



RAPID Facility Response: Spokane Area Fires

Data Collection Update for the Research Community — August 21, 2026

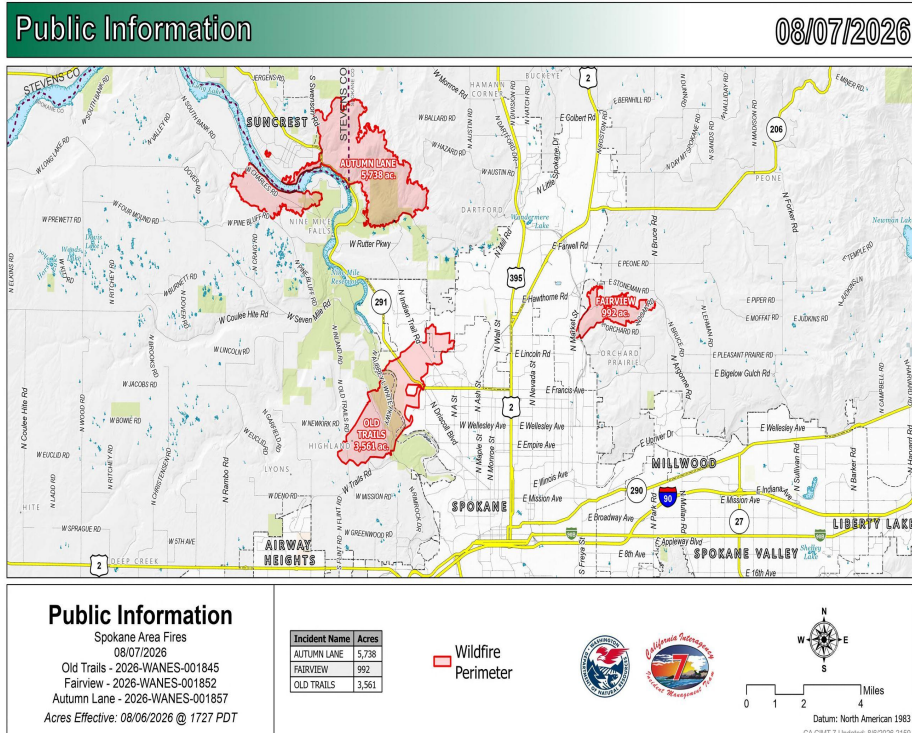
Purpose of This Update

The RAPID Facility is undertaking this environmental sampling and aerial imaging effort to collect fundamental data on the Spokane Area Fires and their impacts on the surrounding community. This work is intended to build a foundational, shared dataset that the broader research and practice communities can draw on to understand both the immediate and longer-term effects of the fires, including impacts on air quality, environmental contamination, and community health.

All data collected through this effort will be openly available and shared without restriction to any particular research group or institution, so that it can be of use to the broader research and practice communities, not research alone. Understanding what happened during and after this event, comprehensively and collaboratively, is critical to informing how similar impacts might be reduced or prevented in future wildfire events.

1. Research Consortium

The Spokane Wildfire Academic Consortium (SWAC) was established in August 2026 to coordinate academic, public health, and community-based research in response to the fires, and is being led by Dr. Sarah Bliss Matousek (Gonzaga University), Dr. Brian Henning (Gonzaga), and Dr. Tania Busch Isaksen (UW Center for Disaster Resilient Communities). The Consortium already brings together Gonzaga University, the University of Washington, Washington State University, Whitworth University, and Eastern Washington University, with regional community colleges being incorporated as partners in the near term. SWAC is working to identify shared research priorities and reduce duplication across the growing number of responding teams. RAPID is supporting SWAC's efforts through the collection of geospatial and hyperspectral data, and is supporting the Center for Disaster Resilient Communities in enrolling Spokane residences near burn areas for an indoor air quality monitoring effort to assess impacts from local clean-up efforts in the coming months.



Spokane Area Fires perimeter map (Autumn Lane — 5,738 ac; Old Trails — 3,561 ac; Fairview — 992 ac). Source: California Interagency Incident Management Team 7 / WA DNR, dated 08/07/2026; acreages effective 08/06/2026 @ 1727 PDT.

2. RAPID Environmental Sampling

Since mid-August, RAPID has been supporting the research team's active air quality monitoring near the Old Trails Fire, which is using SKC pumps with PM2.5 HPEMs to collect paired Teflon and quartz filter samples, alongside SKC 575-001 passive VOC badges (8-hour sampling, targeting a 68-compound panel via ALS Salt Lake City), surface dust wipes with sampling frames for contamination assessment, and PurpleAir low-cost sensors for indoor and outdoor monitoring. PurpleAir measurements are corrected using the EPA correction for outdoor locations and an indoor calibration package developed by Elena Austin's group.

At a correctional facility site, the research team has conducted repeated sampling across multiple indoor and outdoor locations over several sampling periods of variable duration, with ongoing sampling planned at an outdoor site over the next month; collectively, this represents more than 30 PM2.5 filter samples collected or currently underway there. In addition, three community sampling sites have been deployed to collect PM2.5 on Teflon filters and PM10 on paired Teflon and quartz filters at 1.8 L/min, providing broader spatial coverage in and around fire-affected areas. The next rounds of outdoor sampling at the correctional facility are using the same triplicate sample design as the community sites.



Filter analyses are still being arranged and filters are currently being banked, with additional analyses for metals, organics, and EC/OC under evaluation. Sampling is expected to continue into September, with a return visit planned to service equipment, evaluate sampling-duration tradeoffs, and potentially deploy additional sampling.

3. RAPID Drone and Aerial Imaging

Our first-tier priority is to conduct in-depth imaging of the Old Trails Fire, principally on the northeast side of the river, while also capturing adjacent unburned areas for comparison purposes. As time and resources permit, we will extend this imaging to the southwest side of the Old Trails Fire. On reserve, and if time permits, we will also image portions of the Autumn Lane and Fairview fires. We have remained fluid throughout this response and can adapt or modify the data collection plan as needs emerge and are communicated from the research community.

We plan to follow a generally similar approach to the one used in Los Angeles: a fixed-wing drone with a five-camera high-resolution rig, followed by repeat flights with a multispectral camera, and deployment of a hyperspectral camera to image the former Superfund site within the Old Trails zone.

The team expects to deploy for this work next Tuesday, August 25, with the deployment potentially lasting up to one week.