

Northern Arizona University University University University

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ReSHAPE Project

Wildfire and Treatment Effectiveness Mapping and Assessment 2021 Infrastructure Investment and Jobs Act

As a Congressionally authorized program, the <u>Southwest Ecological Restoration Institutes</u> (SWERI) includes three university-based restoration institutes: the New Mexico Forest and Watershed Restoration Institute (NMFWRI), the Colorado Forest Restoration Institute (CFRI), and the Ecological Restoration Institute (ERI) in Arizona. These institutes work together across the Southwest and Interior West to develop a program of applied research and service that helps create healthy forests, prevent wildfires, sustain the resiliency of water supplies to wildfires, and create jobs.

The SWERI have heard from policymakers, land management agencies, and the research community that there is a need to **compile and display existing information** on fuels treatment projects and wildfires at the national level, to **coordinate and facilitate the use of these data** for assessing, planning, and monitoring fuel treatment interactions with wildfires across boundaries, and to **analyze and report** on fuel treatment effectiveness. As a result, the SWERI are identified in the <u>2021</u> Infrastructure Investment and Jobs Act, commonly referred to as the "Bipartisan Infrastructure Law (BIL)," to undertake a national wildfire and treatment effectiveness mapping and assessment project.

The resulting effort being led by the SWERI to accomplish the work outlined in the BIL is the ReSHAPE Project. Within the scope of ReSHAPE, the SWERI will work with existing affected entities and partners, as well as forge new partnerships, to ensure that ReSHAPE both supports and enhances ongoing efforts to display information on fuel treatments and wildfires from the Department of the Interior (DOI) and USDA Forest Service, as well as add capacity where needed to facilitate the use and application of cross-boundary fuel treatment data to reduce the risk of catastrophic wildfire.

More information about ReSHAPE can be found here.

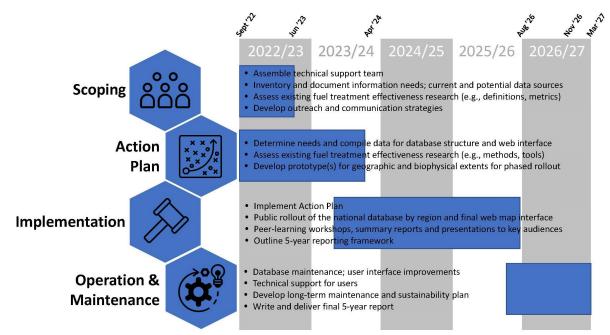


Figure 1. Diagram depicting the proposed timing of individual phases and associated tasks for *ReSHAPE, the SWERI BIL-funded wildfire and treatment effectiveness mapping and assessment project.*

Progress Update for Calendar Year 2022

- The SWERI developed a scope of work to accomplish the SWERI BIL provision that was approved by program coordinators in the USDA Forest Service and DOI Office of Wildland Fire (OWF). The Washington Office Fire and Aviation Management (FAM) in the USDA Forest Service holds the agreement, which was fully executed in September 2022.
- The SWERI are working in partnership with an advisory team at FAM, Forest Service Research and Development, and the OWF to accomplish ReSHAPE, which is the resulting project from the SWERI BIL funding. The scope of work for this multi-year, national project includes several phases (Figure 1), and specific deliverables:
 - <u>Phase 1 Scoping (through June 2023)</u>: SWERI will frame the audience and intended outcomes through a robust scoping process. We will leverage our subject matter experience and expertise to learn from partners and refine the purpose and need for ReSHAPE. We will convene a technical support team comprised of subject matter experts in the DOI, USDA Forest Service, and non-federal entities to ensure our scoping is extensive and sensitive to existing people, programs, products and platforms relating to cross-boundary fuel treatment data. (Deliverables: Communication Plan, Scoping Report)
 - <u>Phase 2 Develop Action Plan (through April 2024)</u>: Using the results from the scoping phase, we will co-develop with agency program coordinators and technical support team members a comprehensive action plan that accomplishes the specific tasks and deliverables outlined for SWERI in subsections (A), (B), and (C) (see SWERI BIL provision language <u>here</u>). (Deliverables: Action Plan, Prototype)
 - <u>Phase 3 Project Implementation (through August 2026)</u>: In this phase, we will implement the action
 plan. This will include phased rollouts of the national geospatial fuel treatment database and web map
 interface, ongoing assessment and facilitation of audience use of fuel treatment data and related spatial
 decision support tools, and assessment of fuel treatment effectiveness relative to wildland fire-related
 management objectives. (Deliverables: National Database, Portfolio of Peer Learning, and
 Presentations)
 - <u>Phase 4 Operation and Maintenance (November 2026 and beyond)</u>: The national database and web
 interface developed in Phase 3 will require updates, maintenance, and technical support for users. At the
 end of Phase 4, the SWERI will produce a final report documenting the national database and fuel
 treatment effectiveness analysis. (Deliverables: Final 5-Year Report)
- The scope of work provides a broad overview of the upcoming program of work for SWERI for the next 5 years to accomplish the BIL provision. Specific details will be provided in the project action plan.
- The SWERI hired Aaron Kimple as the Program Director of Cross-Boundary Fire and Fuel Treatment Assessments and Application. He will provide leadership, coordination, and operational direction and oversight for ReSHAPE. Aaron joined the SWERI in August 2022 and reports to the SWERI Directors.
- The SWERI are also in the process of hiring additional positions to support the Program Director, including a GIS Coordinator based at the NMFWRI, and a Coordinator at ERI to support reporting and operations.
- The Program Director has been leading SWERI staff and agency representatives through initial scoping to identify project needs and develop a strategy for meeting goals and deliverables identified in the first two phases of this project. This has included: development of a SWERI vision for the program, establishment of an advisory board, identification of scale and audiences, development of a timeline, identification of existing efforts, initial outreach to representatives of other projects, updates to affected entities, compilation of existing data and an initial map to inform further refinement of available data, data gaps, and data presentation, development of a questionnaire for potential users, development of a draft charter, development of a web page, and development of an initial outreach and communications plan.

Next Steps

Going forward, the SWERI will: finalize a communications plan; advance a detailed user profile; secure input from potential users; advance an action plan; and continue outreach to representatives for similar efforts.



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