

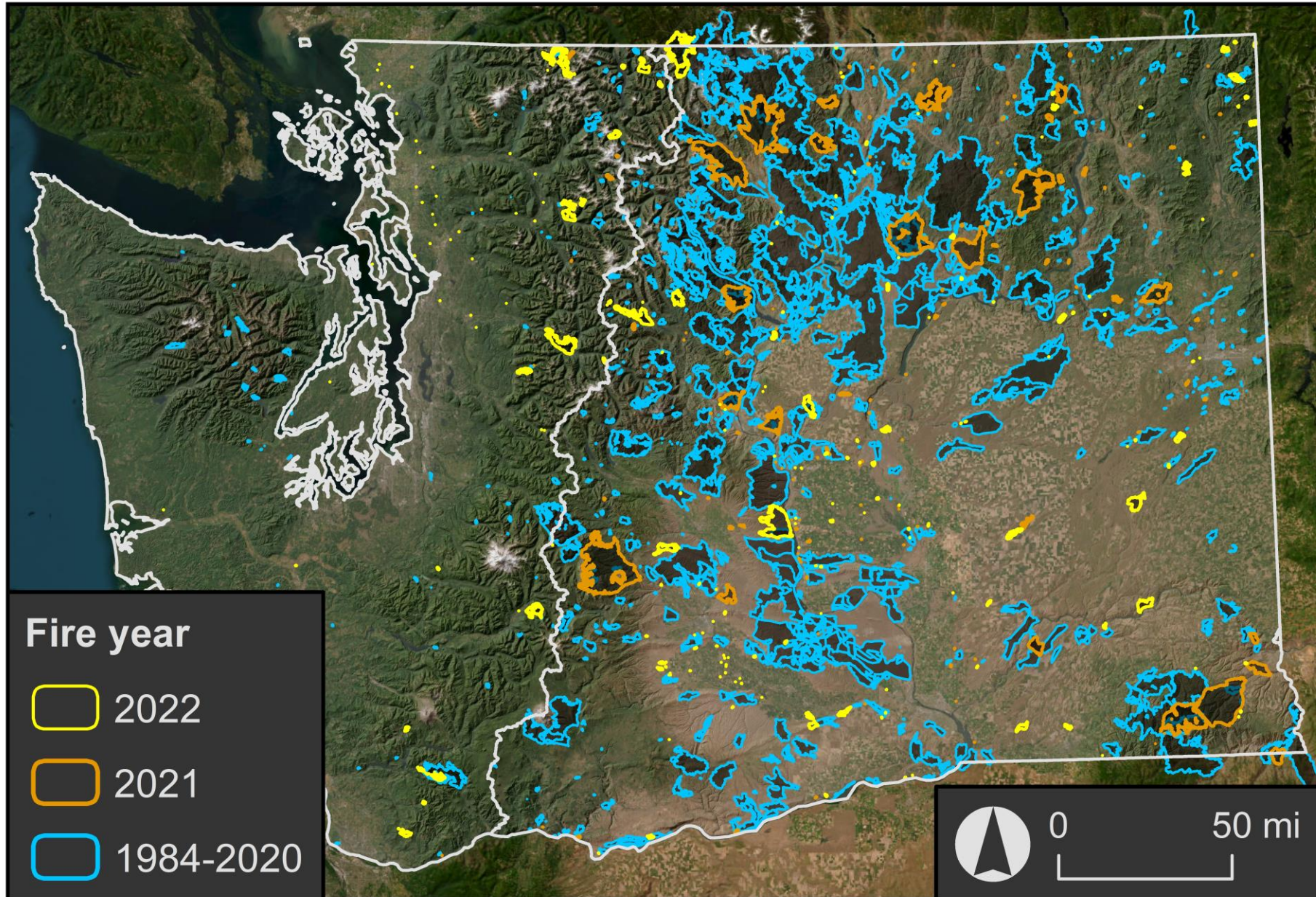


Post-Fire Recovery Program

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Recent Fires Across Washington







06/26/2023

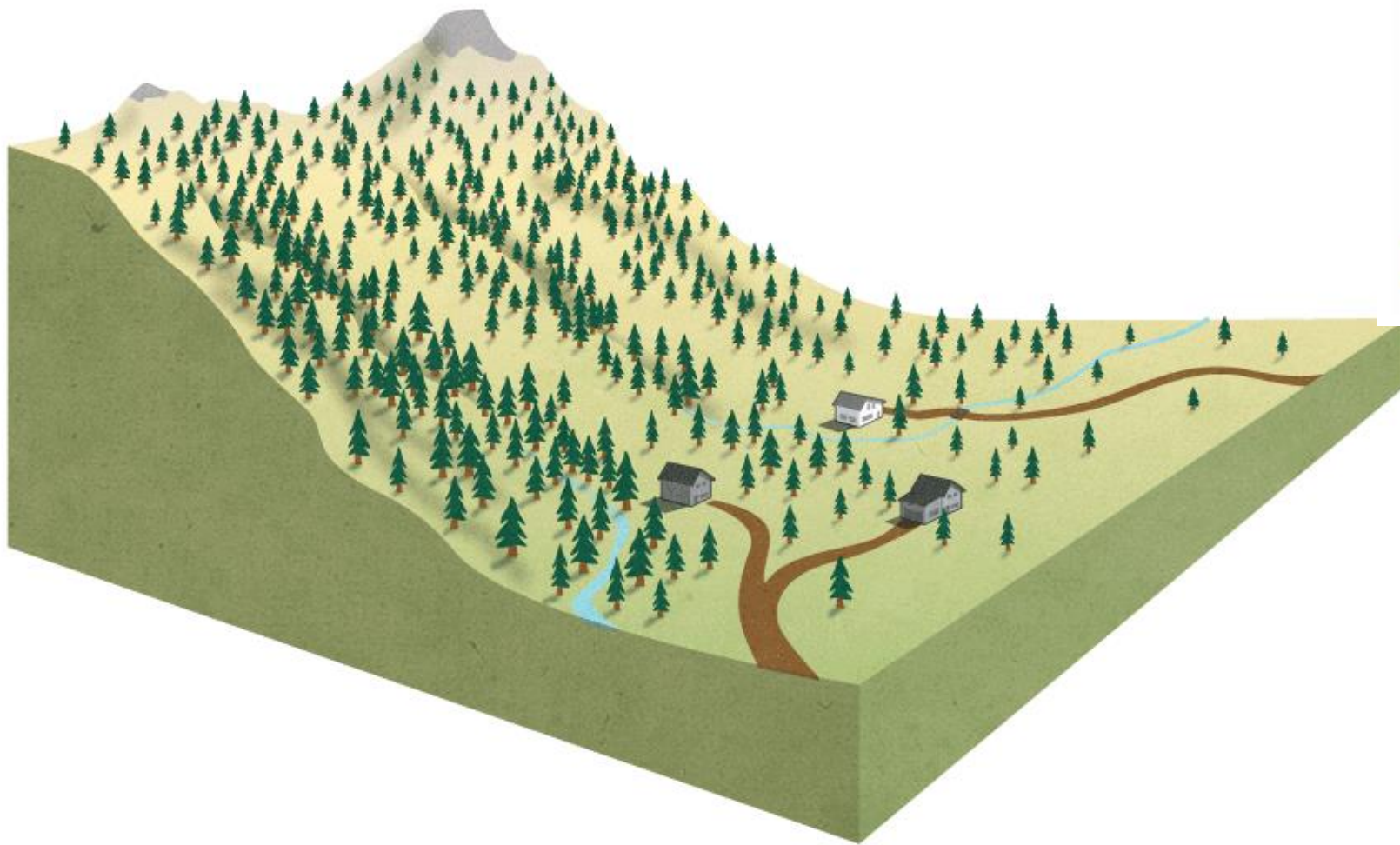
19:52

70°F

21°C



SPYPOINT FLEX



Before Fire

Leaf litter

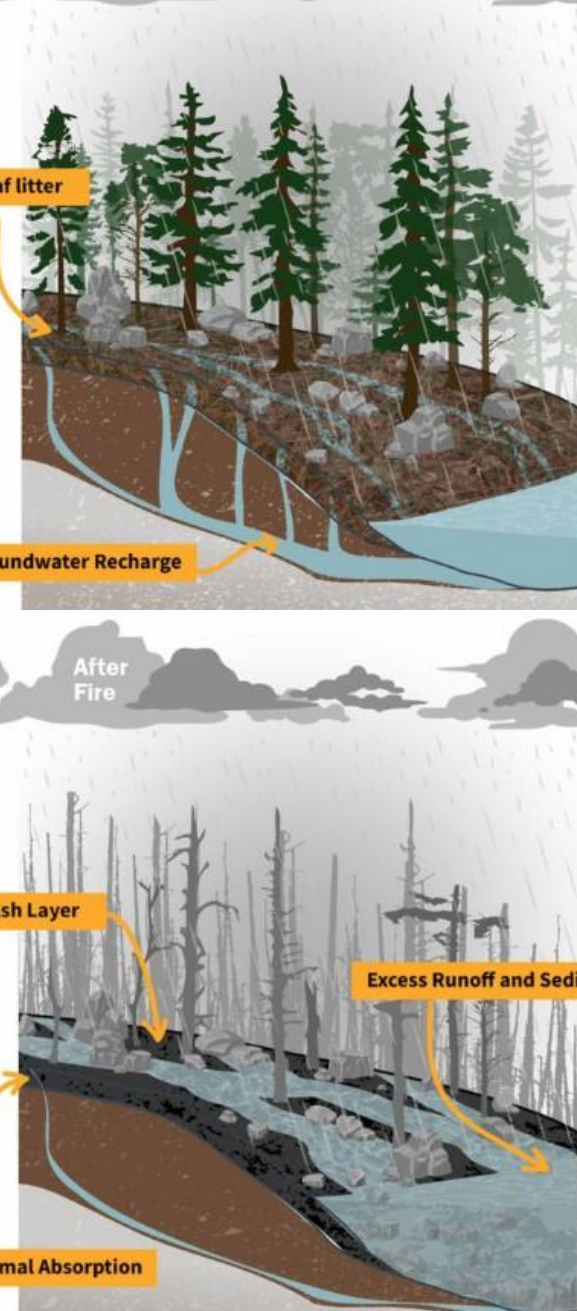
Groundwater Recharge

After Fire

Ash Layer

Excess Runoff and Sediment

Minimal Absorption



Wildfire-Associated Debris Flows



Washingtonians who live on or below hillsides—especially in areas impacted by recent wildfires—should be aware that the rainy season and summer storms increase the chances of potentially dangerous debris flows. The Washington Geological Survey's Wildfire-Associated Landslide Emergency Response Team (WALERT) conducts rapid debris flow hazard assessments in areas recently burned by wildfires. Click on the Reports icon below to see the available WALERT assessment reports.



What is a debris flow?



Debris flows after wildfires



Alluvial fans



What you should know and what you can do



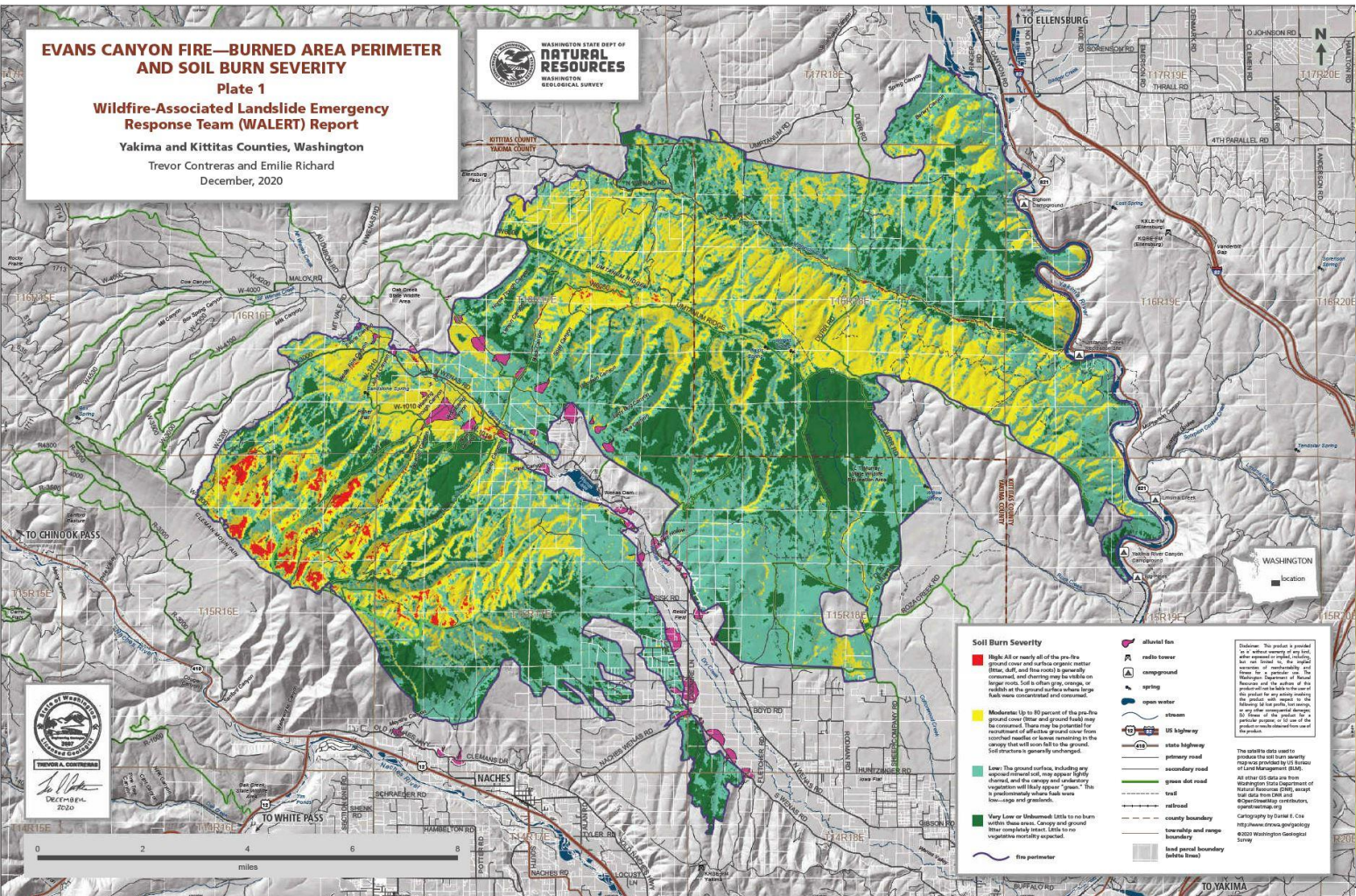
What we do



Reports



EVANS CANYON FIRE—BURNED AREA PERIMETER AND SOIL BURN SEVERITY
Plate 1
Wildfire-Associated Landslide Emergency Response Team (WALERT) Report
 Yakima and Kittitas Counties, Washington
 Trevor Contreras and Emilie Richard
 December, 2020



Soil Burn Severity

- High:** All or nearly all of the pre-fire ground cover and surface organic matter (litter, duff, and forest floor) is generally consumed, and charring may be visible on larger roots, soil surface, logs, or snags at the ground surface where large back fires concentrated and consumed.
- Moderate:** 10 to 50 percent of the pre-fire ground cover (litter and ground fuels) may be consumed. There may be potential for recruitment of effective ground cover from unburned riparian or talus remaining in the canopy that will soon fall to the ground. Soil structure is generally unchanged.
- Low:** The ground surface, including any exposed mineral soil, may appear slightly charred, and the canopy and understory vegetation will likely appear "green." This is predominantly where back fires low-usage and ground fires.
- Very Low or Unburned:** Little to no burn within these areas. Canopy and ground litter completely intact. Little to no vegetation mortality expected.

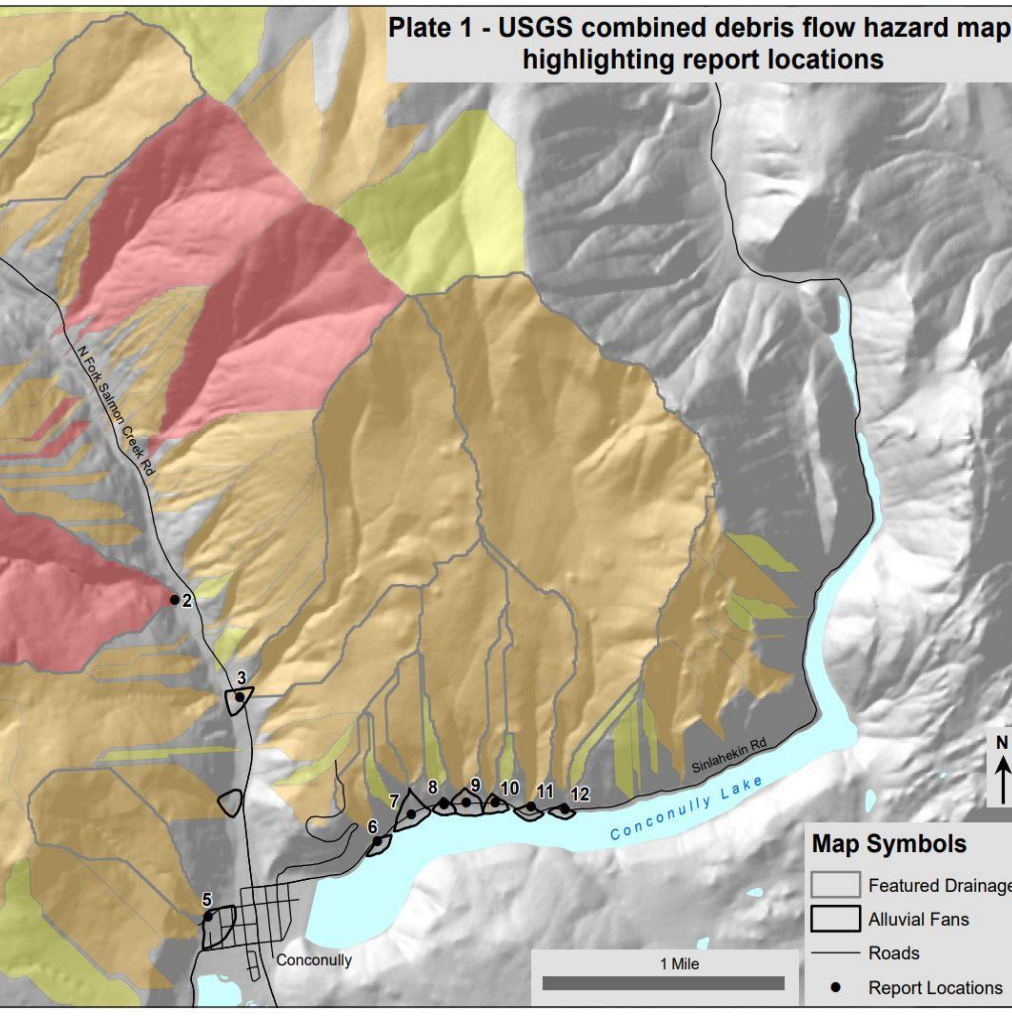
Map Symbols

- burned fan
- water tower
- campground
- spring
- open water
- stream
- US highway
- state highway
- primary road
- secondary road
- green dot road
- trail
- railroad
- county boundary
- township and range boundary
- lead parcel boundary (state lines)

Disclaimer: This product is provided as an advisory service of the USGS and is not intended to be used for the purpose of liability or insurance. The Washington Department of Natural Resources and the State of Washington are not liable for any damages resulting from the use of this product. For more information, contact the project manager at 509-891-2000.

Metadata: The satellite data used in this report were provided by the National Aeronautics and Space Administration (NASA) and the United States Geological Survey (USGS). All other GIS data are from Washington State Department of Natural Resources (DNR), except for the State of Washington Department of Natural Resources (DNR) data. Cartography by Daniel E. Cox, map.daniel@usgs.gov, 2020 Washington Geological Survey.

Plate 1 - USGS combined debris flow hazard map highlighting report locations



Map Symbols

- Featured Drainage
- Alluvial Fans
- Roads
- Report Locations



0 2 4 6 8 miles

1 Mile

Background & Foundation

- Coordination between DNR divisions, state, federal, and local agencies
- Support community post-fire readiness, response and recovery
- Implement existing plans:
 - 20-Year Forest Health Strategic Plan
 - Wildland Fire Protection 10-year Strategic Plan
 - Washington State Forest Action Plan
 - WA Geological Survey – Debris Flow Program (WALERT)



Goals for Program

1. **The goal is to help landowners, communities and watersheds recover from wildfires increasing in size, severity, and long-term impacts felt across Washington.**
2. **Post-Fire Recovery relies heavily on cross-programmatic, cross-boundary coordination.**
3. **Program staff aim to provide expertise and coordination on post-fire recovery efforts from an all-lands perspective.**



Program Outcomes at a Glance

Supplied grass seed for 480 acres on private lands

Completed 3 stream restoration projects in the Methow Valley, working with tribes and NGOs.

Funded recovery projects on 4 conservation districts

\$4,770,000+ funding appropriated to date (state and federal)



FY 24-25 Program Objectives



Create recovery informational materials targeted at landowners



Facilitate improved coordination of statewide post-fire recovery efforts



Invest \$2M in funds for post-fire recovery projects, including reforestation



Ensure a smooth transition from fire suppression to post-fire recovery



Create a "Recovery Visualization Tool" to support community recovery



Evaluate wildland fire recovery needs and recommend solutions.

1. Working to map alluvial fans and identify high risk areas.
2. Working with EMD, SCC, CDs, local collaboratives, and Feds, to identify recovery needs and readiness needs.
3. Working with the SCC to provide funding (\$100,000-\$150,000) for conservation districts to help coordinate post-fire recovery. Ran a post-fire recovery task force in Spokane after the 2023 fires.
4. Expanding on the Washington Restoration Framework to create local recovery readiness plans.



Increase public awareness of risks post-wildland fire and facilitate access to resources to mitigate those risks.

1. Currently have a cache of ready-to-deploy gauges.
2. Installed gauges on several fires from 2022 and 2023.
3. Currently working on 2 contracts to develop outreach materials for recovery and recovery readiness targeted at landowners and communities (\$100,000 investment).
4. Hosting annual post-fire “All Hands” meeting.



Establish a state and private lands Burned Area Emergency Response (BAER) team(s) to assess non-federal lands post-fire.

- 1. Working with federal and state partners to create a pilot project for cross boundary analysis**
- 2. Wildfire-Associated Landslide Emergency Response Team (WALERT) funded with 2 additional positions, new lead starts July 1, 2024**
- 3. Dashboards for debris flow awareness**
- 4. Working to better incorporate post-fire assessment teams with fire suppression teams**
- 5. Weekly calls for statewide resources to increase SA and problem solve**



Community Wildfire Protection Plans

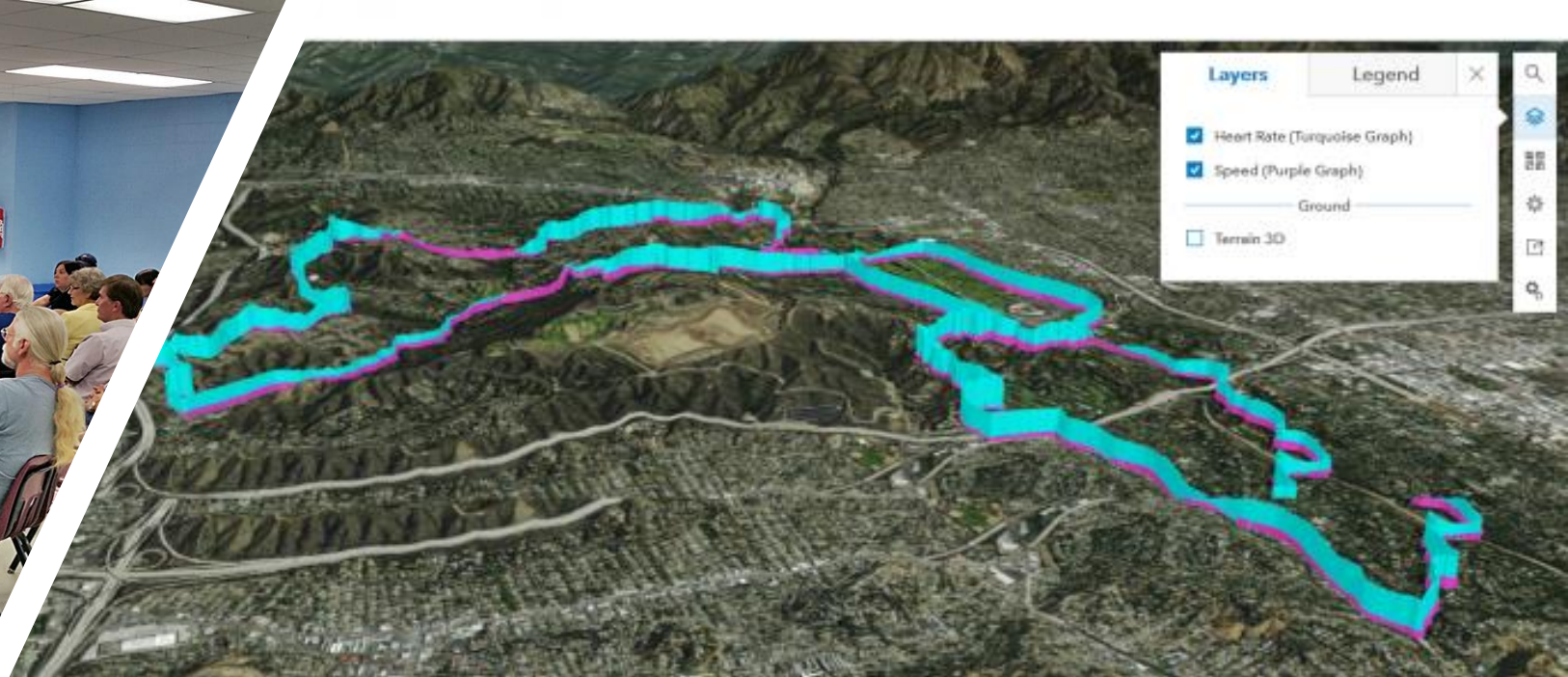
1. **Natural materials debris clean up**
2. **Suppression to recovery handoff needs/expectations**
3. **Assess and identify areas vulnerable to post-fire debris flows/flooding and mitigation planning to reduce risk and improve resilience**



Recovery Visualization Tool

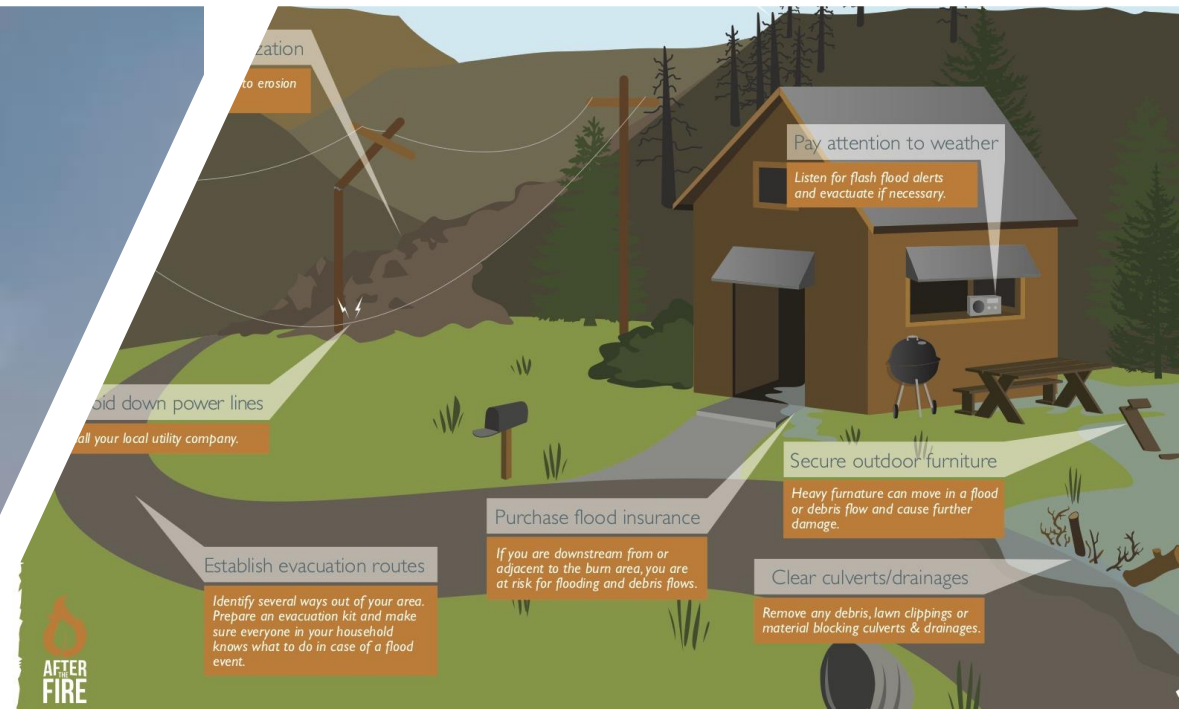
1. Enhanced Decision-making
2. Community Engagement
3. Efficient Resource Allocation
4. Sustainable Land Management
5. Transparent Communication





Hermit's Peak/Calf Canyon Post-Fire Resource Hub

Information on Post-fire Hazards and Response Operations



Landowner Assessments

Identifying landowner needs and connecting them with relief and recovery resources

1. Establish a questionnaire or in-take form
2. Convene a “watershed taskforce” for each fire, made up of land management agencies and emergency management
3. Coordinate landowner assessment and outreach



Landowner Resources

Provide information to landowners about sound recovery practices, funding sources, and technical assistance



Potential Sources of Cost-share & Funding

1. **DNR's Service Forestry Program (formerly Landowner Assistance) for reseeding and tree planting**
2. **Conservation Districts**
3. **Natural Resources Conservation Service – contact local office**
4. **Farm Service Agency – contact local office**



Helpful Links

- <https://www.dnr.wa.gov/postfirerecovery>
- <https://afterthefirewa.org/> (update coming 2024)
- <https://wildfires.wsu.edu/agriculture-and-forest-landowners/>
- <https://wildfires.wsu.edu/>
- <https://www.fireadaptedwashington.org/take-action/>
- <https://www.dnr.wa.gov/wildfire-debris-flows>
- <https://foresthealthtracker.dnr.wa.gov/FindYourForester/Index>

