Credit: Ann K. Olsson

Can We Reduce Risk of Catastrophic Fire?

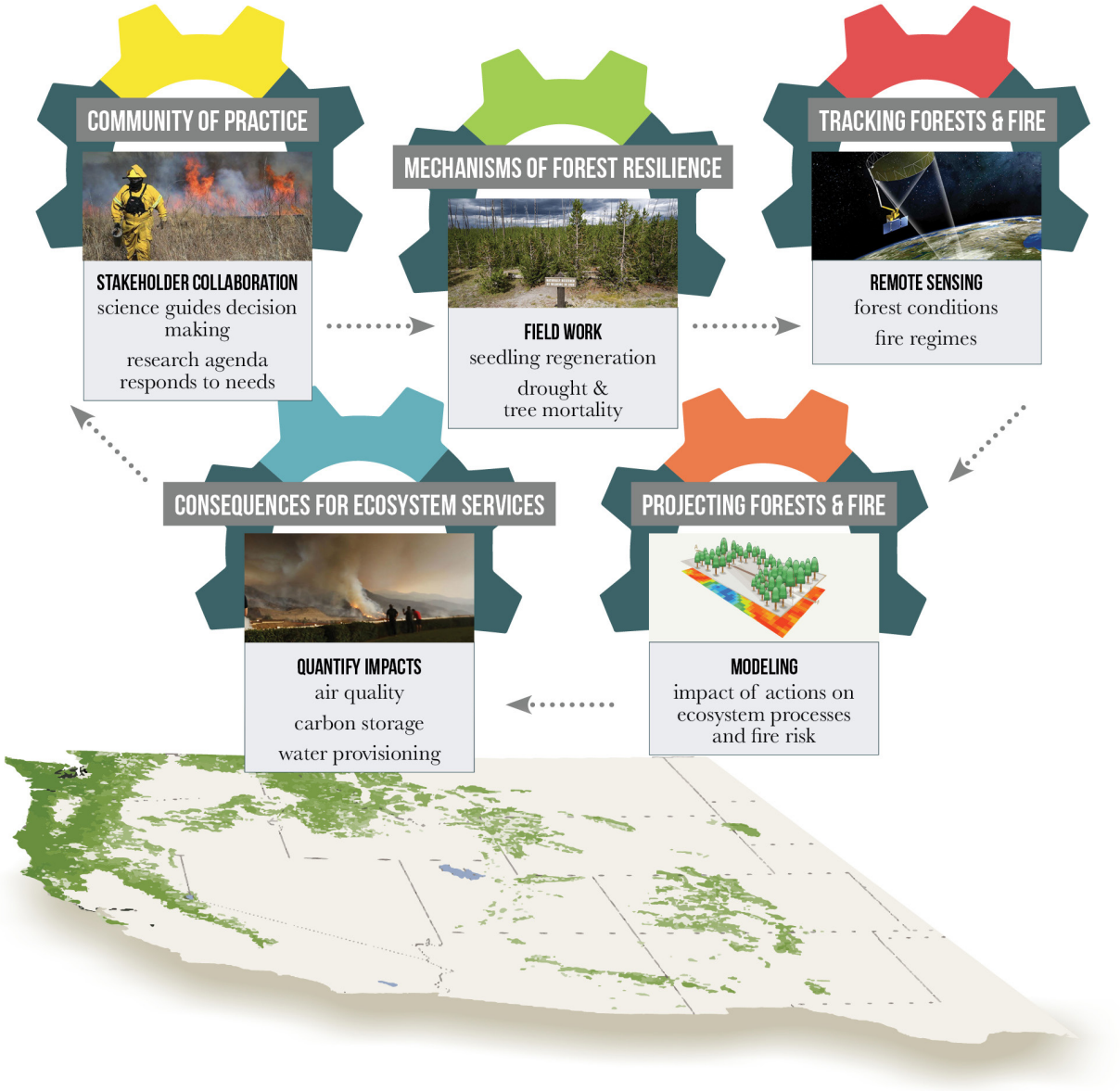
In the western US, climate change and a century of fire suppression have led to rapid increases in the size and severity of forest fires. Managers and policy makers are responsible for safeguarding people, livelihoods, property, and natural resources. This includes managing fire and fuels, monitoring air quality, conserving biodiversity, and tracking the land's ability to sequester carbon.

While unprecedented federal, state, and private resources are available to address the fire crisis – the scope of the problem is so vast that spending must be targeted to ensure multiple goals are met using the best science. Logistical barriers continue to constrain implementation, however, we also still do not know how solutions scale today nor how future climate change will shape outcomes. Effective coordinated strategies will rely on understanding where, when, how, and why ecosystems and fire regimes are changing now and will change in coming decades.

By partnering with the fire-management and policy community, **we are co-creating and implementing a research program that ensures the predictive science of fire ecology and forest resilience is sufficiently mature to support effective strategies to the fire crisis.**

Western Fire & Forest Resilience Collaborative

Cary Institute of Ecosystem Studies



Key Objectives

- Build a community of practice that ensures the research agenda is responsive to decision-maker needs and that the best available science guides decision making and adaptation.
- Understand and predict where and when the risk of non-reversible forest reorganization or transition to grasslands and shrublands is greatest and identify the mechanisms that may underpin forest change.
- Quantify how fire regimes and resulting forest structure and function are changing across the western US.
- Identify the drivers of observed trends in forest fire, project how forests and fire regimes will continue to change in the future, and evaluate how current and future stewardship actions may shape future outcomes.
- Determine current and future consequences for people, biodiversity, and ecosystem services essential to human well-being and economies.

Watch our video:
www.westernfireforest.org