

Project Contacts: Heidi Huber-Stearns at hstearns@umich.edu; Michelle Greiner at Michelle.Greiner@colostate.edu; Laurel Harkness at laurel@ruralvoicescoalition.org

Congress has made historic investments in fuels management activities - including prescribed fire - through the passage of the Infrastructure Investment & Jobs Act (IIJA) and the Inflation Reduction Act (IRA). To effectively deploy this influx of funds at the scale required and across land ownerships, state and federal land management agencies will need to augment their limited capacity through local partners.

Natural resource and land stewardship organizations are increasingly building their prescribed fire skills. However, since many of these organizations have not historically participated in federal wildfire response or suppression efforts, government agencies are less familiar with who these actors are and what they can accomplish. The Forest Service and other agencies have acknowledged this information gap and articulated the need for a better understanding of partner skills and capacity.

In the Fall of 2022, a multi-partner team conducted a national online survey to reach actors outside of state and federal agencies that support, plan, or implement prescribed fire. The four primary survey objectives were: **1) understanding the population of organizations** that engage in this work; **2) identifying their capacities and resource needs**; **3) gauging how they may be impacted by the current scarcity of prescribed fire insurance**; and **4) determining how federal resources could be invested** to support this workforce.

SUMMARY OF KEY FINDINGS

The 137 surveyed organizations would welcome additional funding to expand their workforce, partnership strategies, and prescribed fire implementation. Collectively, these organizations represent a significant federal investment opportunity of up to \$300 million in IIJA and IRA funds.

Significant Funding Opportunity

Organizations need greater support for administrative capacity. This support is an expressed need, both for maintaining current operations and to grow capacity under enhanced funding scenarios. Multi-year, secure funding is needed to hire qualified, full-time staff to manage projects, administer contracts, improve workforce retention and hiring, and better plan for the future.

Organizations also identified a need to increase knowledge of and access to entities that help write and administer grants.

Ability to Grow

Under current operational conditions, organizations collectively estimated how much additional funding they could capitalize on to expand operations:

In the next 1-3 years, organizations collectively projected a capitalization of up to \$165 million.

Most were interested in < \$500,000.

In the next 4-10 years, organizations collectively projected a capitalization of up to \$657 million.

Half were interested in < \$500,000 and half were interested in > \$500,000.

RECOMMENDATIONS

In light of ongoing barriers, certain funding streams and policy solutions would enhance the prescribed burn programs of local organizations. These include:

1 Establishing dedicated and longer-term funding streams to support capacity building and to provide security for partners to offer trainings in effective business processes that allow them to scale up prescribed fire implementation. This includes:

- **Establishing consistent funding sources and agreement structures.**
- **Prioritizing funding that increases community involvement in prescribed fire** beyond implementation, mainly via directed cost-share funding agreements and grants.

2 Improving the availability and quality of prescribed fire/smoke liability insurance. Most organizations would increase prescribed fire implementation if costs for insurance premiums and deductibles were reduced and policies were enacted that specifically classified and supported prescribed fire through multi-year policies.

3 Dedicating separate and streamlined funding for facilities and equipment that is not “owned” by federal agencies. Prescribed fire implementers should be able to purchase equipment (e.g., utility-task vehicles, protective gear, trucks with slip-on units) with federal dollars that they then own long-term. This would reduce the administrative burden such as tracking equipment purchases over \$5,000, confusion about who ‘owns’ equipment, and how it is properly disposed of when no longer functional.

4 Supporting pathways for non-federal partners to advance their fireline qualifications through enhanced training opportunities, cooperative burning partnerships, and implementation. Actors need access to qualifications management that has interoperability with state and federal partners.

5 Investing in a national prescribed fire catastrophe or claims fund to address risks of prescribed fire escapes or damages when burn practitioners adhere to identified best practices.

6 Identifying and supporting opportunities to reduce implementation barriers related to air quality and weather. This may include investing in community and land manager prescribed fire outreach programs, supporting direct work between land managers and air quality regulators at the local and state levels, and addressing other non-weather related constraints to burn windows.



C/ Monk Barth



Kara Karboski



Kara Karboski

ABOUT THE SURVEYED ORGANIZATIONS

This survey identified local and non-governmental entities in the U.S. that support or implement prescribed burning.

The 137 organizations who completed the survey reported a collective 2,400+ full-time employees, 3,700+ employees of various types, and 12,000+ volunteers who currently support, plan, or implement prescribed fire.¹

Most organizations that responded have **less than 10 paid employees, and 42% had 5 employees or less.** In aggregate, volunteer labor is a notable component of overall prescribed fire capacity nationally, representing almost double the number of paid full or part time/seasonal employees.

137	Total organizations
47	Nonprofit organizations
31	Private businesses
24	Prescribed Burn Associations
35	Others <i>Includes special districts, local fire districts, municipalities, nonlegal entities conducting burns together, and Tribal entities.</i>

Organizations reported their skills and capabilities as:



Examples of skills and capabilities:

Cultural Burns: Cultural burning practices, intertribal coordination, and support.

Training: Classroom or experiential training, fireline qualification management, curriculum development.

Workforce: Developing, and/or managing a qualified and equipped workforce (e.g., burn boss).

Organization Administration: Management of funds, agreements, liability, and/or contracts.

Support: Grant writing, fundraising, priority setting.

Communication and Outreach: Outreach to landowners, residents etc., advocacy, educational material.

Planning and Implementation: Assisting or leading prescribed fire application, burn planning, and permitting.

Equipment: Owning large, small, and/or personal protective equipment (e.g., engines, drip torch, drones).

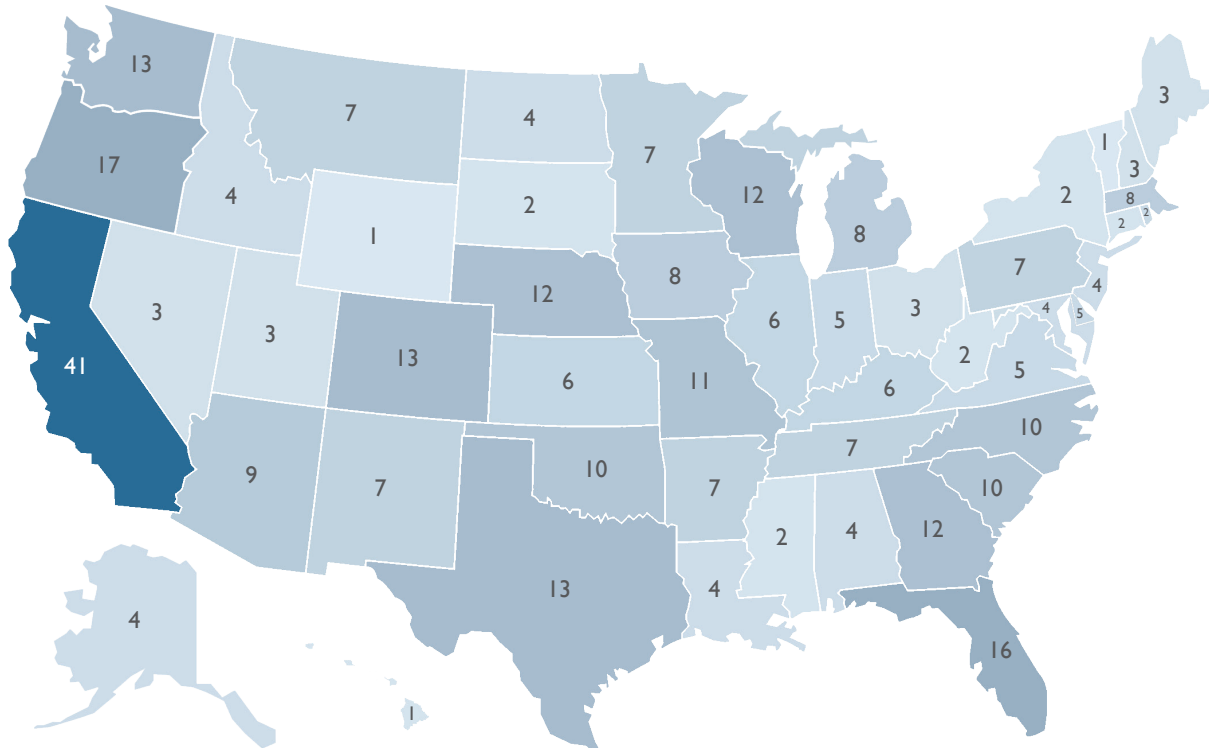
¹ Two nonprofit organizations had multiple state or regional chapters that responded individually to the survey. These individual responses are reflected in our results even though they are aggregated under their main organization for the total number of organizations that completed the survey. This population does not represent the entirety of US actors outside of state and federal agencies that support, plan, or implement prescribed fire. Our work is an initial effort to document the scope of the local prescribed fire workforce and their capacities, which is otherwise largely unknown. To comprehensively capture this population, further studies are needed with targeted recruitment and expanded data collection methods.

ABOUT THE SURVEY ORGANIZATIONS

Where organizations operate

Headquartered in over 30 different states, respondents represented organizations that support, plan, and/or implement prescribed burn operations. They operate at a range of scales, from local (watershed) level to multi-county or multi-state scales.

States where survey respondents have supported, planned, and/or implemented prescribed burn operations.



ABOUT THE PROJECT

This joint research effort was led by partners at [Colorado State University](#), [University of Michigan](#), [Rural Voices for Conservation Coalition](#), the [Fire Learning Network](#), and the [Watershed Research and Training Center](#).

These results are based on a national survey from fall 2022. A full report for the western U.S. will be available in Winter 2023. (CSU Institutional Review Board #3827)

RESEARCH TEAM: Heidi Huber-Stearns and Yulin Chen, University of Michigan; Michelle Greiner and Courtney Schultz, Colorado State University; Becca Shively, Rural Voices for Conservation Coalition.

PROJECT WEBSITE: www.ruralvoicescoalition.org/rxfiresurvey

ACKNOWLEDGMENTS: Support for this project was provided by Resources Legacy Fund, William and Flora Hewlett Foundation, and The Kathy and Steve Berman Western Forest and Fire Initiative at University of Michigan.

