to regionalization projects.	The New Mexico Match Fund could be amended to create an incentive for regionalization: <ul style="list-style-type: none"> - A portion of the fund could be dedicated to regionalization projects. - Scoring criteria for the fund could be adjusted so that regionalization projects (administrative or infrastructure) receive additional points. - A portion of the technical assistance portion of the fund could be focused toward assisting small communities with regionalization.
	Favorable Financing	Provide additional favorable financing to support regionalization costs such as 0% interest loans and extended repayment terms.	Continue to prioritize regionalization projects in NMED's Drinking Water Intended Use Plan for DWSRF funds.
	Performance-Based Incentives	Reward successful regionalization with additional funds or bonuses based on performance metrics.	
Technical Assistance	Feasibility Studies	Fund or provide technical assistance for evaluating regionalization viability.	Allocate a portion of capital outlay funding to feasibility studies for regionalization.
	Expert Consultation	Provide access to experts for assistance with planning and implementation of consolidation projects.	The NMFA Direct Technical Assistance Procurement program (new) will directly support this incentive. Existing technical assistance providers will continue to help communities address this need.
	Legal and Administrative Assistance	Provide support with legal and administrative tasks related to merging systems.	The NMFA Direct Technical Assistance Procurement program (new) will directly support this incentive. Existing Technical Assistance providers will continue to help communities address this need.
	Training and Capacity Building	Provide training for system operators on best practices, new technologies, and management strategies.	Leverage existing training opportunities through technical assistance providers. Southwest Environmental Finance Center was awarded a \$4 million EPA grant to assist small and disadvantaged communities with building technical, financial, and managerial capacity.
Regulatory and Policy Support	Policy Flexibility	Implement supportive policies, such as adjustments to rate-setting regulations.	Build on successes achieved through the Regional Water System Resiliency Act of 2023.
	Regulatory	Require small systems to evaluate the feasibility of consolidation prior to being eligible for state grant funding or financing.	
State Policy/Admin	Streamline administrative processes	Provide a clear road map and reduce administrative steps to regionalize.	Build on successes achieved through the Regional Water System Resiliency Act of 2023.

Incentive Type	Incentive	Description	Relevance to New Mexico
Community Engagement and Support	Public Education Campaigns	Educate the public about the benefits and address concerns regarding regionalization.	A new water financing coordinating council or other support function could take on this role in collaboration with existing technical assistance providers. See Section 4.2.3.
	Stakeholder Involvement	Engage local governments, community leaders, and residents in planning and decision-making.	Southwest Environmental Finance Center received a \$6 million grant from the EPA for technical assistance for small community drinking water systems.
	Customer Support Programs	Assist customers during the transition with communication and support.	
Collaboration and Networking	Regional Networks	Foster collaboration and create networks for sharing knowledge and resources.	A new water financing coordinating council could take on this role in collaboration with existing technical assistance providers. See Section 4.2.3.
	Partnerships	Promote partnerships with local governments, private sector entities, and non-profits.	

The State of New Mexico has already demonstrated a commitment to regional water systems through a number of different policy actions:

1. In 2009, the New Mexico Legislature passed House Bill 185, which led to the establishment of the Lower Rio Grande Public Water Works Authority (EPA 2017). This authority was formally created under N.M. Stat. 73-26-1, which outlines its functions and organizational structure. The statute defines the authority as a collaborative entity composed of domestic water associations that can consolidate water rights and facilitate the interconnection of multiple water systems to enhance regional water management and resource sharing (N.M. Stat. 73-26-1). This group has largely been supported by the NMOSE.
2. In 2023, New Mexico passed the Regional Water System Resiliency Act, which enables the creation of regional utility authorities and provides guidelines around the establishment and functionality of these authorities ([SB 0001](#)).
3. Legislative support for Mora County Water Alliance including funding (Junior Bill and GroFund appropriations).
4. NMED is actively supporting the development of three entities in McKinley County, which have formed a Joint Powers Agreement with the goal of evolving into a Regional Water Authority.
5. The Rural Community Assistance Corporation (RCAC) is providing technical assistance to community systems in Taos County, where efforts are underway to explore the formation of a Regional Water Authority (RCAC 2015).

These concerted efforts reflect New Mexico's strategic approach to enhancing water system resilience and regional collaboration through targeted funding and technical support.

Outside New Mexico, water providers across the United States have increasingly adopted incentive programs to support the regionalization of small community water systems. Table 15 provides a summary of these diverse regionalization programs implemented in various states and offers concrete examples of how different states have successfully incentivized or mandated regionalization. Each state's strategy demonstrates unique methods for promoting regional cooperation among water systems, aiming to enhance efficiency, reduce costs, and improve service quality. These examples highlight practical applications of regionalization incentives. The intent is to showcase a range of strategies, illustrating how states have addressed regionalization challenges and provided support for system consolidation. By

understanding these diverse programs, State of New Mexico decision-makers can better assess their own regionalization needs, evaluate potential impacts, and develop effective policies to foster cooperation and efficiency across small community water systems.

Table 15. Examples of Incentives for Regionalization in Other States

State	Incentive Type	Description	Details	Type of Funding	Sources
Pennsylvania	Conditional Funding	Financial assistance for acquisition, construction, improvement, expansion, repair, or rehabilitation of water systems	PennVest (Pennsylvania Infrastructure Investment Authority) evaluates “Whether the project encourages consolidation of water or sewer systems if the consolidation would enable the customers of the systems to be more effectively and efficiently served” when considering applications for financial assistance.	Grant or Loan – The PennVest board of directors may combine grant and loan funds. Regulations and guidance around providing a loan vs a fund can be found in Title 25 Pa.C.S. 963.5.	Title 25 Pa.C.S. 963.5 (State of Pennsylvania 2024). Commonwealth of Pennsylvania 2024
California	Mandatory Requirements	Process to mandate regionalization for water systems out of compliance with regulatory standards	California Water Code outlines the conditions under which the State Water Resources Control Board can require consolidation of a water system with a neighboring system. California Code requires water systems in violation to pursue consolidation with neighboring systems or be subject to additional oversight and penalties. The state board may set timelines and performance measures to facilitate completion of consolidation.	N/A	California Health & Safety Code 116682 (State of California 2024) CA Health & Safety Code Section 116650 (State of California 2024)
Tennessee	Financial Incentives and Technical Support	Grants, loans, and technical assistance to encourage consolidation and regionalization	The state offers the Rural Utility Service grants, loans, and technical assistance through the Tennessee Department of Environment & Conservation. Regionalization projects strategically connect Tennessee infrastructure, including that in rural communities, to improve services and optimize capacity. These efforts seek to provide cooperative support across water and wastewater systems to enhance system capacity, reduce costs, and/or obtain a higher level of service.	Grant	(Tennessee Department of Environment & Conservation 2023) Competitive Grant Manual: Regionalization (Tennessee Department of Environment & Conservation 2023)
Kentucky	Collaboration and Networking	Mandated Area Water Management Councils (AWMCs) in each of Kentucky’s 15 Area Development Districts (ADDs)	Kentucky passed Senate Bill 409 that created a process to regionalize and consolidate water systems. AWMCs were developed and met to discuss infrastructure needs and planning.	NA	Kentucky Legislative Research Commission (2005)
	Financial Support and Regulatory Encouragement	Funding and regulatory support to facilitate the consolidation of small systems	Kentucky provides funding through the Kentucky Infrastructure Authority and promotes consolidation through regulatory frameworks and incentives.	Grants and loans	Kentucky Legislative Research Commission (2005)

4.2.2 OPTIMIZING LOAN AND GRANT FUNDS

Optimizing loan and grant funds in New Mexico requires a strategic approach to balance the use of all available financial resources (loans and grants) and address the issue of delayed capital outlay projects.

The majority of funds available for drinking water infrastructure, including regionalization, are loan funds available through the Drinking Water State Revolving Fund. However, even with very low or zero interest rate packages, small communities often cannot afford loan payments considering the cost of the project. In 2013, the EPA identified the New Mexico DWSRF as having the highest percentage of unspent amounts in the nation, with 32% of the total awarded grants being unspent (Water Trust Board 2013). There are insufficient grant funds, or principal forgiveness opportunities, to reduce the amount of loans required to below hardship criteria especially for disadvantaged communities across the state.

Capital outlay, which represents the most flexible state grant funding, could be used to fund a portion of a project making a low-interest loan more affordable for some communities. However, several challenges have led to grant funds being tied up, impacting the timely execution of capital outlay projects. Bureaucratic fragmentation contributes to this issue, as no one agency is held accountable for a coordinated and centralized approach to grant funding. Additionally, project management issues, such as delays in project readiness and complications in contracting and procurement, further hinder the efficient use of grant funds. Efforts to streamline administrative procedures, enhance project readiness, and improve oversight are essential to mitigating these challenges and ensuring more effective use of grant funds.

The NM Match Fund provides a clear opportunity to incentivize regionalization and encourage communities to incorporate some federal loan (through the DWSRF or USDA RD) into funding packages.

There are multiple strategies that could be used to enhance the incentives for utilizing loan funds:

- Offer favorable terms and conditions that make loans more attractive compared to grants. This could include lower interest rates, flexible repayment schedules, or partial loan forgiveness tied to project milestones. *Note: this is largely already being done in the DWSRF program.*
- Improve the loan application process by simplifying requirements and streamlining approval procedures.
- Implement robust project readiness assessments and pre-approval checks to help ensure that grant recipients are prepared to proceed with projects promptly.
- Promote education and outreach programs to inform potential applicants about the benefits of loans versus grants.
- Provide technical assistance to navigate the application process to help shift the preference toward a balance of grants and loans.
- Create an entity to streamline how funding occurs throughout the state.
- Leverage capital outlay funding to access other funding sources, using it as a true 'gap filler' rather than first stop for project funding.
- Use funding to build local capacity, such as technical assistance centers focused on water resource management within a region.
- Require asset management plans for grant eligibility. Asset management could be used as the utility or community "match."

- Require technical, managerial, and financial capacity for water systems to receive capital outlay.
- Create an administrative process to make private financing work more effectively in smaller systems that lack good credit ratings.
- NM Match Fund scoring criteria could be adjusted so that regionalization projects (administrative and infrastructure) are prioritized.

By addressing these areas, New Mexico can better align its funding mechanisms with project needs and accelerate the completion of essential capital outlay projects.

4.2.3 STATE WATER FINANCING COORDINATING FUNCTION AND/OR COUNCIL

Considering the numerous agencies and state funding programs available through the State of New Mexico, there would be value in a more formal financing coordinating council or committee that would provide an opportunity for state funding programs to be integrated and maximize resources for New Mexico's communities.

Two examples of state financing coordinating councils in other states are provided below.

Examples of State Water Coordinating Councils

Utah Water Development Coordinating Council

The Utah Water Development Coordinating Council (UWDCC) was established to coordinate the use and application of funding to promote conservation, development, treatment, restoration, and protection of the waters in the state. Members of the UWDCC meet monthly to review current and anticipated applications to all water funding programs in the state. The Council discusses opportunities for blended financing for specific projects, aims to optimize funding based on eligibility constraints associated with each program, and works to ensure equitable terms and financing opportunities across similar applicants. The UWDCC is comprised of the following members: the director of the Division of Water Resources, the executive secretary of the Water Quality Board, the executive secretary of the Drinking Water Board, the director of the Housing and Community Development Division or the director's designee, the state treasurer or state treasurer's designee; the commissioner's designee, and an individual appointed by the governor with the advice/consent of the senate who is familiar with water infrastructure projects and employed by a water conservancy district. Federal funding partners such as USDA Rural Development (RD) are also invited to participate in the discussions, as appropriate.

TWICC- Texas Water Infrastructure Coordination Committee

The Texas Water Infrastructure Coordination Committee is a collaborative effort by state and federal government agencies and technical assistance providers. TWICC could serve as a model for efforts in New Mexico due to its structure. TWICC's work includes the following efforts to streamline and coordinate water funding across the state ([TWICC 2024](#)):

1. Develop and promote the use of standardized guidance documents between funding agencies.
2. Coordinate and review project profile forms to recommend which agency(s) programs may be eligible to assist applicants with financial, managerial and technical capabilities, regionalization or funding.
3. Identify concerns and hold quarterly workshops around the state to address targeted issues and assist in outreach efforts.

4. Develop and update outreach materials including a Resource Page, Contact Page, and Workshop Page on the website.
5. Share agency information and training about water issues to target solutions for water quality and quantity issues.
6. Receive project profile forms from projects and provide feedback through letters and meetings to communicate funding sources and technical assistance available.

Recommendations for New Mexico Water Financing Coordinating Council

There have been ongoing discussions about the formation of a water financing coordinating council in New Mexico for several decades. Most recently, the 2022 Water Task Force Report recommended the formation of a coordinating body in the form of a Water Infrastructure Projects Authority that would be responsible for vetting, prioritizing, funding, administering, and providing oversight of water infrastructure projects funded using a new earmark on severance tax bond proceeds. This general recommendation was further supported in the recent Legislative Fiscal Committee's (LFC's) report on state-funded water projects (LFC 2024), although the LFC identified several existing agencies and authorities that could take on the goals of a coordinating council. The LFC report also reports on the recommendation from the Government Finance Officers Association to formally prioritize infrastructure projects across the state based on multiple factors. There is currently no comprehensive ranking mechanism for water projects at the state level.

In 2023, HB 232 created the Infrastructure Planning Division at NMDFA with the goal of assisting local entities in stacking funding (e.g., capital outlay requests, federal grant funds), coordinating across funding agencies, and shepherding communities through different stages of the process. This new division would be a good lead agency to organize and centralize the functions and materials associated with new coordinating functions and/or a formal council.

Below are recommendations about the structure and scope of a coordinating council based on the virtual workshops that were held for this project.

- The council could build on the restructuring in water planning that was enabled through the Water Security Planning Act, by including representatives from each regional participate in the council. Regional water plans could include a prioritization of communities that would most benefit from regionalization of drinking water infrastructure or administrative functions.
- Council participants should represent state and federal funding programs as well as have good representation from local governments (e.g. Council of Governments).
- The scope of the council should be designed from the perspective of water systems, not just the funding agencies. The council should aim to reduce administrative barriers and identify funding priorities.

4.3 STATE PLANNING RECOMMENDATIONS

4.3.1 AQUIFER CHARACTERIZATION PLANNING AND IMPLEMENTATION

The state's ability to access federal support for aquifer mapping and monitoring relies on identifying a nexus between the use of the resulting data and monitoring network with eligibility requirements for specific federal funding programs. To do so effectively, two distinct steps are needed:

1. Aquifer Characterization Statewide Planning and Scoping Study: A statewide study will be led by NMBGMR in consultation with a steering committee and will aim to establish priority regions and sites for improved monitoring. This study will build on the work already completed in *Background and Considerations for a Statewide Groundwater-Level Monitoring Network in New Mexico* (OFR 624) (Pine et al. 2023).
2. Phased Pilot Aquifer Monitoring Project: Implement a stand-alone aquifer monitoring system for one of the priority regions already identified in *Background and Considerations for a Statewide Groundwater-Level Monitoring Network in New Mexico* (OFR 624) (Pine et al. 2023).

Aquifer Characterization Statewide Planning and Scoping Study

The study will include an analysis of aquifer conditions to help plan and prioritize regions for aquifer monitoring and site selections for implementation of new monitoring wells. This process includes gathering extensive data on where current monitoring is happening, depths and conditions of aquifers in each region, reviewing land and water use challenges, and land ownership. These data will inform the selection of sites for monitoring wells throughout the state, especially in drought sensitive areas. Ongoing coordination will be necessary as the Bureau works to strengthen partnerships with state and local agencies and community stakeholders to form a statewide coalition to support this initiative. At the same time, the Bureau will refine the selection criteria and prioritize well placement across the state. When this work is complete the Bureau will be prepared to secure funding to implement the program.

The scope of work for the aquifer characterization planning study may include the following tasks:

- Create a small steering committee to set specific annual regions and goals.
- Work with the steering committee to establish criteria and identify priority aquifers and sites for proposed wells, building on the work completed in OFR 624 and funding opportunities.
- Select best funding opportunities for drilling specific wells and aquifer characterization.
- Facilitate meetings and coordination with research groups; state, federal, and local agencies; and other interested stakeholders.
- Develop use cases to serve the needs of all stakeholders and address water availability.
- Determine staffing needs at the New Mexico Bureau of Geology and Mineral Resources for data management and monitoring network maintenance.
- Recognize the long-term goal of building student research programs to strengthen the hydrogeology workforce in New Mexico.
- Determine the best data management system to use for long-term program (e.g., data storage, computing capacity needs).

Phased Pilot Aquifer Monitoring Project

Concurrently with development of a statewide aquifer planning and scoping study, NMBGMR will begin to pursue funding for phased implementation of a stand-alone monitoring system in one of the priority regions already identified in OFR 624 (Pine et al. 2023). The NMBGMR, NMED, OSE, USGS and other partners will be instrumental in organizing and implementing this project. The scope of work for this project will be divided into two phases.

Phase 1: Selection of pilot region

In this phase of the work, the steering committee will use the ten regions identified in the initial study to identify one region for a pilot project. Using criteria from the report, which may be further refined, one pilot region will be selected for implementation. Identify contracting needs for specialized data collection, analysis, and modeling. This phase will also include scoping of compliance, permitting, and land permission requirements needed for drilling exploratory wells. The NMBGMR will lead this pilot project, collaborating with state water management agencies and local stakeholders to ensure a comprehensive approach to aquifer mapping and monitoring. A preliminary cost estimate for these activities is \$350,000.

Phase 2: Well drilling implementation

After selecting a region for implementation, Phase 2 of the project will include execution of legal agreements, deed restrictions, and preparation of final construction drawings. The partnership between the Bureau of Geology, landowners and maintenance crews will be established. The monitoring and operations plan will be completed as one of the final tasks. A preliminary cost estimate for these activities is \$10,000,000. The aquifer characterization for this region may include the following:

- Exploratory wells to be drilled in priority regions or conversion of existing wells into long-term monitoring wells;
- Full aquifer characterization (fresh and brackish), with funding to meet immediate and long-term needs;
- Geophysical characterization to be conducted to assess subsurface conditions;
- Water chemistry analysis to be performed to monitor water quality and composition;
- Hydraulic testing (of both short and long duration) to determine aquifer properties;
- Environmental tracers to be used to assess residence times, recharge rates, and connections with surface water;
- Subsurface geologic and hydrologic mapping to be conducted for detailed understanding;
- Commitment to long-term monitoring to ensure continuous tracking of water resources;
- Ensure data will be open and fully accessible, in alignment with the Water Data Act.

Funding Opportunities

For the planning study, NMBGMR could apply for a funding through FEMA's Hazard Mitigation Grant Program, managed by the state Department of Homeland Security and Emergency Management. They may also pursue support through the Planning Assistance to States, a competitive comprehensive planning and/or technical assistance program offered by the USACE.

The following two funding sources are being explored for support of the phased pilot aquifer monitoring project:

- Building Resilient Infrastructure and Communities program (FEMA): This program includes state-specific funding managed by DHSEM as well as a competitive national program.
- Sustainability Partners: Funding through the Infrastructure as a Service model could be used to accelerate progress on the drilling and finishing of well infrastructure.

4.3.2 STATE-LED FEDERAL DESIGNATIONS

Regional Conservation Partnership Program (NRCS)

Projects within the Upper Rio Grande basin could be submitted for the state/multistate or the non-CCA funding. If a Rio Grande basin CCA designation is accomplished in the future, eligible partners can submit applications to compete for the CCA-specific funding in response to an RFP issued by the NRCS. The most recent RFP opportunity closed July 2, 2024 and the next opportunity has not yet been announced. Applications must include the geographic area of the project, the resource concerns to be addressed, a proposed budget for use of NRCS funding, a list of partner contributions and how they will amplify federal funding, and any specific work targeted by the partners that are potentially critical to the success of the project. Additional information on the RCPP application process is available through the NRCS.

National Water Quality Initiative Designation (NRCS, NMED)

Designation of watersheds at the HUC-12 scale within the Upper Rio Grande basin for the National Water Quality Initiative program would be made by the NRCS. The focus of this program is improving water quality in watersheds with impairments identified on New Mexico's 303(d) list with a priority on those that have been designated as high priority for Total Maximum Daily Load development. WBPs or NWQI plans are a prerequisite to designating a watershed from the NWQI program. The following watersheds already have watershed-based plans and would therefore already qualify for designation: Rio Nutrias, Upper Rio San Antonio, Lower Rio Embudo, Rio Fernando de Taos, and Comanche Creek. If there is interest amongst the Ribbons of Life partners to add other watersheds, WBPs or NWQI plan would need to be completed first.

Sole Source Aquifer Designations

Authorized under section 1424(e) of the Safe Drinking Water Act, the Sole Source Aquifer Program (SSA) enables the EPA to designate aquifers that are the sole or principal source of drinking water for an area as sole source aquifers and provide review of proposed projects (that receive federal funding) within the aquifer recharge area (called the "review area") to ensure that the projects do not contaminate the sole source aquifer so as to create a significant hazard to public health. To date, there are 81 SSAs nationwide including one aquifer in New Mexico (<https://www.epa.gov/dwssa/map-sole-source-aquifer-locations>).

The EPA's SSA website provides information on both SSA petitions/designation and SSA project reviews (<https://www.epa.gov/dwssa>). Generally the steps involved in designating an SSA are as follows:

- The EPA defines an aquifer to be sole source if it supplies at least 50% of the drinking water for its service area and there are no reasonably available alternative drinking water sources should the aquifer become contaminated.
- Any individual, corporation, company, association, partnership, state, municipality, or federal agency may petition EPA for SSA designation. A petitioner is responsible for providing EPA with sufficient data and information.
- SSA petition decisions are delegated to EPA Regional Administrators.

EPA published the Sole Source Aquifer (SSA) Designation Petitioner Guidance in 1987 to assist interested parties in submitting SSA designation petitions to EPA regional offices:

<https://www.epa.gov/dwssa/guidance-petitioning-sole-source-aquifer-ssa-designation>.

4.4 STATE FUNDING RECOMMENDATIONS

The following legislative state appropriations would help continue to leverage available federal funding opportunities for New Mexico's water resources needs:

- Legislative appropriations to NMBGMR for recurring funding of \$1.25 million to cover recurring costs such as FTEs, software licenses, and project/data management. After 2037, the program will shift its focus from building and data acquisition to long-term maintenance and updating and improving models. It is expected that state appropriations, if granted, could serve as non-federal match for federal funding opportunities.
- Increase appropriations for the River Stewardship Program so that the water quality focus of using this funding to match 319 funds can be expanded to address the demand for watershed restoration match from other programs.
- Continue and consider an increase in the annual allocation of Land of Enchantment Legacy funding for NMFD, NMDA, NMED, and NMDGF. This has proven to be an effective way for communities to access federal grants that have match requirements in order to maximize the on-the-ground projects, enhance capacity, and strengthen capability.
- Examine the New Mexico Match Fund annually and increase appropriations as necessary to ensure the ability to maximize federal funding opportunities. It is an effective way for communities to access federal grants that have match requirements. It also can be used if there is an unexpected increase in a project cost due to federal requirements (NEPA, Buy America Build America, and similar).
- Support for the NM Water Task Force suggestion that the Water Trust Fund be explicitly authorized to fund natural infrastructure projects.

4.5 FEDERAL POLICY RECOMMENDATIONS

Below are several federal policy recommendations that could help to reduce barriers to accessing federal funds and increase collaboration between federal agencies, states, and other partners.

4.5.1 NEW MEXICO FEDERAL AGENCY SUPPORT TEAM (NM FAST)

The Western States Federal Agency Support Team (WestFAST) provides a unique role in improving the effectiveness of collaboration between western states and federal agencies with water management responsibilities in the west. WestFAST was organized in 2008 upon the recommendation of the Western Governors' Association and today represents a collaboration of more than sixteen Federal agencies. WestFAST was critical to the success of the NM Integrated Water Financing Plan. Federal agency representatives participated in workshops and assisted the team in identifying the most appropriate person within an agency to answer questions or assist with specific federal programs or funding opportunities. In many cases, this resulted in collaboration with regional agency teams in addition to the WestFAST representatives that often come from headquarters or national level roles.

Considering the value in developing working relationships between state and federal agencies, including those that do not typically work together, there would be value in establishing a state-specific version of WestFAST to provide enhanced opportunities for collaboration across the federal family at the state scale in partnership with states.

Workshop participants identified the following potential elements of a future NM FAST.

Scope

1. NM FAST should be led by the state and organized around a New Mexico centered entity.
2. It is important to have an organizational analog at the state level to Western States Water Council to provide administrative and coordination support.
3. NM FAST should identify and collaborate on mutual federal and state priorities that can feed into WSWC to consider at a national level.
4. NM FAST should help connect potential grantees to funding programs.
5. NM FAST should assist state agencies identify the appropriate person within a federal agency for new initiatives or projects.
6. NM FAST could collaborate on outreach and education regarding agency responsibilities and programs.

Structure

1. Consider mirroring the structure of Silver Jackets program (USACE).
2. The structure including roles and responsibilities should be clearly outlined in a charter document.
3. Structure should include roles for COGs, NGOs, other local entities.
4. NM FAST would need to be supported by the Governor and legislature.
5. Suggest that meetings occur at least 2x per year.
6. Subcommittees could take on specific coordination roles such as communication and funding.
7. Representatives from agencies should be able to represent the full breadth of the agency.
8. Webinars focused on specific topics with in-depth information could be used to reach a broader audience.
9. The regional water planning process should be incorporated into any implementation activities coordinated through NM FAST.

4.5.2 STREAMLINING FEDERAL PERMITTING

One of the barriers to accessing federal funds, especially for small communities, are the federal compliance requirements including conducting NEPA analyses of federally funded projects. Whereas some agencies have a Categorical Exclusion option for watershed health, stream restoration, or aquatic habitat improvement projects, other agencies require a full Environmental Assessment for each project. Federal agencies should review actions that currently qualify for a Categorical Exclusion and consider expanding this tool to be used for the following:

- Drinking water infrastructure upgrades and new construction in small disadvantaged communities.
- Exploratory wells used for aquifer characterization to support state monitoring efforts and water management programs.
- Watershed health benefits such as improved ecological function, habitat enhancement, and wildfire/flood risk reduction

USACE permits are also required for certain work, including the placement of dredge and fill material into waters of the United States and navigable WOTUS. “The Corps balances the reasonably foreseeable benefits and detriments of proposed projects, and makes permit decisions that recognize the essential values of the Nation’s aquatic ecosystems to the general public, as well as the property rights of private citizens who want to use their land.” The USACE may issue authorizations under two main categories of permits: General permits and individual permits. A general permit can only be used to authorize projects with minimal individual and cumulative adverse impacts to aquatic resources while providing a streamlined approach to assuring federal requirements are met while allowing for more timely project implementation. When a project does not qualify for authorization by general permit, then the USACE

must process a permit application using Individual permit procedures, which may include other streamlined approaches.

4.5.3 INCREASED FLEXIBILITY IN FUNDING PROGRAMS

The ARPA, BIL, and IRA laws have expanded existing funding programs and provided for the development of new programs necessary to address water resources needs in western states. As these programs have been rolled out, several constraints have limited the ability to maximize the impact of the funds. Amending the funding programs to provide additional flexibility would help accelerate progress on a variety of water resource investments. These include the following:

1. **Capacity building and technical assistance:** There have been substantial investments in technical assistance to help small and disadvantaged communities access funding. However, the funds for technical assistance have primarily been for transactional assistance to address the immediate needs of community water systems. It would be helpful to invest more technical assistance funds to address longer term capacity building needs.
2. **Reimbursement v. disbursement model:** The USACE 595 Program and several other federal programs are difficult for small communities to take advantage of because of a reimbursement model rather than a disbursement model. Many small communities cannot front the capital for projects. Changing this model would require a change to the Water Resources Development Act (2 Code of Federal Regulations 200).
3. **Match requirements:** Match requirements for some programs creates a barrier for small communities to efficiently obtain full funding even for a modest project. Match waivers for more federal programs would benefit small and disadvantaged communities and accelerate the timeline for constructing projects.

4.5.4 DEVELOP DEDICATED, DURABLE, LONG-TERM FEDERAL

The ARPA, BIL, and IRA provided generational investments in water infrastructure and watershed restoration efforts. However, given the anticipated costs to address New Mexico's diverse water resource challenges, these federal funds were a "down payment." Further, ARPA, BIL, and IRA are all time-limited funds, with most funding required to be obligated by the end of federal Fiscal Year 2026. As such, durable, long-term investments in western water infrastructure and watershed health are still needed to address the long list of projects identified through New Mexico's state and regional water planning processes. Specific opportunities to secure durable, long-term funding include the following:

- Infrastructure will likely continue to be a priority for the next administration and Congress. It will be important to work with Congress and the administration to elevate the importance of continued federal investments in western water infrastructure, natural infrastructure approaches, drinking water infrastructure, and wastewater infrastructure. Specifically, it will be important to collect and share success stories and the benefits of federal infrastructure investments with federal decision-makers.
- Significant federal resources are being used to pilot water conservation programs including the System Conservation Partnership Program (Upper Colorado River Commission), Lower Rio Grande Ground Water Conservation Program (New Mexico ISC and partners), and groundwater conservation easements (Colorado Open Lands funding from the NRCS RCPP program). These programs have been successful in water conservation on a limited basis. However, a long-term

funding program is needed to turn these successes into meaningful programs that can sustain rural economies and manage changing water resources under changing climatic conditions.

- Neither the Rio Grande Basin nor the Colorado River Basin have dedicated, coordinated funding to support water-related investments. These two basins represent New Mexico's most critical water resources and would benefit from long-term reliable funding similar to other watersheds in the United States. For example, the Delaware River Basin Restoration Program, established by an act of Congress, provides annual funding to improve and sustain water quality, upgrade water infrastructure, conserve and restore fish and wildlife habitat, and enhance recreational opportunities. These unique watershed-based funding programs provide critical base funding to leverage other public and private funding. Currently, neither the Colorado River nor the Rio Grande has such a program, which means water project funding, other than formula-based programs, relies extensively on competitive funding processes. Establishing basin-specific funding programs for the Rio Grande and Colorado River basins could help address the long list of identified water-related funding needs.

4.5.5 INCREASE FEDERAL INVESTMENTS IN CAPACITY-BUILDING, PROJECT DEVELOPMENT, AND FUNDING NAVIGATION PROGRAMMING

Increasing federal investments to address local workforce and capacity constraints, early-stage project development, and funding navigation programming can help Tribes, small rural and disadvantaged communities, acequias, agricultural water providers, and community-based organizations access federal funds while increasing the pace of water infrastructure, water conservation and efficiency, and watershed restoration/improvement projects. Specific opportunities to address these challenges include the following:

- Securing dedicated federal funding for existing community navigator programming, such as the USFS Community Navigator Initiative. Establishing new navigational assistance programs for western water infrastructure, aquatic restoration, and conservation can help expand the technical assistance network for water projects.
- Existing federal programs, including the Bureau of Reclamation's Cooperative Watershed Management Program and Project Design Grants, provide important federal resources for early-stage project planning, design, and capacity building. Other public and private funding programs often do not prioritize these critical activities. These federal programs are frequently oversubscribed and could benefit from increased federal investment.
- Federal water workforce programs such as the EPA's Innovative Water Infrastructure Workforce Development Program and USDA RD Circuit Rider Program, are critical and could benefit from increased federal investment. However, these programs are also limited in scope. Expanding existing federal water workforce programs to include other sectors, such as irrigation delivery, storage, and source water restoration and conservation, can help address workforce challenges holistically.

4.6 FUTURE WORK ON CAPACITY CONSTRAINTS

Capacity constraints across the water workforce are one the largest barriers identified for making progress on water infrastructure and water initiatives. These constraints include the private and public sectors at all levels of governance (local, state, and federal). The impact of workforce capacity constraints is discussed in more detail in Section 4.1.6. Ideally, across New Mexico, there would be increased investment in existing or new workforce development programs that support a sustainable cadre of skilled

workers that can support both planning and implementation. This cadre would support on-the-ground project work, project management, grant writing, support for clearances and approvals, and similar.

Several efforts are underway to address these issues including the following:

- The University of New Mexico, along with two other universities, received a \$600,000 grant from the EPA focused on introducing undergraduates to careers in the water industry. Work under the grant begins in October 2024.
- The University of New Mexico Southwest Environmental Finance Center received a \$4 million award from the EPA under the Innovative Water Infrastructure Workforce Development Grant Program to provide technical assistance to small and disadvantaged communities and systems to build financial, managerial, and technical capacity.
- The New Mexico Department of Workforce Solutions received a \$1.5 million grant in 2024 from the Families and Workers Fund under the program Powering Climate and Infrastructure Careers Challenge.
- The University of New Mexico Southwest Environmental Finance Center was awarded \$6.2 million from the EPA for training and technical assistance to small drinking water and wastewater systems.
- The New Mexico Forestry Division took the “full opt-in” approach for the USFS Community Wildfire Defense Grant and was therefore able to take advantage of getting funding to support a full-time CWDG Coordinator. The coordinator was able to provide the necessary technical assistance to enable more New Mexico communities and more funding to be awarded in the following cycle. Other agencies could follow this example. One Ribbons of Life activity specifically states the need to “accelerate the ability of federal agencies to prepare and implement on-the-ground restoration activities by supporting Cooperative Positions that are hosted by non-government organizations.” For example, the NRCS can fund technical positions that support archeological studies or land grant projects along with general support for NRCS programming. The New Mexico Finance Authority is overseeing a broad technical services contract with funding from the state legislature to provide direct support to communities pursuing drinking water system regionalization. This contracting mechanism will streamline procurement and provide necessary planning support to small communities in the form of attorneys, accountants, community facilitators, project managers, and others (NMFA Memorandum from Donnie Quintana, July 16, 2024).



The tables that follow outline a plan to access additional funding for each of the three demonstration projects. The plans generally include the most promising funding opportunities, policy and planning recommendations that would help enable access to additional funds, and, where possible, commitments from lead entities and partners to pursue these steps together.

5.1 ACCELERATING SMALL COMMUNITY DRINKING WATER SYSTEM REGIONALIZATION

The integrated financing plan for accelerating small community drinking water system regionalization (Table 16) relies heavily on policy and planning recommendations recognizing that the barriers to funding drinking water regionalization projects primarily relate to funding and capacity constraints rather than a lack of available funds. Further, this plan reflects the need to leverage existing funds, especially loan funds, and recognizing that there is already good publicity about most available drinking water grant funds.

Table 16. Accelerating Small Community Drinking Water System Regionalization Integrated Financing Plan

No.	Action	Lead	Key Deadlines	Funding Amt	Key Partners	Relevant report sections
DWR 1.	Promote a wide array of federal grant opportunities, including both widely used sources and more innovative programs such as 595 program (USACE), HMGP (FEMA), BRIC (FEMA), and WaterSMART Drought Resiliency Projects (USBR) as part of community financing packages for fully funded infrastructure projects.	Technical assistance partners	NA	NA	USACE, FEMA, USBR, NMED, NMDHSEM, NMDFA	Section 3.1.2
DWR 2.	Form a New Mexico State Financing Coordinating Council or other Support Role.	Technical assistance partners and NMDFA Infrastructure Planning Division	NA	NA	NMED, NMFA, NMDFA, Water Trust Board, USDA RD, SFEFC, RCAC	Section 4.2.3
DWR 3.	Implement policy recommendations to incentivize regionalization.	Legislators	2025 Legislative session	NA	NM ISC/OSE, NMED, NMFA, RCAC, SWEFC, EPA, USDA RD	Section 4.2.1
DWR 4.	Implement policy recommendations to optimize loan and grant funds through blended financing plans to fully fund projects that will help ensure funds are put to work more quickly.	Legislators	2025 Legislative session	NA	NM ISC/OSE, NMED, NMFA, NMDFA, RCAC, SWEFC	Section 4.2.2
DWR 5.	Examine the New Mexico Match Fund annually and increase appropriations as necessary to ensure the ability to maximize federal funding opportunities.	Legislators	State budget deadlines	NA	NM ISC/OSE, NMED, NMFA, NMDFA, RCAC, SWEFC	Section 4.4
DWR 6.	Evaluate potential for federal policy changes to accelerate investment in drinking water infrastructure.	WSWC	NA	NA	WestFAST	Section 4.5

5.2 AQUIFER MAPPING AND MONITORING

The integrated financing plan for aquifer mapping and monitoring (Table 17) includes several promising funding opportunities that are specific to certain types of aquifers that link to federal programs. Additional work to inventory and summarize characteristics of aquifers will allow better targeting of federal programs in the future.

Table 17. Aquifer Mapping and Monitoring Integrated Financing Plan

No.	Action	Lead	Key Deadlines	Funding Amt	Key Partners	Critical Dependencies	Relevant report sections
AMM 1.	Prepare an application to FEMA for statewide aquifer characterization planning or scoping study.	NMBGMR	Fall 2024	\$350,000	FEMA, USACE, EPA, NMBGMR, USBR, NMOSE, NMED	Coordinate with FEMA and NMDHSEM to identify the most appropriate program, BRIC or HMGP.	Section 4.3.1
AMM 2.	Prepare an application for DHSEM and FEMA for pilot phased project.	NMBGMR	Feb 2025	Implement pilot set of wells for aquifer mapping and monitoring based on existing report. Estimated cost: \$10,000,000.	FEMA, NMBGMR, NMDHSEM	Coordinate with FEMA and NMDHSEM to identify the most appropriate program, BRIC or HMGP. Secure grant writing technical assistance.	Section 3.2.1
AMM 3.	Work with <i>Sustainability Partners</i> to identify opportunities to provide funding support for this project	NMBGMR	Fall 2024	Up to \$175,000,000	Sustainability Partners, NMBGMR, NMOSE, Legislators	Completion of planning and scoping work (AMM 1).	Section 3.2.2
AMM 4.	Secure legislative funds for aquifer mapping and monitoring that can provide non-federal match.	NMBGMR and NMT	State budget deadlines	Budget Request to Higher Education Department: <ul style="list-style-type: none"> - \$1.25 million (recurring) - \$28.75 million (nonrecurring, for 3-year pilot of new data collection) 	Legislators, NMOSE, NMED	Governor's Office support Legislative support Legislative Finance Committee support Budget availability	Section 4.4

No.	Action	Lead	Key Deadlines	Funding Amt	Key Partners	Critical Dependencies	Relevant report sections
AMM 5.	Apply for the USACE's Planning Assistance for States and Tribes Program.	NMBGMR	Rolling	Planning-level assistance valued up to approximately \$300,000	USACE, NMOSE	Secure non-federal match (AMM 4).	Section 3.2.1
AMM 6.	Apply for membership in the National Alliance for Water Innovation (NAWI) program.	NMBGMR	Spring 2025.	TBD.	DOE	None.	Section 3.2.1
AMM 7.	Pursue funds for characterizing aquifers for brackish water in the state.	NMBGMR	Various deadlines	Various amounts	DOE, USBR, and NMISC	Completion of planning and scoping study (AMM 2); become member of NAWI (AMM 7).	Section 3.2.1
AMM 8.	Apply for Sentinel Landscapes funding.	NMBGMR	NA	NA	Sentinel Landscapes	Identify wells within Sentinel Landscapes boundaries (AMM 1).	Section 3.2.1
AMM 9.	Petition the EPA for sole source aquifer designation.	NMED	NA	NA	EPA, NMOSE, NMBGMR	Completion of planning and scoping study (AMM 1).	Section 4.3.2
AMM 10.	Continue to evaluate other federal funding programs that could support the project.	NMBGMR	NA	NA	NMED, OSE	Completion of planning and scoping study (AMM 1).	Section 3.2.1

5.3 RIBBONS OF LIFE

There are significant funding opportunities for the activities outlined in the Ribbons of Life demonstration. Many of these are recurring funding opportunities that need to be aligned with specific coalition building activities and on-the-ground projects in a more detailed watershed plan. The integrated financing plan focuses on specific near-term opportunities to support the Ribbons of Life coalition and capacity needs as well as several federal designations (Table 18) that could be pursued to leverage more federal funding in the future. The 11 actions below will be vetted with the Ribbons of Life coalition partners to determine which are the highest priority to pursue; what partner may serve as the primary applicant or lead; and when the appropriate milestones will occur.

Table 18. Ribbons of Life Integrated Financing Plan

#	Action	Lead	Key Deadlines (estimated)	Funding Amt	Key Partners	Critical Dependencies	Relevant report sections
RoL 1.	Apply for Cooperative Watershed Management Program WaterSMART Grant (USBR) to secure funding for coalition capacity and support.	NWF	Sept 3, 2024. Fall 2025.	Up to \$300,000	USBR, NWF, coalition partners		Section 3.3.3
RoL 2.	Apply for Collaborative Capacity Program for Forests and Communities (USFS, NFF) to secure funding for coalition capacity and support.	NWF	January 2025	Up to \$150,000	USFS, NFF	Match is encouraged but not a factor in project evaluation.	Section 3.3.1
RoL3.	Apply for Aquatic Ecosystem Restoration Program WaterSMART grant (USBR).	Coalition partners	Waiting on next NOFO.	Design from \$500,000 to \$2 million; construction grants from \$3 million to \$20 million.	USBR, NMDGF, NMFD,		Section 3.3.1

#	Action	Lead	Key Deadlines (estimated)	Funding Amt	Key Partners	Critical Dependencies	Relevant report sections
RoL 4.	Apply for Environmental Water Resources Projects WaterSMART grant (USBR).	Coalition partners	Next application deadline March 2025	In general, applicants can request \$3 million (25% match) for projects with total project cost of \$6M. A watershed group can apply for up to \$5 million with no total project limit.	USBR, NMFD, NMDGF, Coalition partners TBD	Applicant must include one or more organizations with water/power delivery authority. For a watershed group, projects must be completed within 5 years and can be implemented on non-federal land.	Section 3.3.1
RoL5.	Apply for FEMA BRIC funding for top activity priorities. Eligible BRIC activities are on-the-ground projects, risk reduction planning, education/outreach, capability/capacity building, and partnership building.	Coalition partners	Due from State to FEMA end February 2025. Work with NM DHSEM on timeline and application process	Wide range, could be multiple millions	FEMA as grantor, NMDHSEM as applicant and administrator, with coalition partner serving as sub-applicant	Must have non-federal share commitment letter. Reduction in match if requirement met. Must have FEMA-approved mitigation plan that includes the location of the on-the-ground projects; plan not required for capacity, partnerships, or planning	Section 3.3.1
RoL 6.	Apply for FEMA HMGP funding for top activity priorities. Eligible HMGP activities are on-the-ground projects, risk reduction planning, education/outreach.	Coalition partners	Due from state to FEMA based on disaster-specific application deadline. Work with NM DHSEM on application process.	Wide range, could be multiple millions	FEMA as grantor, NMDHSEM as applicant and administrator, with coalition partner serving as sub-applicant	Must have non-federal share commitment letter. Reduction in match based on disaster specific administration. Must have FEMA-approved mitigation plan that includes the location of the on-the-ground projects.	Section 3.3.1
RoL 7.	Apply for USFS Landowner Cost Share Payment Programs for Climate Mitigation and/or Forest Resilience Practices.	Coalition partners	Sept 30, 2024 2025 round uncertain	Up to \$5 million for single-state program, up to \$15 million for multi-state programs	USFS, NMFD District Office and Watershed Coordinator, coalition partners		Section 3.3.1
RoL 8.	Align individual on-the-ground project needs with recurring funding opportunities and coordinate and track applications.	NWF	Annually	Multiple millions through multiple programs	Coalition partners TBD	This would be part of the Coalition Action Plan updates and socialization. Secure funding for coalition capacity and support (RoL 1 and RoL 2).	Section 3.3.3
RoL 9.	Designate new NWQI watersheds.	NRCS		Unknown	Coalition partners TBD	Identify HUC-12 watersheds that are on the 303d list. Prepare WBP or NWQI plans	Section 3.3.2

#	Action	Lead	Key Deadlines (estimated)	Funding Amt	Key Partners	Critical Dependencies	Relevant report sections
RoL 10.	Prepare and submit RCPP application to NRCS for state/multistate or non-CCA funding.	Coalition partners	Spring 2025	Multiple millions via existing NRCS funding streams	NRCS, USFS, NFF, NMFD, NMDA, and coalition partners	Scale/location must be determined. Secure funding for coalition capacity and support (RoL 1 and RoL 2).	Section 3.3.2
RoL 11.	Increase annual appropriations to the River Stewardship Fund.	Coalition partners TBD	State budget deadlines	NA	Legislators, NMED, Trout Unlimited, and coalition partners		Section 4.4



CHAPTER 6 – APPLICABLE LESSONS

6.1 FINANCE PLANNING COLLABORATION PROCESS LESSONS

- Building federal, state, and local relationships is critical to navigating federal funding programs. Efforts to continue relationship building through federal staff at both regional offices and headquarters will help the state better navigate federal agency networks and leverage additional funding opportunities as they arise.
- It is important to identify funding priorities early in a finance planning process. These decisions should be made by state water leaders. Selection of priorities in a large group workshop setting is unlikely to be successful.
- Narrow the focus of projects and workshops to provide more time for ideation. Identifying innovative funding for very broad initiatives is challenging due to the number of elements that require different kinds of funding.
- Manage the number of participants to provide opportunity for everyone to contribute. Separate those with direct funding or with programs applicable to the need from others that are interested in the outcomes.
- Build in extra time for one-on-one conversations. Do not rely on email to gather information or explore innovative ideas; people seem more comfortable being creative without an audience (i.e. not in a virtual workshop setting). A combination of one-on-one conversations with the program experts and workshops is needed.
- Improve the interaction and participation on virtual meetings. Since many federal agencies cannot travel out of state and many state staff do not have the time or resources to travel, successful virtual meetings will be imperative to planning process success. Shorter virtual workshops with very specific agendas and highly focused interactive exercises may increase meaningful participation.
- Recognize that Tribal engagement is already occurring with both federal and state agencies. Early in the planning process, identify an achievable Tribal engagement process that includes a realistic yet effective outreach and participation strategy.
- Local engagement is complex yet necessary for gaining detailed knowledge of the proposed projects and activities. Consider local inclusion earlier on in the process.

6.2 FINANCING SOLUTION LESSONS

- Money does not solve everything. It is important to incorporate policy, planning, and capacity solutions into the plan.
- Separate workforce capacity and technical assistance needs from financing plan development as capacity is a large, complicated challenge in and of itself.
- Recognize the limitations of using more than one federal funding source for a project; look to a variety of non-federal sources for creative financing solutions.

6.3 SUMMARY LESSONS

- Federal funding programs are numerous, complex, and challenging to navigate. Having program experts available to provide technical assistance is critical to overcoming barriers and identifying the best opportunities.
- The NM Integrated Water Financing Plan provided an opportunity for state agencies that typically do not work together to better understand the funding that is available and to identify collaborative approaches to securing funding in the future.
- The NM Integrated Water Financing Plan provided one example of a tangible opportunity for federal agencies to collaborate and support state water needs.

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APPENDIX A: PARTICIPANTS

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