

**RVCC** Rural Voices for Conservation COALITION

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# TRINITY INTEGRATED FIRE MANAGEMENT PARTNERSHIP

A CASE STUDY

FEBRUARY 2019/

## TRINITY INTEGRATED FIRE MANAGEMENT PARTNERSHIP

A cross-boundary, multi-partner effort to reduce hazardous fuels and improve forest health and wildlife habitat by building the local capacity to plan and implement cooperative prescribed burning in northern California.

## **ABOUT THIS CASE STUDY**

Working across public and private boundaries, or on "all lands", is essential to address the ecological and economic challenges that communities in the rural West face. The Rural Voices for Conservation Coalition (RVCC) helps foster successful all-lands efforts through a multi-pronged approach of knowledge, tools and products, peer exchanges, and policy learning and actions. RVCC's case study series illuminates examples of all-lands projects, including how effective partnerships are built and necessary programs, tools, and authorities are acquired and combined. This case study was developed with assistance from the Watershed Research and Training Center, and interviews with Cal Fire and US Forest Service personnel.

Ecosystem Workforce Program

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University

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Rural Voices for Conservation

COALITION

## **ABOUT RVCC**

RVCC envisions healthy landscapes and vibrant rural communities throughout the American West. We are committed to finding and promoting solutions through collaborative, placebased work that recognizes the inextricable link between the long-term health of the land and the well-being of rural communities.

## PRIMARY PROJECT PARTNERS & COOPERATORS



The Watershed Research and Training Center (WRTC) Shasta-Trinity National Forest Six Rivers National Forest (SRF) Cal Fire Trinity County Resource Conservation District (RCD) Bureau of Land Management Natural Resources Conservation Service (NRCS) Trinity Fire Safe Council North Coast Unified Air Quality Management District Local fire departments Private contractors Private landowners

# PRIMARY ACTIVITIES & OUTCOMES TO DATE

| $\checkmark$ | Training and development of a multi-partner prescribed fire workforce.  |
|--------------|---|
| $\checkmark$ | National Environmental Policy Act (NEPA) planning on private lands to implement prescribed fire with federal partners.  |
| ✓            | Implementing 12 distinct cooperative burning projects on public and private lands between 2014-2017. A total of approximately 900 acres have been treated to date: 300 on the Shasta-Trinity National Forest, 50 on the Six Rivers National Forest and 550 on private land. |
| $\checkmark$ | A first cross-boundary burn spanning two adjacent units of National Forest System and private lands in the Weaver Basin area in fall 2017.  |
| ✓            | Approximately 3500 acres are currently under burn plans on private lands, and the Forest Service has approximately 24,000 acres planned or in-planning across the two forests. Implementation will be contingent upon future funding and staffing.                          |
| $\checkmark$ | Demonstration that it is possible to burn relatively seamlessly across landownership boundaries with a crew of mixed personnel.   |
| $\checkmark$ | Robust communication with communities about potential smoke impacts, and public support for burning.  |

| Partner   | Туре  | Roles Local Partner State Partner Federal Partner  |  |
|---|---|--|--|
| Watershed Research<br>and Training Center<br>(WRTC)       | Local NGO                                   | <ul> <li>Overall coordinator</li> <li>Partner in participating agreement with Forest Service leader/contractor of third-party NEPA process on private lands</li> <li>Developer of prescribed fire plans/smoke management plans/burn permits</li> <li>Provide their own hand crews and engines to work under supervision of USFS on prescribed burns on national forest land</li> <li>Provide qualified burn boss and oversight of prescribed burns on private land</li> <li>Provide training and qualifications management for Trinity County RCD, prescribed fire training for volunteer fire department personnel</li> </ul> |  |
| Cal Fire  | State agency                                | <ul> <li>Provide permits, work with burn boss to mitigate any items identified, lead burn planning and implementation through their Vegetation Management Program</li> <li>Provide personnel to assist in preparing burn units</li> <li>Provide standby fire protection assistance (personnel and engines for holding) during implementation of WRTC-led burns</li> </ul>  |  |
| Shasta-Trinity National<br>Forest (STNF)                  | Federal agency                              | <ul> <li>Enter into participating agreements with WRTC and partners</li> <li>Provide concurrence and approval of WRTC NEPA on private land</li> <li>Provide qualified burn boss, staffing and oversight of prescribed burns on STNF land</li> <li>Provide personnel and equipment to assist with burning on private lands through Wyden Authority and participating agreement</li> </ul>   |  |
| Six Rivers National<br>Forest (SRNF)                      | Federal agency                              | <ul> <li>Enter into participating agreements with WRTC and partners</li> <li>Provide qualified burn boss, staffing and oversight of Rx burns on SRNF land</li> </ul>   |  |
| Natural Resources<br>Conservation Service<br>(NRCS)       | Federal agency                              | <ul> <li>Pre-treatment funding support through EQIP program with anticipation of eventual<br/>EQIP funding for burn planning and implementation</li> </ul>   |  |
| Bureau of Land<br>Management (BLM)                        | Federal agency                              | <ul> <li>Enter into contracts and agreements with WRTC and partners</li> <li>Provide qualified burn boss, staffing and oversight on BLM-managed lands</li> </ul>   |  |
| Trinity County Fire<br>Safe Council                       | Local council                               | • Facilitate strategic planning and provide platform for coordinating resources  |  |
| Trinity County<br>Resource Conservation<br>District       | Local conservation<br>district              | <ul> <li>Work through WRTC training to qualify their fuels crew for prescribed fire</li> <li>Work as a contractor to WRTC to provide personnel assistance in burn implementation</li> </ul>  |  |
| North Coast<br>Unified Air Quality<br>Management District | Air quality regulators                      | Review and issue permits for smoke management plans and burn permits   |  |
| Volunteer fire<br>departments                             | Local fire<br>departments                   | Provide engines and personnel for burn implementation  |  |
| Private contractors                                       | Businesses                                  | <ul> <li>Provide a Type 2 Burn Boss and liability insurance for WRTC-led burns on private land</li> <li>Intermittently provide additional resources including personnel and engines as needed</li> </ul>   |  |
| Private landowners  | Non-industrial and<br>industrial landowners | Provide land for implementation of prescribed burns  |  |

| Program, Tool, or Authority  | Purpose  |
|--|--|
| Master participating agreement between WRTC and USFS   | Documents overall cooperation between WRTC and USFS for<br>implementation of prescribed fire activities including risk-sharing and sharing<br>of equipment and human resources |
| Supplemental project agreements between WRTC and USFS  | Documents cooperation between WRTC and USFS for prescribed fire training opportunities on specific prescribed fires  |
| Contracts and agreements with volunteer fire departments (VFD)                                     | Documents cooperation between VFDs and WRTC for prescribed fire<br>training opportunities and implementation needs including agreed-upon<br>rates for personnel and equipment  |
| Annual National Wildfire Coordinating Group (NWCG) firefighter training                            | Required qualifications for serving as a wildand firefighter on federal lands<br>and in cooperative agreements with federal agencies   |
| US Fish and Wildlife Service's Partners in Conservation Program                                    | For planning and implementing pre-treatment and prescribed burns on private lands to meet wildlife habitat objectives  |
| California Deer Association Habitat Improvement Grants   | For implementing prescribed burns on private lands to meet wildlife habitat objectives   |
| California Fire Safe Council Clearinghouse (USFS State Fire<br>Assistance funds)                   | For burn planning, environmental compliance, permitting and implementing prescribed burns  |
| Stevens Act (Hazardous Fuels) funds  | For planning prescribed burning on private lands   |
| Multiple Fire Learning Network master agreements held by TNC                                       | To create larger enabling conditions for planning, firefighter training, and implementation  |
| Scaling-up to Promote Ecosystem Resiliency (SPER)  | Administered through cooperative agreement with USFS to plan and create enabling conditions for cooperative burning  |
| USFS Hazardous Fuels Reduction annual appropriations and stewardship contracting retained receipts | For planning and implementing prescribed burning on federal lands  |





Organizing shared work across ownership boundaries, organizations, and partners requires stitching together funding and planning using a variety of authorities, contracts, and funding sources. With this project, several programs, tools, and authorities had to be combined over time to:

- 1. Develop a supportive environment for cross-boundary prescribed fire in the region
- 2. Build local cross-trained prescribed fire capacity
- 3. Obtain necessary planning and permission for prescribed burns based on federal regulations
- 4. Implement the burns

Timing-wise, the WRTC and partners built the workforce and implemented single-jurisdiction burns; then received federal funds to support "seamless" cross-boundary burning that necessitated a NEPA process and Forest Service permission for private lands involved. Generally, identifying resources and figuring out how to use them relied on several means: drawing on a network of partners with experience for ideas and examples, constantly searching a wide array of potential funding sources for different aspects of the project, and reaching out and negotiating across various scales of the Forest Service up to the Washington Office level for support and permission.

**Developing a supportive environment** for using more prescribed fire and working across boundaries was necessary given the risks and novelty of these approaches. Years of prior work by The Nature Conservancy's Fire Learning Network, California Fire Safe Council, California Prescribed Fire Council, and Fire-Adapted Communities Network has occurred to explain the need and issues, and to outline a case for why and how this could be possible across northern California. This built a network of partners, resources, and political and organizational support that entities like the WRTC could then draw on in figuring out how to actualize cooperative prescribed fire programs in their own areas.

**Building the local capacity required** and obtaining necessary training and qualifications for each individual. The WRTC already had a crew of forestry technicians experienced in other areas such as chainsaw operation, timber cruising, stand exams, and layout. These personnel took required wildland fire suppression training to become Firefighter Type II. The National Widlfire Coordinating Group provides standards and procedures for this that are well-established. The WRTC also has acquired resources including two Type 6 engines, radios, and personal protective equipment. They built these items into grants and agreements budgets wherever it would be an allowable cost. In addition, the WRTC hosted cooperative trainings for VFDs, hosted the NorCal TREX (prescribed fire training exchange) five times, and provided Firefighter II annual refresher training for the Trinity County RCD personnel.

**Implementing single jurisdiction burns** came before cross-boundary burning. To enable personnel from different agencies and organizations to work together on a crew, agreements and other mechanisms were necessary. A five-year master participating agreement was signed in 2011 between the WRTC and Shasta-Trinity National Forest to document overall cooperation for implementation of prescribed fire activities and sharing of human resources; and a second similar agreement was created once the first was expiring. In 2013, a similar master agreement was established between WRTC and the Six Rivers National Forest. Supplemental Project Agreements pursuant to the master agreements were developed to outline more specific roles and responsibilities for specific burns. These types of agreements are commonly used between the Forest Service and partners for activities with mutual contributions and benefits. The WRTC was already familiar with these due to their prior work implementing other projects for fuels reduction and forest health on Forest Service lands, but also sought support from The Nature Conservancy (TNC), who has experience with training and administering mixed-personnel crews working on multiple jurisdictions. TNC provided sample agreements and utilized their legal council to help WRTC's Board of Directors understand their risk and exposure. The WRTC and the local national forests needed to go to

the Washington Office level of the Forest Service to get support for using these agreements for these purposes.

**Combining multiple funding sources** required the WRTC to seek diverse resources for burn planning, equipment, and implementation of burning on both public and private lands. They obtained and "stacked" funding sources for the various stages of project development and implementation, with some sources funding only planning (both burn planning and environmental compliance), some funding only pre-treatement activities (e.g. hand thinning, piling, control line construction), and some funding only specific portions of implementation (for instance, only specific burn units based on vegetation characteristics or land ownership).

**Planning a truly cross-boundary burn** was challenging as the WRTC had pursued Stevens Act funding to support prescribed burning, which triggered a requirement for NEPA analysis on involved private lands.

To obtain the support and engagement of local Forest Service personnel, the WRTC and partners had to take several steps at different scales of that agency to identify field-level personnel and examples of prior private lands NEPA by asking the Regional Office, and assess willingness from the local line officers. They also then had to interface with the local interdisciplinary team members to figure out who would be on a team, what type and standards of NEPA would be used, and how to fit into their schedule of planned work and budget. Line officers had to work up their chain of command to obtain permission to engage in private lands NEPA as well. Given Forest Service time and budget limitations, this NEPA process was eventually conducted as a Categorical Exclusion by the WRTC staff and subcontractors, and the Forest Service's local wildlife biologist, forest archaeologist, and line officers provided review of specialist reports and concurrence.



Aligning personnel and communications on the first cooperative burn: The Forest Service was not comfortable having the Trinity RCD crews work on federal land because the RCD does not have its own independent agreement with the Forest Service; they were there under contract with the WRTC. The RCD contract and policies also did not clearly provide for staff overtime. RCD personnel worked only on the private lands and left the burn earlier than others. In addition, there were limitations in radio communication and sharing tactical channels due to the varying technologies and standard operating procedures of different partners.

**Possessing appropriate liability and personnel:** To lead a burn, there is typically a need for a three to five million dollar liability policy that covers the burn boss explicitly. This is a TNC standard operating procedure that the WRTC adopted as well. The WRTC engaged a contracted Type 2 burn boss from a local business to provide this capacity. But this capacity is limited regionally, which is becoming more of an issue as the CA Prescribed Fire Council, TNC, and others continue to promote more prescribed fire and cross-boundary partnerships to achieve it. There are insufficient numbers of people with these qualifications. As a result, good burning windows have been missed in the past.

Accomplishing burns within available regulatory windows and seasonal conditions: As California's active fire season now extends into the fall and winter, two issues arise. One is that conditions may be less suitable (drier fuels, lower relative humidities, higher temperatures, higher winds) during what was historically a desirable time to burn. Another is that with wildfires occurring around the state, qualified personnel and resources may not be as available to participate in prescribed fire. Even when there is not a resource drawdown because of active wildfires, resource readiness can prevent federal and state fire organizations from commiting resources to prescribed fire.



## **KEY STEPS AND ENABLING CONDITIONS**

Support through The Nature Conservancy Fire Learning Network over several years. This funding is not broadly available and made a huge difference in supporting start-up planning, training and partnership development work. It was essential to pair this and other capacity building funding with more limited program or project-specific sources for implementing the work.

Air Quality Management District and state of California state smoke management rules are relatively straightforward and generally trend towards authorizing burns when smoke impacts can be reasonably managed.

Years of deep investment in multiple relationships.

Required years of investment from multiple funders to address different landownership and partner needs to build the case.

Ensuring that local capacity for prescribed fire was built in preceding years as described: hosting cooperative trainings for volunteer fire departments, hosting the NorCal TREX, and providing an annual NWCG S-130/190 firefighter II training for WRTC and Trinity RCD crews. This increased agency comfort with having non-agency crews/personnel as active partners while burning.

Turnover in both the Forest Service and partner organizations was relatively limited during this time, so as experience and comfort was built, it was also retained.

Enthusiasm and support from fire management staff from the local to the Regional Office in the Forest Service created vertical alignment around a willingness to try incorporating external partners into prescribed fire, despite the risks and novelty of doing so.

Use multiple and strong forms of communication to prepare for smoke management. Partners included smoke management plans in the burn plans, seasonal public notifications on where they plan to burn, burn-day notifications to neighbors, sensitive receptors and public agencies, and many other public communications around prescribed fire and smoke management.

Starting with simpler projects—single jurisidications, doing pile burns and small broadcast burns, using simple incident management structures with one leader, before moving to burn across boundaries.

Circumstances matter: a nice clear, dry fall day with good smoke dispersion helped the first cross-boundary burn go well and become a good example.

## **LESSONS LEARNED**

### Funding Source Focused on Capacity Building



Flexible funding sources focused on capacity building allow time for partnership development and figuring out how to truly "stitch" together the programs and authorities. Even if templates and examples are collected, it still takes work to identify how they can really be used in a given place, and to pay attention to the intersections, requirements, and contradictions between different resources and tools; this work is not typically funded.

### Develop Supporters at Different Scales



Develop a broad net of multiple types of supporters at different scales so that they can help provide examples, experiences, and legitimacy and make the case for cross-boundary implementation of prescribed fire.

### Allow Time for Relationships and Permissions at Each Level



When working with multi-scaled agencies like the Forest Service, time especially needs to be spent in navigating relationships and permissions at each level, depending on where the authority and leadership on an issue exists.

### Manage the Real Risks to Increase Comfort



Manage the real risks that each party faces by exploring, acknowledging, and addressing them to increase comfort. This can include training, ensuring wildland fire standards are being followed, and using proven models.



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