ReSHAPE
Reshaping Wildfire & Fuels Reduction Information

INTRODUCTION

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 fuel 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 effects.

As a result, SWERI was identified in the **2021 Bipartisan Infrastucture Law (BIL)**, to undertake a national wildfire and treatment effectiveness mapping and assessment project. The resulting effort is the **ReSHAPE Project**.

Scan the QR code to learn more about the 2021 Bipartisan Infrastructure Law (Section 40803, Wildfire Risk Reduction).

SWERI
Southwest Ecological Restoration Institutes

Colorado State University | New Mexico Highlands University | Northern Arizona University

OUR PURPOSE

THE SITUATION
We do not fully understand the effects of fuel treatments on wildfire. There are a lot of data and multiple decision support tools and systems. The data are not easily accessible or applicable and the systems of record are not easily comparable.

THE NEED
Develop a tool that combines relatable data, presents it in a comprehensible way, allows users to easily query and download information, and facilitates analysis of fuel treatment effects.

ACTIONS TO MEET THE NEED
- Compile data from existing systems of record
- Make data relatable and downloadable
- Present data on an accessible platform
- Promote platform and facilitate use
- Evaluate and assess data needs, applicability of tool
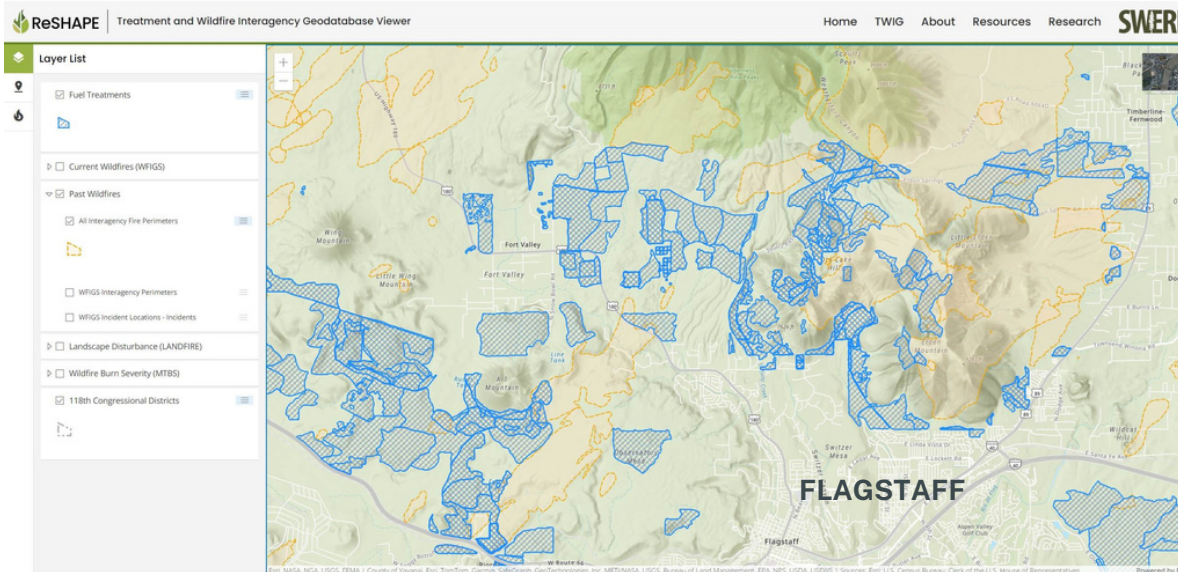- Research fuel treatment effects on wildfire

OUR COLLABORATORS

Through the resulting ReSHAPE Program, the SWERI are working closely with an advisory team at the **Department of Interior Office of Wildland Fire**, **Forest Service Fire and Aviation Management** and **Research and Development**, **National Association of State Foresters**, and are forging new partnerships to ensure that ReSHAPE incorporates, supports, and enhances and adds capacity to facilitate the use and application of fuel treatment and wildfire data.

OUR AUDIENCE

The SWERI recognize that, for ReSHAPE to be impactful, it needs to meet end user needs. Working with advisors and partners, SWERI defined ReSHAPE audiences and segmented them into user groups. Different users will have different objectives, data needs, and ways of engaging.

CONGRESSIONAL POLICYMAKERS & STAFFERS

RESEARCHERS

FEDERAL LAND MANAGERS

STATE-LEVEL LAND MANAGERS

TRIBAL LAND MANAGERS

COUNTY-LEVEL PLANNERS

PUBLIC

TWIG: TREATMENT WILDFIRE INTERAGENCY GEODATABASE

ReSHAPE will result in 1) a **geodatabase** that compiles existing fuel treatment and wildfire data from US Department of Agriculture Forest Service and Department of Interior systems of record from all 50 states and 9 territories, and 2) a **web-based map viewer and portal** that allows easy access to compiled data. This geodatabase and associated viewer are referred to as the ReSHAPE **Treatment & Wildfire Interagency Geodatabase (TWIG)**.

TWIG MAP VIEWER VISION:

SCAN ME

- User friendly web map
- Accessible and open data
- Intuitive and simple reporting and analysis tools
- No login or registration required to access information
- View, export summary reports based on political or geographic boundaries
- View treatment type, completion date, and funding sources

COORDINATION & FACILITATION

One of unique attributes of ReSHAPE is its emphasis on coordination and facilitation of TWIG. The SWERI have a long history of developing and translating best available information to facilitate forest restoration and ReSHAPE is no different. TWIG is being designed to be **iteratively refined**, **improved**, and **supplemented** with additional data and applications so that it is useful to end users and meets their needs. This approach will also allow SWERI to effectively supplement and integrate into other existing efforts and avoid duplication with ongoing work.

RESEARCH & REPORTING

The SWERI focus on coordination and facilitation of TWIG will be supplemented by **research expertise in three areas**: 1) research exploring effects and metrics of forest treatments on wildfire behavior; 2) analysis of large datasets, such as those used by TWIG, to assess the data, comparability, quality, and determine any gaps or additional information needed to apply the information; and 3) social science that will advance understanding and practice of collaborative, collective decision-making and action-taking utilizing geospatial data and decision-support products in wildland fire management.

CONTACT: Aaron Kimple, Program Director, SWERI ReSHAPE, *Aaron.Kimple@nau.edu • reshapewildfire.org*