



PODs for Non-Incident Management • WADNR Forest Health Assessment and Treatment Framework Case Study

PODs empower cross-boundary communication, prioritization, and implementation

The Washington Department of Natural Resources (WADNR) and partners are using Potential Operational Delineations (PODs) as a framework for prioritizing forest vegetation treatments across all lands in eastern Washington. In-depth interviews with WADNR and U.S. Forest Service staff revealed innovative ways that PODs were leveraged, as well as recommendations for improving the use of PODs in non-incident management.

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What are PODs?

The Potential Operational Delineations (PODs) spatial fire planning framework brings together firefighters' local knowledge and advanced fire modeling products to inform fire response and empower pre-planning. Before smoke is in the air, agency partners and cooperators collaboratively identify and document the most effective potential control lines (PCLs) on the landscape, where there is a high likelihood of containing wildfires (e.g., roads, streams, ridges, etc.). While PODs can inform incident response, the framework can also support wildfire mitigation and other cross-boundary planning efforts. This series explores innovations from the field and shares how land managers across the West are using and adopting the PODs framework to meet local needs.

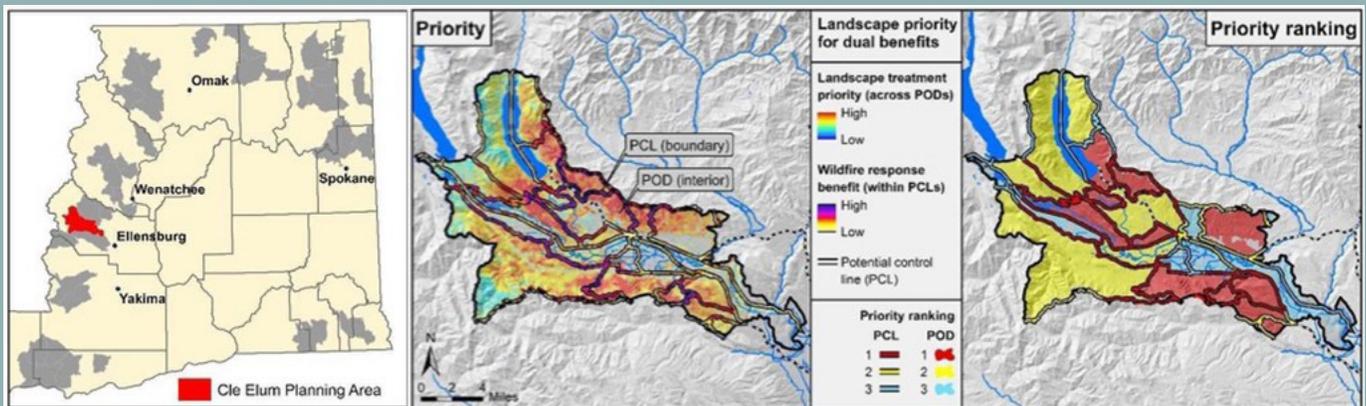


Figure 1. Landscape prioritization for dual benefits in the Cle Elum priority planning area. Landscape treatment priorities categorized across PODs, and wildfire response benefits are categorized within PCLs. Middle map illustrates raster-level data; map on the right illustrates priority ranking (i.e., 1-3). (Source: WADNR 2020)

Integrating PODs with the WADNR Forest Health Assessment and Treatment Framework

Passed in 2019, Washington State Legislature House Bill 1784 required WADNR to develop a forest health assessment and treatment framework to prioritize treatments that serve “dual benefits” of forest health and wildfire response objectives. WADNR adopted PODs and PCLs as an organizational framework to meet the dual benefit requirement, and deployed a collaborative pilot project in eight priority planning areas across eastern Washington (Figure 1). The collaborative engagement process: 1) introduced PODs and the dual benefit concept; and 2) identified local values and resources of concern to incorporate into the prioritization framework (e.g., homes, infrastructure, drinking water) through a stakeholder survey and local meetings. The Nature Conservancy (TNC) secured funding for local coordinators to schedule meetings and facilitate dialogue with communities. In a concurrent process, WADNR fire and forest health staff worked with local fire districts, U.S. Forest Service staff, and other partners with local fire management

knowledge to delineate PODs and PCLs across the planning areas. Together, the collaborative processes and analytical products give planners tools to prioritize treatment locations that maximize forest health and wildfire response benefits through landscape-level treatments within priority PODs, and enhance PCLs where appropriate with better signage, access, fuel removal, and/or shaded fuelbreaks (Figure 1).

How the WADNR and partners are using PODs

PODs are a communication tool to build shared understanding and co-manage risk – Managers agreed that the PODs framework is an intuitive concept for building shared understanding. PODs and PCLs were used to outreach with landowners to identify where, why, and when work needs to be done. The PODs framework also illustrated how landowners share fire risk with their neighbors, underscoring the need to invest in work on their respective properties and co-manage fire risk across the landscape.

I really feel like the PCL piece of PODs, the control lines are something that a lot of people really understand. From a planning standpoint again, I think it really does help as we're out with the public presenting in groups to show...why we may need to be doing work over on your neighbor's property first.

The PODs framework has helped managers secure funding and plan across jurisdictions – Incorporating PODs into the assessment and treatment framework has also bolstered WADNR's Shared Stewardship Investment Strategy by aligning state and regional forest priorities to accelerate treatments. For example, WADNR managers are integrating the PODs framework with a cross-boundary treatment database to plan linked, continuous treatments that will address forest health and fire risk at the POD scale. Further, the Cascadia Conservation District leveraged the dual benefit treatment framework to secure a large grant for community protection treatments along PODs and PCLs.

The Cascadia Conservation District just got a really big grant...to streamline fuels treatments on POD lines...that was another excellent example, just leveraging the data that Ana and her team has developed into actually seeing money come into our areas.

Managers and communities are using the dual benefit framework for implementation – TNC and Kittitas Fire Adapted Communities have used the prioritization framework to implement treatments on Cle Elum Ridge for community protection (Figure 1). WADNR managers are leveraging state trust lands' fuel break treatments on road corridors to attribute control lines for wildfire operations.

The Kittitas Fire adapted communities [and The] Nature Conservancy has really embraced this as a primary POD line for us...the community and landowners have all embraced this. And we've done a ton of really good workup on North Cle Elum Ridge to prep that area.

Manager recommendations for improving PODs use in non-incident management contexts

Communication and outreach – Managers recommended a robust communication and outreach strategy to engage local landowners, county commissioners, building and zoning inspectors, and U.S. Forest Service partners. They suggested plugging into regional collaborative and fire management forums, maintaining the [PODs user community](#) for peer-to-peer learning, and helping local communities and organizations apply PODs concepts on the ground. Managers expressed need for short briefs, videos, and dialogue opportunities to learn about how PODs are being used to prioritize and implement treatments in non-forest systems (e.g., rangelands), outside U.S. Forest Service contexts, and in situations where managed fire is not an option.

Clear direction and leadership – Managers recommended clear direction from unit-, regional-, and state-level leadership regarding how PODs should be used in incident and non-incident management contexts. Clear direction and intent would give managers confidence that this planning framework is here to stay, and they should support its use internally and with partners. Relatedly, managers wanted assurance that leaders will commit financial and personnel resources to implement treatments in priority PODs and PCLs once they are identified.

Collaborative processes result in actionable analytical products – The collaborative process itself is a crucial step that cannot be overlooked. The history of collaborative engagement and existing relationships in eastern Washington, along with support from organizations like the TNC and local champions, were key factors in developing a locally relevant, useful, and used treatment prioritization framework.

Actionable tools require updating, monitoring, and adaptive management – For the framework to stay relevant, the models and layers underlying PODs need to be regularly updated to assess how fires and treatments modify landscape conditions and wildfire risk within and across PODs over time. Managers want clear direction about who is responsible for collecting and maintaining this data, and they also emphasized the need for standardized definitions and protocols for attributing PCLs.



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For further reading see:

WADNR (2020). Forest health assessment and treatment framework (RCW 76.06.200). Washington State Department of Natural Resources. Olympia, WA. https://www.dnr.wa.gov/publications/rp_2020_fh_report.pdf

Hersey, Charles; Barros, Ana. 2022. The role of shaded fuel breaks in support of Washington's 20-Year Forest Health Strategic Plan: Eastern Washington. Washington Department of Natural Resources. Olympia, WA. https://www.nwfirescience.org/sites/default/files/publications/Fuel_Break_Memo_Hersey_et_al_2022_final.pdf