

Rocky Mountain Research Station

PODs at a glance

The PODs process is more than drawing containers on a map—it is a cross-boundary, collaborative engagement that translates into operational strategies once fire is on the ground.

The Potential Operational Delineations (PODs) process is a framework for cross-boundary, collaborative, and integrative fire planning that can support place-based implementation of the [National Cohesive Wildland Fire Management Strategy](#). PODs are based on best available science about fire operations and risks to communities, ecosystems, and responders. The PODs process is holistic. It brings together local managers and stakeholders to plan for future fires using a sophisticated science framework.

The research and data analysis underpinning PODs heavily support Risk Management Assistance (RMA) on real time fire incidents. PODs are also being used by resource managers to proactively define meaningful projects, plan fuels management, and conduct prescribed fire. PODs are used as a learning tool to manage and mitigate risk, rather

than avoid it. This process helps reinstate balance in fire-dependent ecosystems. The PODs framework allows for continuous development of new, risk-informed approaches to address emerging wildland fire management challenges.

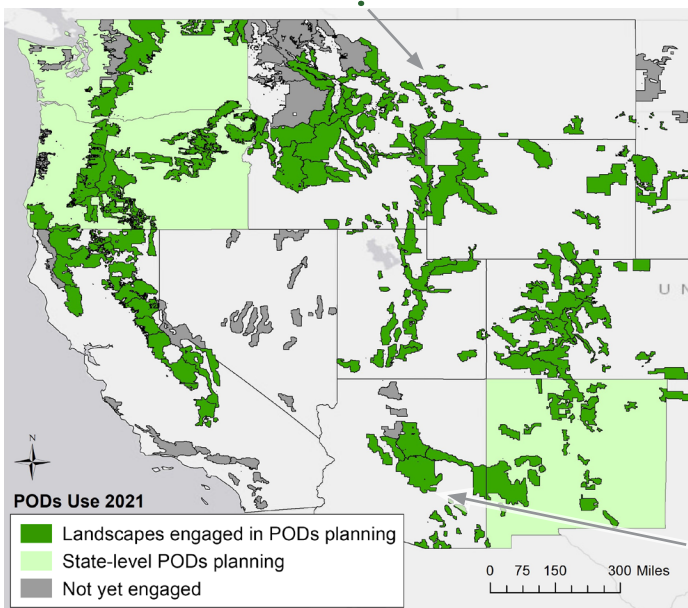
What are PODs?

- PODs are fire management and planning units.
- PODs have boundaries defined by potential control features that can be leveraged for fire containment during a wildfire or prescribed fire. Typical POD boundaries are a combination of roads, rivers, major ridges, barren areas, waterbodies, major fuel changes, or other locations that facilitate control.
- The process of developing PODs is done collaboratively by local wildland fire managers, stakeholders, and scientists.
- Collaborators identify a network of best available control features, often using analytical tools to assess the feature's quality and suitability.
- When paired with a wildfire risk assessment, PODs can be used to quantify and summarize risk into strategic response zones that provide the starting point for strategic planning of incident response.

About the Wildfire Risk Management Science Team

The [Wildfire Risk Management Science \(WRMS\) Team](#) housed at the [Rocky Mountain Research Station](#) develops and applies risk analysis, economics, and decision science research to improve the scientific basis for wildfire management. The WRMS Team has a very productive relationship with Forest Service Fire and Aviation Management (FAM) that ensures WRMS science meets the needs of and advances the agency's

PODs and RMA provided information to managers on the 2021 Balsinger Fire to ensure fire responder safety by helping evaluate the limited suppression operations.



The 2017 Pinal Fire leveraged a PODs network to burn nearly 7,200 acres for resource benefit and risk reduction objectives. Four years later, the Pinal footprint protected the communities surrounding Globe, AZ during the 2021 Telegraph Fire.

goals. The team's scientists create actionable knowledge through continual learning and management partnerships which improve the science behind PODs and better support the needs of practitioners who are using PODs on the ground. The WRMS Team develops scientifically backed tools, processes, and information to help manage risks.

WRMS provides the science behind the Risk Management Assistance Dashboard

Data and models developed by the WRMS Team for PODs underpin [Risk Management Assistance](#). RMA informs decision making by using models during real time fire incident response. For example, RMA identifies snag hazards to fire responders and locations where responders can potentially contain the fire. PODs and RMA largely share a common set of scientists, analysts, and analytics. PODs are used as a proactive planning process while RMA is responsive. The

PODs were co-developed by managers in the National Forest System in partnership with scientists at the U.S. Forest Service Rocky Mountain Research Station, the Colorado Forest Restoration Institute, and Oregon State University.

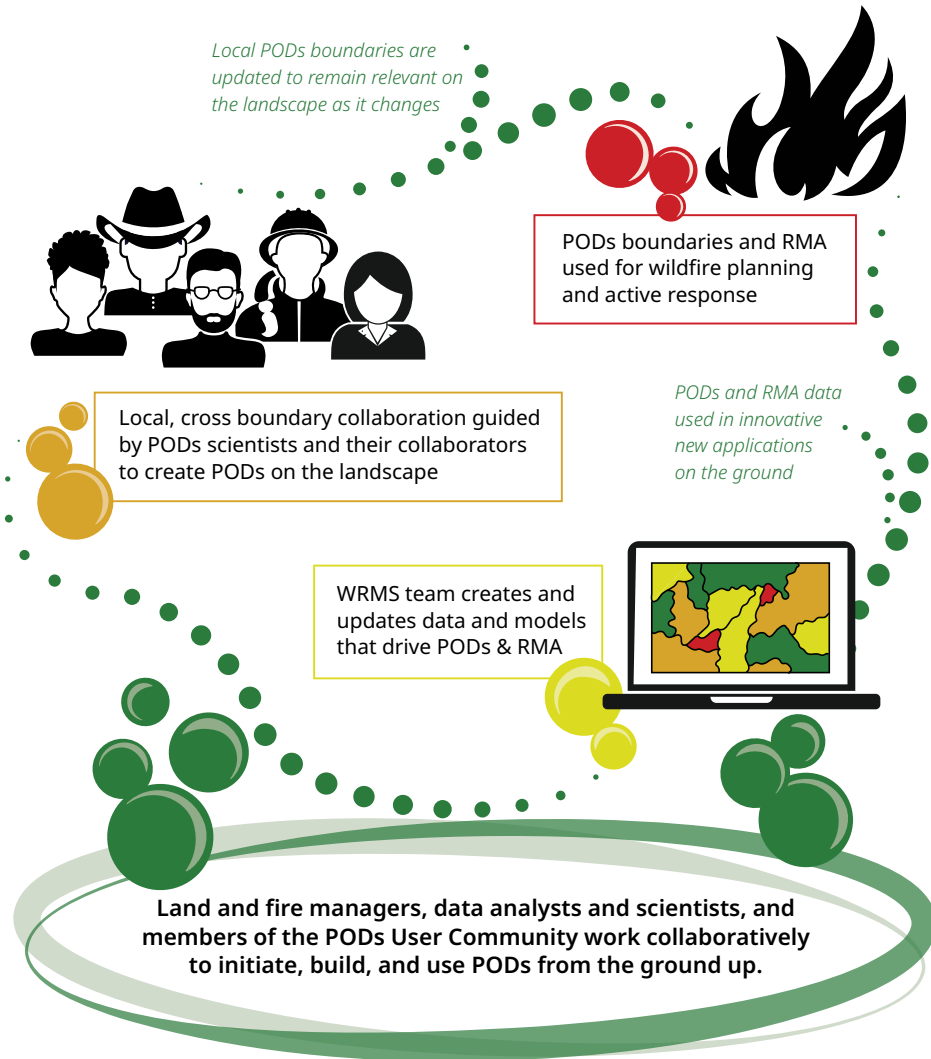
WRMS Team works closely with RMA staff to gather feedback from end users to continually improve the tools and processes used for decision support.

Looking forward PODs implementation

The WRMS Team and its partners cannot meet the growing demand for PODs alone. To build capacity, the WRMS Team convened the new multiagency PODs User Community, a network of practitioners and researchers who share knowledge, encourage innovation, and build capacity to implement and monitor cross-boundary pre-fire response planning. This community will continue to grow and guide the future direction of research and applications on the ground. Technology transfer by the PODs User Community and other collaborators is necessary to allow the WRMS scientists to further PODs research.

Continued scientific advancement

PODs science and PODs applications on the ground are the result of focused research, emphasis on science delivery, and deliberate partnerships built by the WRMS Team. The WRMS Team and their collaborators will ensure continued scientific innovation in pursuit of safer and more effective fire response. PODs are not an end point for this science, but the beginning of improving the overall fire management architecture of the agency. The WRMS Team's vision is to realize a fire management paradigm where decisions and actions are risk-informed, evidence-based, enriched with analytics, aligned with long-term objectives, and built on a foundation of cross-boundary collaboration and partnership.



62

62 National Forests are engaging with PODs

40

40 National Forests have completed the PODs process

73%

73% of forests in USDA Forest Service Regions 1-6 are engaged with PODs

40%

More than 40% of the 113 fires supported by RMA in 2021 leveraged PODs networks.



State, county, tribal, and local cooperators as well as partners from other federal agencies routinely engage in PODs workshops