



New Mexico Forest and Watershed Restoration Institute

New Mexico Highlands University

www.nmfwri.org

New Mexico Forest & Watershed Restoration Institute Fiscal Year 2022 Work Plan Summary

Fiscal Year: October 1, 2021 through September 30, 2022

Operational Year: June 1, 2022 through May 31, 2023

Funding Source: Annual Federal Appropriations to SWERI and FWRI

Introduction

The New Mexico Forest and Watershed Restoration Institute (“FWRI”)¹ is a Research and Public Service Program (“RPSP”) based at Highlands University (“HU”)² in Las Vegas, NM. FWRI staff with expertise in geospatial information systems, ecological monitoring, outreach and education, and collaboration work alongside partnering organizations around New Mexico to build capacity and develop projects that lead to healthier ecosystems and communities.

The Fiscal Year 2022 (“FY22”) Work Plan details how the FWRI will apply funds from Congressional Annual Appropriations. The Work Plan will be implemented during the Operational Year, which begins when the FWRI receives appropriated funds, generally on or around June 1, and ends 365 days later.

FWRI Programs, Positions and Staff

With increased appropriations, the FWRI staff has grown over the past year, and will continue to increase in size in the coming year. Staff are organized into three programmatic areas: Administration, Coordination & Organizational Development (Education & Outreach; Public Information; Special Programs); Technical and Applied Science Programs (Geospatial Information Systems, Monitoring); and Civic and Community Action Programs (Collaboration, Conservation & Restoration Education). As of June, 2022, the FWRI staff consists of the following positions:

Administration, Coordination and Organizational Development

- Administration
 - Director, Alan Barton
 - Budget, Finance and Administration Manager, Cesar Alvizo
 - Administrative Assistant, Marla Martinez
- Coordination
 - Education and Outreach Coordinator, Natalia Shaw
 - Outreach Assistant, Raymundo Melendez
 - Public Information Coordinator, Staci Matlock
- Special Programs
 - Special Programs Manager, Joe Zebrowski
 - Student Workers

¹ New Mexico Forest & Watershed Restoration Institute; See <https://nmfwri.org/>.

² New Mexico Highlands University; See <https://www.nmhu.edu/>.

Technical and Applied Science Programs

- Monitoring Program
 - Monitoring Program Manager, Kathryn Mahan
 - Assistant Manager/Crew Logistic Support, Carmen Briones
 - Data Manager/Analyst, Corey Beinhart
 - Monitoring Technicians/Crew Bosses (3 positions), Alex Makowicki, Meredith Prentice, Carolina May
 - Student Workers, including Summer Field Crew
- Geospatial Information Systems (“GIS”) Program
 - GIS Program Manager, Patti Dappen
 - GIS Specialist (2 positions), Katie Withnall, Dana Heusinkveld

Civic and Community Action Programs

- Collaboration Program
 - Collaboration Specialist, Elliese Wright
 - Collaboration and GIS Technician (VISTA), Eleanore Mearns
- Conservation Science Center Program
 - Conservation and Restoration Education Manager, Shantini Ramakrishnan
 - Student Workers

FWRI Institutional Alliances and Partnerships

The FWRI is one of three Southwest Ecological Restoration Institutes (“SWERI”), which also include the Ecological Restoration Institute (“ERI”) at Northern Arizona University (“NAU”) ³ and the Colorado Forest Restoration Institute (“CFRI”) at Colorado State University (“CSU”). ⁴ Congress created the SWERI institutes with the Southwest Forest Health and Wildfire Prevention Act of 2004⁵ (“SWERI Act”) to promote the use of adaptive ecosystem management to reduce the risk of catastrophic wildfire and restore the health of fire-adapted ecosystems in the Interior West.

The FWRI also participates in the Forest Restoration Triangle (“FORT”), along with the Department of Forestry at HU⁶ and the John T. Harrington Forestry Research Center operated by New Mexico State University (“NMSU”) and located in Mora, NM.⁷ The three FORT entities share a common board that meets biannually to coordinate and review the activities of the three institutional partners.

The SWERIs collaborate with a diverse set of partners and affected entities to build capacity in forest restoration, and the Institutes support cooperative efforts such as Shared Stewardship. The partners that the SWERIs collaborate with and the affected entities that the SWERIs serve include land managers and regulators, such as federal, state, local and tribal agencies; interested

³ Ecological Restoration Institute; See <https://eri.nau.edu/>.

⁴ Colorado Forest Restoration Institute; See <https://cfri.colostate.edu/>.

⁵ Southwest Forest Health and Wildfire Prevention Act, Pub. L. No. 108-317, 118 Stat. 1204 (Oct. 5, 2004), codified as amended at 16 U.S.C. §§6701–6707 (2020); See <https://www.govinfo.gov/content/pkg/USCODE-2020-title16/html/USCODE-2020-title16-chap86.htm>.

⁶ HU Department of Forestry; See <https://www.nmhu.edu/departments-of-forestry-2/>.

⁷ John T. Harrington Forestry Research Center; See <https://morasc.nmsu.edu/>.

or affected stakeholders; concerned citizens; organizations representing natural resource users; traditional groups including land grants and acequias; state and local representatives; and political subdivisions of states, such as soil and water conservation districts. SWERI administrators and staff respond to the current needs of partners and affected entities while also anticipating and preparing for future challenges.

FWRI Statutory Purposes and Duties

Congress authorized the SWERIs in 2004, and the FWRI began operations in 2005. The SWERI Act defines the purposes and duties of the SWERIs, and creates a framework for the three Institutes to align their operations, cooperate with federal agencies, collaborate with partners and serve affected entities.

The SWERI Act requires preparation of an **ANNUAL WORK PLAN**, stating “as a condition of the receipt of funds made available under this Act, for each fiscal year, each Institute shall develop in consultation with the Secretary, for review by the Secretary, in consultation with the Secretary of the Interior, an annual work plan that includes assurances, satisfactory to the Secretaries, that the proposed work of the Institute will serve the informational needs of affected entities.”⁸

The SWERI Act states that **PURPOSES** of the SWERI are “to promote the use of adaptive ecosystem management to reduce the risk of wildfires, and restore the health of forest and woodland ecosystems in the interior West,” and “promote the use of collaborative processes and adaptive ecosystem management.”⁹

Thus, the **GENERAL PURPOSES AND CONDITIONS** of the SWERIs are:

- (1) Promote the use of adaptive ecosystem management
- (2) Reduce the risk of wildfires
- (3) Restore the health of forest and woodland ecosystems in the interior West
- (4) Promote the use of collaborative processes
- (5) Prepare an Annual Work Plan that ensures the proposed work of the Institute serves the informational needs of affected entities

The **DUTIES** of the SWERIs as defined in the SWERI Act¹⁰ are:

- (1) develop, conduct research on, transfer, promote, and monitor restoration-based hazardous fuel reduction treatments to reduce the risk of severe wildfires and improve the health of dry forest and woodland ecosystems in the interior West;
- (2) synthesize and adapt scientific findings from conventional research to implement restoration-based hazardous fuel reduction treatments on a landscape scale using an adaptive ecosystem management framework;
- (3) translate for and transfer to affected entities any scientific and interdisciplinary knowledge about restoration-based hazardous fuel reduction treatments;
- (4) assist affected entities with the design of adaptive management approaches (including monitoring) for the implementation of restoration-based hazardous fuel reduction treatments; and
- (5) provide peer-reviewed annual reports.

⁸ SWERI Act § 5(f) (*See* footnote 6).

⁹ SWERI Act § 5(a)(1 & 2) (*See* footnote 6).

¹⁰ SWERI Act § 5(c) (*See* footnote 6).

Fiscal Year 2022 Federal Appropriations

The Department of the Interior, Environment, and Related Agencies Appropriations Act, 2022 appropriates funding to the SWERIs.¹¹ Under Hazardous Fuels, Congress provides funding “for the Southwest Ecological Restoration Institutes to continue to assist communities and land managers in applying hazardous fuels and wildfire risk reduction treatments, conducting monitoring and evaluation research, providing technical assistance, and for independent analysis of managed fire.”

Project Formulation

The projects and deliverables in the FWRI’s FY22 work plan respond to needs identified from various sources, including:

- The U.S. Forest Service (“USFS”), including personnel at the Southwestern Regional Office, Forest Supervisors’ Offices and District Rangers’ Offices;
- The New Mexico State Forestry Division (“NMSFD”) and the Energy, Minerals and Natural Resources Department (“EMNRD”), including regular coordination with the NMSFD’s Forest and Watershed Health Office, and drawing on objectives spelled out in the New Mexico Forest Action Plan (“FAP”) of 2020¹² and the agreement between the USFS and NMSFD titled “Toward a Shared Stewardship Across Landscapes: An Outcome-Based Investment Strategy” issued on Nov. 15, 2019 (“Shared Stewardship”)¹³;
- Other federal agencies, including the Natural Resources Conservation Service (“NRCS”), the Bureau of Indian Affairs (“BIA”), the Bureau of Land Management (“BLM”), the National Park Service (“NPS”), and the Fish and Wildlife Service (“FWS”);
- Other state agencies, including the N.M. Environment Department (“NMED”), the State Land Office (“SLO”), the Department of Game and Fish (“DGF”), and the Office of the State Engineer (“OSE”);
- Tribal governments and natural resource agencies;
- The offices of municipal, county, state, and federal elected officials;
- Soil and Water Conservation Districts (“SWCD”) and Resource Conservation and Development Councils (“RC&D”);
- Non-governmental organizations (“NGO”);
- Academic institutions in New Mexico, neighboring states, and beyond;
- Local forestry collaboratives and watershed groups;
- Individual stakeholders;
- The FORT Advisory Board;
- The leadership and staffs of the CFRI and the ERI;

This FWRI work plan continues themes and specific projects initiated over the last several years in GIS, monitoring, collaboration, and outreach. In addition, this plan incorporates new themes and projects, reflecting growth the FWRI has undergone over the past year in staffing and capacity.

¹¹ Department of the Interior, Environment, and Related Agencies Appropriations Act, 2022, p. 68. *See* <https://docs.house.gov/billssthisweek/20220307/BILLS-117RCP35-JES-DIVISION-G.pdf>.

¹² New Mexico Forest Action Plan, Sep. 2020; *See* <https://www.emnrd.nm.gov/sfd/forest-action-plan/>.

¹³ New Mexico Shared Stewardship Portal; *See* <https://nmssp.org/#/>.

The administration and staff at the FWRI and HU and our partners throughout New Mexico and the West are thankful for the annual funding provided by Congress through the USFS. We are proud to serve the United States and New Mexico and are excited to continue our partnerships and projects, and to scale up our work and accomplishments in FY22.

Summary of Programmatic Themes for FY 2022

For FY22, the FWRI will work on projects in seven programmatic themes:

■ Theme 1 – Community Engagement, Science Communication, and Restoration

Education: Designed to increase awareness and understanding of ecological processes within forested ecosystems and watersheds throughout New Mexico and the related impacts of wildfire, including managed wildfires; to build capacity of community stakeholders and remove barriers to adaptive management through Tribal outreach, K-16 education, technical trainings; and support of federal-state shared stewardship.

■ **Theme 2 – Geospatial Analysis and Support:** Our GIS work strengthens our connections to our stakeholders and offers technological solutions to restoration-based questions. Projects include GIS support to the Collaborative Forest Restoration Program (“CFRP”) and collaborative groups, geospatial technology training for land managers and natural resource professionals, as well as continued development of the New Mexico Vegetation Treatment Geodatabase (www.vegetationtreatments.org). FWRI GIS experts also use remote sensing to assess, monitor, and visualize forests in New Mexico. Technologies such as drones, Light Detection and Ranging (“LiDAR”) and 360-degree cameras offer a unique perspective to capture and assess forest conditions and adaptive management applications.

■ **Theme 3 – Monitoring Ecosystem Response and Reducing Barriers to Adaptive Management:** Ecological monitoring data provides the scientific basis for restoration treatments and is critical for adaptive management. The FWRI’s in-house monitoring crew collects data on ecosystem response to restoration, provides internship opportunities, trains partners, and serves as a data repository and network. Each summer, the Monitoring Program employs several students, who gain valuable practical experience in forest restoration, building New Mexico’s future forestry work force. As part of the FWRI’s mission to promote adaptive management practices, the Special Programs Manager is coordinating a study of managed fire in New Mexico, and a contractor is researching optimal treatment placement to mitigate high-severity wildfire.

■ **Theme 4 – Collaboration and Partnerships:** The FWRI advances collaborative conservation by promoting and coordinating partnerships, developing collaborative capacity in rural communities, creating and facilitating networks of collaborative organizations, improving communications among collaborative groups and the public, and supporting administrative needs of volunteer groups. The Collaboration Program employs AmeriCorps-VISTA volunteers who work closely with community-based collaborative groups on projects that create greater economic opportunities.

■ **Theme 5 – Communication and Public Information:** FWRI staff craft strategic and effective communications to inform and engage the public in our work. The Public Information Specialist develops videos, story maps, briefing papers, slideshows, posters and articles that describe and highlight projects, and distributes these to media outlets, partners and affected entities. The FWRI also supports effective internal communication among FWRI and SWERI staff, and with colleagues at Highlands University.

■ **Theme 6 – Forest Operations, Economics and Utilization:** The FWRI supports a sustainable restorative and regenerative economy, focusing on economic development and business growth for the wood utilization industry as an agent for forest restoration. Operations, Economics and Utilization includes working with forest industry, agencies and affected entities to enhance business capacity, reduce barriers to trade, develop uses for small diameter timber, and plan and implement outreach on forest restoration protocols and treatment effectiveness. Forest Operations also includes developing and promoting forest restoration protocols, and studying treatment effectiveness and the effects of managed and prescribed fire.

■ **Theme 7 – Professional and Organizational Development:** The FWRI supports professional development opportunities for staff members to increase capacity and maintain a healthy and productive workplace. Organizational development includes shared leadership, and regular staff field trips and retreats, and extends to inter-SWERI collaborations, workshops and annual summits.

Cross-Cutting Themes

In addition to our programmatic themes, which guide our project development and implementation, our Program of Work also draws on cross-cutting themes that tie together several of the FWRI's programs and projects.

■ **Developing Local Workforces:** For many years, New Mexico's forest industry has found it challenging to employ and retain forest workers. This has been exacerbated in recent years by changes in labor practices due to the global COVID-19 pandemic and increased competition for labor. Solutions to this issue require long-term investments in recruitment, training and capacity building, beginning with youth engagement. Taken together, the FWRI's programs are engaging K-12 students and teachers, college students and faculty, forestry field technicians, agency and NGO professionals, and researchers in developing career-building pathways in natural resource fields. Workforce development and capacity building today will bring dividends in the future, by drawing more individuals into careers that steward our nation's natural resources and that find creative solutions to future issues.

■ **Integrating Scientific and Traditional Knowledge:** The SWERI Act charges the three institutes with synthesizing, adapting, translating and transferring scientific findings and knowledge to affected entities. Among the affected entities in New Mexico are many communities that draw on generations of traditional knowledge in their policies and practices. Accordingly, the FWRI adapts and synthesizes scientific and traditional knowledge to reach its partners and affected entities with practical and useful information.¹⁴

■ **Strengthening Communities:** The FWRI's programs and projects are built around practical, applied research and community development, providing tools and information that communities can use to increase their own security, resiliency and well-being, to uphold and sustain their local culture and values, to create opportunities for place-focused education and sustainable economic

¹⁴ The U.S. Forest Service, a key FWRI partner, recognizes the value of integrating scientific and traditional knowledge. In its ten-year strategy for addressing wildfires, the Forest Service states that science "includes acknowledging and incorporating Indigenous and traditional ecological knowledge." See U.S. Forest Service. (2022). *Confronting the Wildfire Crisis: A 10-Year Implementation Plan*. FS-1187b. <https://www.fs.usda.gov/sites/default/files/Wildfire-Crisis-Implementation-Plan.pdf>.

advancement, to hold families together and retain youth in the community, and to plan with confidence for their common future.

Theme 1: Community Engagement, Science Communication and Restoration Education

Budget: \$380,555

Purpose: This program continues to increase its capacity to reach diverse audiences, including land managers, the education community, and intra- and inter-SWERI engagement. Efforts focus on sharing holistic approaches to natural resources management, partnership cultivation, leadership growth, career exploration, workforce development and technical training.

Staff: Primary responsibility for implementing the projects in Theme 1 will be with the Conservation and Restoration Education Manager and the Education and Outreach Coordinator, as well as staff and students in these programs. The Public Information Coordinator and Special Programs Manager will support these projects as well. Contractors may be employed for short-term work on some projects.

Outcomes:

Successful implementation of Theme 1 leads to:

- Young New Mexicans have a better understanding of scientific resource management through practical instruction and field experiences
- Youth are more aware of opportunities for a career in science and natural resource management and have a greater understanding of what these careers entail
- Students from K-16 demonstrate an improved understanding in STEM disciplines
- Community members demonstrate greater knowledge and understanding of natural resource issues and engage more actively in their communities

Theme 1. Community Engagement, Science Communication and Restoration Education	
Project	Audience/Outcomes
Community Engagement (CE)	
1.1 Wood for Life/Northern New Mexico Fuel Wood Working Group	<u>Audience:</u> Tribal nations, USFS, NMSFD, NGOs <u>Outcome:</u> Identification of tribal groups interested in this program; Matched tribes and pueblos in need of firewood with NMSFD and USFS forest thinning projects; Build communication and coordinate interested parties
1.2 Landowner Engagement	<u>Audience:</u> Private landowners <u>Outcome:</u> Participation in landowner-led organizations, and leveraging relationships to facilitate coordination between landowners, community organizations and agencies
Science Communication (SC)	
1.3 Outreach on Monitoring & Forest Restoration Protocols	<u>Audience:</u> Public land managers and NGOs; NMSFD; private landowners; firewood dealers; NRCS <u>Outcome:</u> Continued implementation of desired conditions in P-J, ponderosa pine and mixed conifer

1.4 Support to Shared Stewardship	<u>Audience:</u> NMSFD; USFS; regional stakeholders <u>Outcome:</u> Active cooperation with NMSFD in promotion of Shared Stewardship, including of the planning Portal and promotion of the NMSFD FAP
1.5 Knowledge Transmission: Publications, Guides, Manuals	<u>Audience:</u> Public land managers and NGOs; NMSFD; private landowners; general public <u>Outcome:</u> Improved communication and sharing of knowledge to diverse audiences on topics relating to forest restoration and monitoring protocols
Restoration Education (RE)	
1.6 K-12 Education & Outreach	<u>Audience:</u> K-12 students, formal and informal educators, outdoor learning providers <u>Outcome:</u> Increased public support for forest and watershed restoration; recruitment of youth into conservation careers
1.7 Tribal Education and Capacity Building	<u>Audience:</u> Tribal nations, partnering agencies <u>Outcome:</u> Improved local management of tribal lands; recruitment of tribal youth into conservation or STEM careers; Collaborate with ERI's Tribal Liaison
1.8 Undergraduate & Graduate Student Support	<u>Audience:</u> HU undergraduate & graduate students; HU faculty <u>Outcome:</u> Increased opportunities to introduce students to future STEM employers, explore STEM careers in forestry, ecology, biology, and related fields, and build related skill sets
1.9 Technical Trainings & Workforce Development	<u>Audience:</u> public land managers and NGOs; NMSFD; private landowners; firewood dealers; NRCS <u>Outcome:</u> Increased involvement with partnering agencies to address community and partner needs; build skills and address challenges associated with forest restoration and monitoring

Theme 2: Geospatial Analysis and Support

Budget: \$279,345

Purpose: The FWRI is an important center of GIS expertise in northern New Mexico. FWRI GIS experts use remote sensing and technologies such as drones, LiDAR and 360-degree cameras to assess, monitor, and visualize forests in New Mexico and adaptive management applications.

Staff: The GIS Program Manager and GIS Specialists are primarily responsible for implementing the projects in Theme 2. The Special Programs Manager works with the GIS Team on some projects as well.

Outcomes:

Successful implementation of Theme 2 leads to:

- Fire managers able to make more informed decisions in planning and fire suppression or management by using effective decision-support tools
- Increased understanding and informed use of GIS and technology applications in natural resource management

Theme 2. Geospatial Analysis and Support	
Action	Audience/Outcomes
2.1 New Mexico Vegetation Treatment GeoDatabase	<u>Audience:</u> Land managers and NGOs; CFRP grantees; NMSFD; Tribal agencies <u>Outcome:</u> Working collaboratively with and receiving data from agencies across the state; Developing user-friendly GIS tools and providing training and outreach
2.2 GIS Support for the CFRP	<u>Audience:</u> CFRP grantees and proponents; USFS; interested public <u>Outcome:</u> Access to FWRI's CFRP monitoring spatial data online, project boundaries field plot locations with links to reports online; Use of this web map will result in easier access to monitoring data, and better project planning and future data collection
2.3 GIS Support for Place-based Collaboratives	<u>Audience:</u> Place-based collaborative groups; FWRI stakeholders <u>Outcome:</u> Host collaborative group websites and web mapping applications on our website, nmfwri.org
2.4 Geospatial Technology Training for Collaboration	<u>Audience:</u> Place-based collaborative groups; FWRI stakeholders <u>Outcome:</u> Improved application of geospatial technology to assist in coordination and implementation of conservation and restoration programs and projects; Develop training materials that cover geospatial data creation, management, and sharing techniques that will allow partners in collaborative to more easily work together
2.5 Geospatial Technology Training for Land Managers and Natural Resource Professionals	<u>Audience:</u> Watershed groups; CFRP grant recipients; Tribal agencies; landowners; NMSFD; and other agency personnel <u>Outcome:</u> Provide outreach to land managers and interested parties in the use of GPS / GIS / Drone technologies for natural resource management; Webinars and whitepapers will be used in place of in person trainings when not possible
2.6 Forest Visualization of Desired Conditions	<u>Audience:</u> Land managers and NGOs; range managers; private landowners; NMSFD <u>Outcome:</u> Ability to showcase desired conditions to a much larger stakeholder group online with no in person contact or travel required

Theme 3: Monitoring Ecosystem Response and Reducing Barriers to Adaptive Management

Budget: \$615,434

Purpose: The FWRI's Monitoring Program maintains a professionally managed field crew to collect data on short- and long-term ecosystem response to restoration treatments. Data contribute to a statewide monitoring data repository, and staff also manage a suite of analytical tools, build a database of groups participating in ecological monitoring, and improve statewide capacity for ecological monitoring and restoration work through monitoring protocol trainings and technical support.

Staff: The Monitoring Program Manager and Assistant Manager/Logistics are primarily responsible for implementation of Monitoring Program goals. The Monitoring Program includes three Monitoring Technicians/Crew Bosses, a Data Manager/Analyst, student field crews and

consultants. Consultants supplement staff expertise for Projects 3.4, 3.5 and 3.6. Other FWRI staff may assist with monitoring as needed. The Monitoring Program will need an IT contractor and possibly an analyst/statistician in FY22.

Outcomes:

Successful implementation of Theme 3 leads to:

- A strong and competent workforce in natural resources, as college graduates in forestry and conservation management with training and practical experience in field methods can transfer these skills directly to work in agencies and organizations
- Databases with quality data used in planning, management decisions, and research
- Better understanding on how to produce and maintain resilient, fire adapted ecological and human communities

Theme 3. Monitoring Ecosystem Response and Reducing Barriers to Adaptive Management	
Action	Audience/Outcomes
3.1 Monitoring technical assistance for restoration projects.	<u>Audience:</u> Land managers and NGOs; range managers; private landowners; work studies and summer interns. <u>Outcome:</u> Standardization and increase in quality of monitoring data
3.2 Survey and meet with partners to review overlapping monitoring protocols and how these robust indicators can form the basis of a shared monitoring strategy to support NMSFD's FAP	<u>Audience:</u> FWRI stakeholders; broader collaborators including CFRP and GRGWA groups; NMSFD <u>Outcome:</u> Statewide collection and use of consistent, robust monitoring data for adaptive management decision-making and in modeling vegetation treatments and wildfire
3.3 Capacity-building and technical support among interested partners, including exploring ways to expand student programming	<u>Audience:</u> Tribes: youth; Land Grants; SWCDs; stakeholders; HU students <u>Outcome:</u> Local organizations able to do their own monitoring, and able to carry out agency contracts for monitoring and possibly other restoration techniques; trained students and recent graduates
3.4 Develop a workflow to efficiently receive and compile monitoring data collected on restoration projects by partners in addition to our own.	<u>Audience:</u> FWRI stakeholders; broader collaborators <u>Outcome:</u> Use of our monitoring data for adaptive management decision-making and in modeling vegetation treatments and wildfire
3.5 Facilitate collaboration between UNM and other stakeholders; support outreach and dissemination of results.	<u>Audience:</u> NMSFD; land managers; NGOs; private landowners; Federal land management agencies <u>Outcome:</u> Improved placements of restoration treatments; Collaboration between UNM and other stakeholders
3.6 Coordinate FWRI participation in efforts addressing treatment prescriptions, prescribed fire, and managed wildfire.	<u>Audience:</u> Congress; Federal and state land management agencies <u>Outcome:</u> Federal, state, and local land managers have resources for decision making related to vegetation treatments and wildfire risk reduction

Theme 4: Collaboration and Partnerships

Budget: \$275,003

Purpose: The mission of the Collaboration Program is to build and expand effective collaborative capacity and organization, and serve as a resource for collaborative groups in New Mexico. FWRI staff will advance collaborative conservation by promoting and coordinating partnerships, developing collaborative capacity in rural communities, creating and leading networks of collaborative organizations, improving communications among collaborative groups and the public, and supporting administrative needs of volunteer groups.

Staff: The current staff includes a Collaboration Specialist and an Americorps VISTA volunteer working in technology for collaboration. The FWRI Director also participates in and coordinates collaborative groups and networks.

Outcomes:

Successful implementation of Theme 4 leads to:

- Strong relationships and partnerships among affected entities focused on a common landscape
- Increased knowledge and skill in collaborative techniques among leaders and coordinators as well as participants in collaborative groups
- A wider range of tools, including increased use of technology, available to collaborative groups to improve collaborative capacity and increase opportunities for collaboration

Theme 4: Collaboration and Partnerships	
Action	Audience/Outcomes
4.1 Statewide Operational Support to Collaborative Groups	<u>Audience:</u> Collaborative groups (especially new groups) and partnering organizations <u>Outcome:</u> Stronger collaborative group structure; Better coordination and communication; Documented plans, strategies, and assessments; New collaborative groups
4.2 Regional Collaborative Networking	<u>Audience:</u> Collaborative groups and partnering organizations <u>Outcome:</u> Peer-to-peer learning opportunities; Resources for collaborative groups on building capacity; Enhanced collaborations skills; Virtual networking of place-based collaboratives
4.3 Collaborative Maps and Technological Applications	<u>Audience:</u> Collaborative groups and partnering organizations; Funding and support entities; General public <u>Outcome:</u> Online maps showing locations of collaborative groups and support organizations with search capacity to identify information about each group; Increased skills with technological applications to support collaborative capacity
4.4 Creating Funding Opportunities for Collaborative Groups	<u>Audience:</u> Collaborative groups and partnering organizations; Federal and state land management and regulatory agencies; Facilitators, coordinators, and partners in collaborative groups and watershed associations <u>Outcome:</u> Guidance on organizing the distribution of funding to support collaboration; Funding for collaborative capacity-building and facilitation

4.5 Supporting Local Economies Through Collaboration	<u>Audience:</u> Collaborative groups and partnering organization; Community residents and leaders; Funding entities; Land management and regulatory agencies <u>Outcome:</u> Advancing sustainable and regenerative community economies through indirect development interventions
4.6 Shared Stewardship in Northern New Mexico	<u>Audience:</u> Collaborative groups and networks <u>Outcome:</u> Improved collaborative capacity in the Enchanted Circle Priority Landscape and the Rio Chama CFLRP; Increased understanding of human and social dynamics to promote better adaptive management practices

Theme 5: Communication and Public Information

Budget: \$155,401

Purpose: The Public Information Specialist develops videos, story maps, briefing papers, slideshows, posters, and articles that describe and highlight projects, and distributes these to media outlets, partners and affected entities. The FWRI also supports effective internal communication among FWRI and SWERI staff, and with colleagues at Highlands University.

Staff: The Public Information Specialist is primarily responsible for the projects in Theme 5. The Outreach and Education Coordinator and Assistant, the Conservation and Restoration Education Manager, and the Special Programs Manager also assist with the project in Theme 5.

Outcomes:

Successful implementation of Theme 5 leads to:

- Increased public knowledge of the programs and projects carried out by the FWRI, and their purposes and benefits
- Greater connection between the FWRI and the local population in Northeastern New Mexico, and the people of the State of New Mexico
- Better understanding among political and economic leaders of the work of the FWRI
- Professional, regularly updated FWRI website and social media, and increased use of the FWRI's Facebook, Twitter, Instagram, LinkedIn and other social media sites
- Professional papers and informational briefs on the work of the FWRI

Theme 5: Communication and Public Information	
Action	Audience/Outcomes
5.1 Expand the library of FWRI communication products	<u>Audience:</u> FWRI staff, partners and affected entities; HU faculty and students <u>Outcome:</u> Greater connection between the FWRI and the local population in Northeastern New Mexico, and the people of the State of New Mexico; Professional papers and informational briefs on the work of the FWRI
5.2 Build knowledge of the FWRI through public information	<u>Audience:</u> FWRI partners and affected entities; Federal, state, local and Tribal public officials and administrators; General public <u>Outcome:</u> Increased public knowledge of the programs and projects carried out by the FWRI, and their purposes and benefits; Greater

	connection between the FWRI and the local population in Northeastern New Mexico, and the people of the State of New Mexico; Better understanding among political and economic leaders of the work of the FWRI; Professional, regularly updated FWRI website and social media, and increased use of the FWRI's Facebook, Twitter, Instagram, LinkedIn and other social media sites
5.3 Enhance inter-SWERI communications	<u>Audience:</u> FWRI staff and SWERI alliance partners <u>Outcome:</u> Increased knowledge of FWRI programs and projects; Professional papers and informational briefs on the work of the FWRI and SWERI partners

Theme 6: Forest Operations, Economics and Utilization

Budget: \$99,378

Purpose: The FWRI is working to build a Forest Operations and Utilization Program focused on business capacity, opportunities for economic growth, and support for sustainable restorative and regenerative communities and local economies that stimulate forest restoration, as well as a second program in Sustainable Forest Restoration.

Staff: During FY22, the FWRI Director and Special Programs Manager will work with consultants and contractors on a needs assessment to better understand how to improve forest operations and to identify opportunities for utilizing and marketing small diameter timber and other opportunities for local economic development in the forestry sector.

Outcomes:

Successful implementation of Theme 6 leads to:

- The FWRI's goals and objectives for forest utilization and business development will be reconceptualized to develop strategies for working effectively with New Mexico's forest industry, and especially small operators, to improve forest operations
- Forest operators will increase their business capacity and business skills, understanding of markets, and innovation in utilizing small diameter timber
- Increased coordination and collaboration with NMFD, the New Mexico Forest Industry Association ("NMFIA") and individual forestry businesses, the ERI at NAU, and the New Mexico Department of Workforce Solutions to develop an approach to create a more resilient forest industry, to promote restorative and regenerative economic solutions in communities, and to contribute to building a forest industry workforce in New Mexico

Theme 6. Forest Operations, Economics and Utilization	
Action	Audience/Outcomes
6.1 Examination of the economic needs of industry and agencies.	<u>Audience:</u> FWRI Director and staff; Forest industry and NMFIA; Federal, State, Local and Tribal land management agencies including USFS and NMSFD

	<u>Outcome:</u> Coordinated effort to study the role of business in restoration and opportunities for more effective forest operations; coordinate with FWRI's institutional alliances and partners
6.2 Forest Restoration Protocols	<u>Audience:</u> FWRI staff, affected entities and partners, including agencies <u>Outcome:</u> Reports on protocols for restoration treatments in different ecosystems
6.3 Sustainable Forest Restoration Program	<u>Audience:</u> FWRI Director and staff, affected entities and partners <u>Outcome:</u> Strategic plan to develop a Sustainable Forest Restoration Program at the FWRI

Theme 7: Professional and Organizational Development

Budget: \$194,883

Purpose: Theme 7 addresses the well-being and professional development of FWRI staff, as well as the energy that staff put into advancing the development of the organization itself.

Staff: The FWRI Director and Special Programs Manager share primary responsibility for implementing Theme 7. The FWRI has an open search for an Assistant Director, who also will take responsibility for staff well-being under Theme 7.

Outcomes:

Successful implementation of Theme 7 leads to:

- FWRI staff members that are better prepared, more knowledgeable and better connected to other professionals in their fields by taking advantage of opportunities for professional development, including travel to professional conferences, and FWRI and SWERI retreats and workshops
- Increased means of communication and opportunities for cross-program collaboration among FWRI staff, resulting in stronger ties and coordination across FWRI programs and projects, better understanding of each of the FWRI programs, a strong staff esprit-de-corps, and staff retention
- Increased collaboration and communication with SWERI and FORT alliance partners

Theme 7: Professional and Organizational Development	
Action	Audience/Outcomes
7.1 Staff Professional Development	<u>Audience:</u> FWRI staff <u>Outcome:</u> Increased disciplinary knowledge and connections with other professionals; Presentations at professional conferences; Participation in 20 webinars and trainings
7.2 Organizational Development	<u>Audience:</u> FWRI staff, partners and affected entities <u>Outcome:</u> Additional staff and capacity; FY23 Work Plan and Budget; 2022 Annual Report; Staff retreats
7.3 Organizational Health and Well-Being	<u>Audience:</u> FWRI staff <u>Outcome:</u> Staff participation in educational field days and learning events;

	Staff represent the FWRI with clothing and items bearing the FWRI logo; Staff use safety equipment to conduct their work safely
7.4 Inter-SWERI and FORT Coordination	<u>Audience:</u> FWRI staff and institutional alliances <u>Outcome:</u> Stronger relationships among SWERI staff and partnerships among SWERI programs; Regular FWRI participation in SWERI workshops, leadership meetings, coordination meetings, and planning; Co-produced materials and resources by SWERI staff; FWRI participation in FORT Board meetings; FWRI staff teaching courses in the HU Forestry Dept.; HU Forestry faculty collaborating with FWRI staff
7.5 Diversity, Equity, Inclusion and Justice	<u>Audience:</u> FWRI staff <u>Outcome:</u> Staff training in DEIJ and increased awareness of DEIJ; Improved interactions between FWRI staff, partners and affected entities

COVID-19 Protocols

As this work plan was filed, the global COVID-19 pandemic continued to affect ordinary operations in workplaces around New Mexico. Some COVID-19 restrictions had recently been lifted, while others remained in place. As the pandemic entered its third year, HU and FWRI policies continued to stress protecting the health of staff by following guidelines and regulations issued by the Centers for Disease Control (“CDC”), the New Mexico Governor’s Office and public health officials, and the Office of the President of HU. COVID-safe practices included working from home, using personal protective equipment (“PPE”) effectively when interacting with others, maintaining appropriate distancing, and avoiding large gatherings, including face-to-face staff meetings and indoor in-person meetings with partners.

The FWRI will continue to prioritize the health of staff members, partners and affected entities, and will require safe practices as long as necessary over the coming year, while striving to complete all the deliverables described herein.

Calf Canyon-Hermit’s Peak Wildfire

In April, 2022, two wildfires ignited in the Sangre de Cristo Mountains west of Las Vegas, NM, and then merged and grew rapidly as a result of several severe wind events. As this work plan was being prepared, the Calf Canyon/Hermit’s Peak Wildfire grew to the largest fire in New Mexico history, covering more than 300,000 acres. In early May, the fire reached the edge of Las Vegas, and burned north into Mora and Taos Counties. The themes and projects presented in this work plan were developed before this wildfire started; however, it is likely that adjustments will be made to the FWRI’s work plan and work over the operational year as the FWRI, HU, the SWERI, the Las Vegas community and the FWRI’s partners in New Mexico address the fallout from this catastrophic wildfire.

Infrastructure Investment and Jobs Act of 2021

In November, 2021, Congress passed and President Biden signed the Infrastructure Investment and Jobs Act¹⁵ (“IIJA”) into law. The IIJA appropriated funding to the SWERIs as part of over

¹⁵ Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429, 1098–99 (Nov. 15, 2021). The IIJA is also known as the Bipartisan Infrastructure Law (“BIL”).

\$5 billion directed towards forest restoration and management, for projects to be implemented over the next five years. The IJA funding is supplemental to the annual Congressional appropriations that the SWERI receive each year, and infrastructure funding will be directed to specific projects as outlined in the IJA. These projects include a national geodatabase of vegetation treatments and associated projects that apply the geodatabase to better understand the effectiveness of vegetation treatments. IJA projects will complement the SWERI's work outlined in annual work plans; however, work related to IJA funding will be addressed in separate work plans and agreements that focus specifically on the projects described in the IJA.

Annual Report

The FWRI will prepare and publish an annual report highlighting the projects completed during the FY22 Operational Year. In the past, FWRI Annual Reports were produced in alignment with federal fiscal years (Oct. to Sep.). However, in 2022 the FWRI began producing Annual Reports to report on activities during calendar years. Thus, activities detailed in this Work Plan will be included in the 2022 and 2023 FWRI Annual Reports. Annual Reports are reviewed by partners and stakeholders, and when complete, the Annual Reports are posted on the FWRI website at: <https://nmfwri.org/about-us/annual-reports/>.

NMFWRI Fiscal Year 2022 Summary Federal Budget

Item	Cost
Salaries	\$1,025,969
Fringe Benefits	\$351,645
Equipment	\$54,642
Consulting	\$127,260
Supplies	\$88,007
Travel	\$190,364
Indirect @ 10%	\$162,113
TOTAL	\$2,000,000

The overall budget includes three categories of personnel costs and three categories of operational costs. Personnel-related budget categories include salaries for regular, term and temporary full- and part-time FWRI staff, fringe benefits provided by NMHU to employees, and temporary consultants hired for specific projects. Operational categories include equipment over \$5,000 in value, materials and supplies, and travel. The funder provides 10 percent of the total budget to NMHU for overhead costs.

Breaking down the budget by category, approximately 51% of the FY23 federal grant goes to salaries, 18% to fringe, 3% to equipment, 6% to consulting services, 4% to materials and supplies, 9% to travel, and 10% to NMHU overhead.