

The intersection of fire, emissions, human health, and community preparedness

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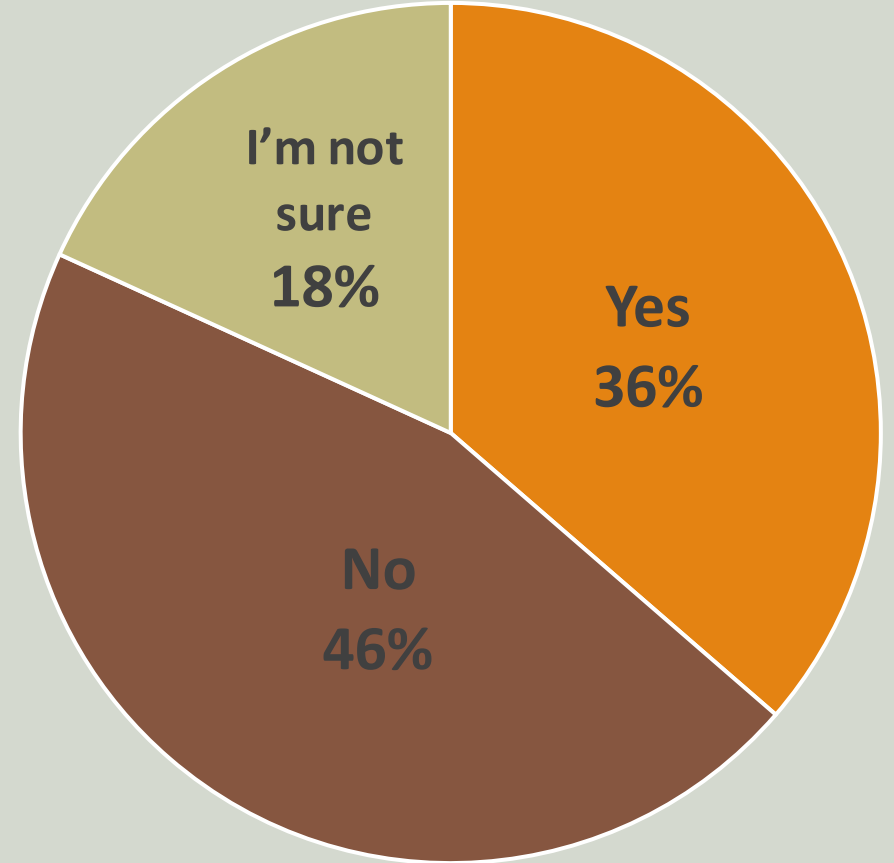




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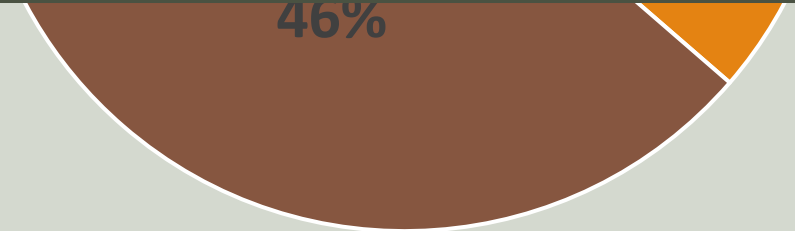
Communities do not feel prepared for fire or smoke season.



Communities do not feel prepared for fire or smoke season.



This means they are not prepared for smoke from any type of fire...





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Wildfire, Smoke Exposure, Human Health, and Environmental Justice Need to be Integrated into Forest Restoration and Management

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Interdisciplinary Consensus Statements



We recognize the need to listen to and integrate other perspectives, in particular those embodied by Indigenous peoples who have used fire successfully as an ecological tool for thousands of years.



Prescribed fires in addition to managed fires are both necessary management techniques to keep forests resilient and to lessen the negative ecological and public health impacts of wildfires.



Certain regions of the western US will experience more smoke days with heightened use of prescribed and managed fire however, **we expect the impacts of smoke exposure to be reduced over the long term in comparison with untreated land burned by wildfires.** With these techniques, exposure in affected communities can be planned and lessened.

Interdisciplinary Consensus Statements

4

No degree of smoke exposure is without risk. However, additional investment in advance preparation for affected populations can lower associated health risks. **A smoke-resilient community is resilient to smoke from any type of fire.**

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We must work to promote both equity in process (e.g. who has a say in decision making) and equity in outcomes (e.g. who gets exposed to the smoke) within those communities and populations experiencing disproportionate impacts from smoke.

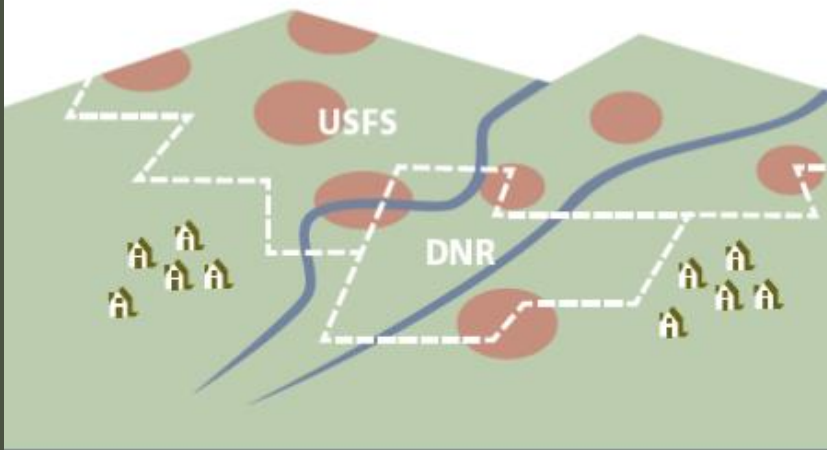
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We are missing opportunities for positive impact by working as separate disciplines.

We recommend, that further and intentional integration of forest/fire and health disciplines (including the practitioners, tools and resources) needs to occur to lessen the human health effects of smoke exposure due to prescribed and managed fires

Prescribed Burning Planning

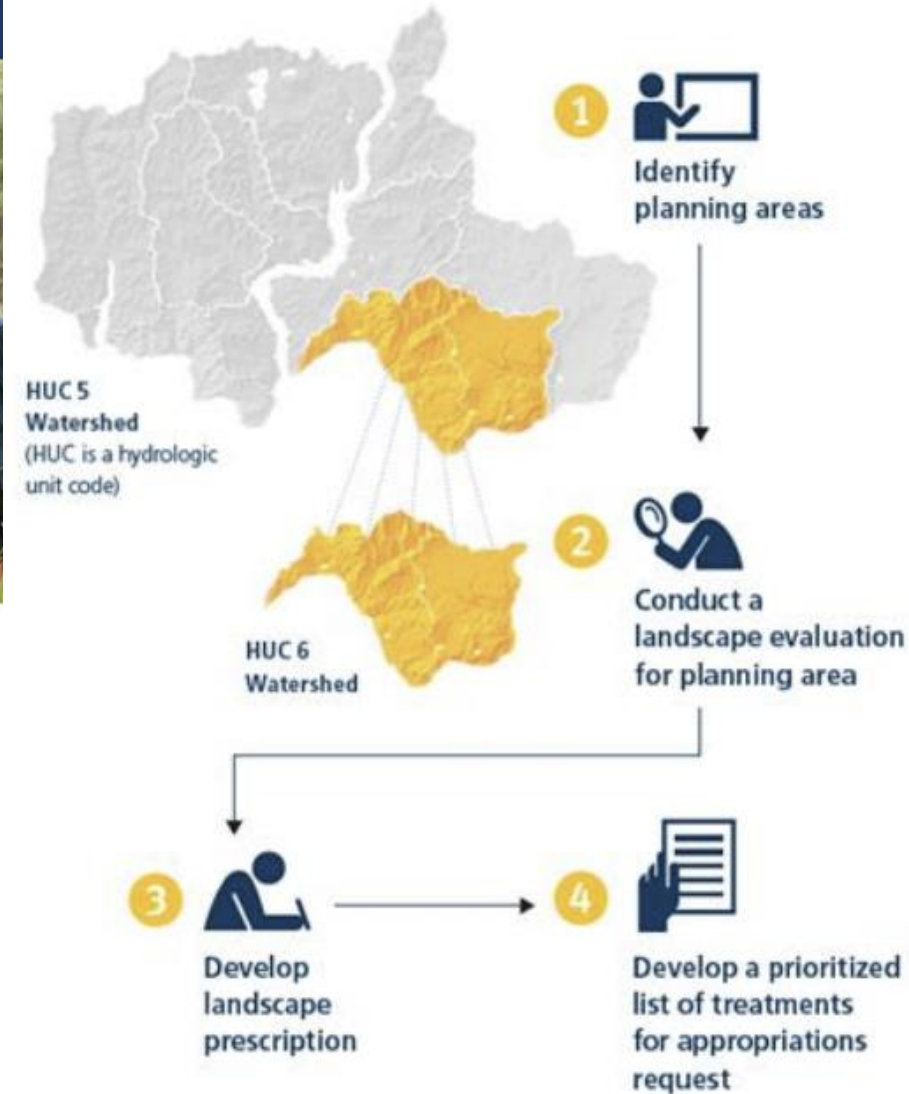
Current: Scattered treatments



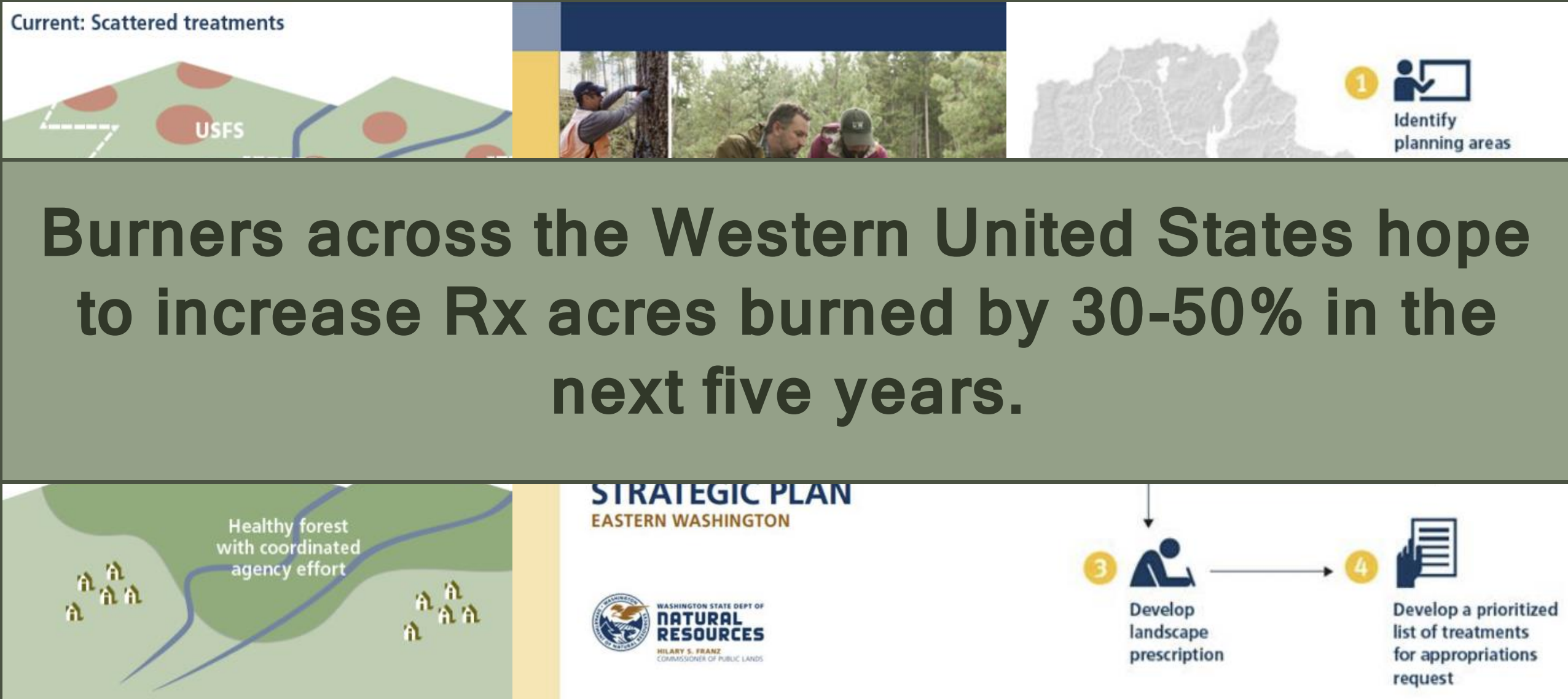
Vision: Coordinated, contiguous treatments

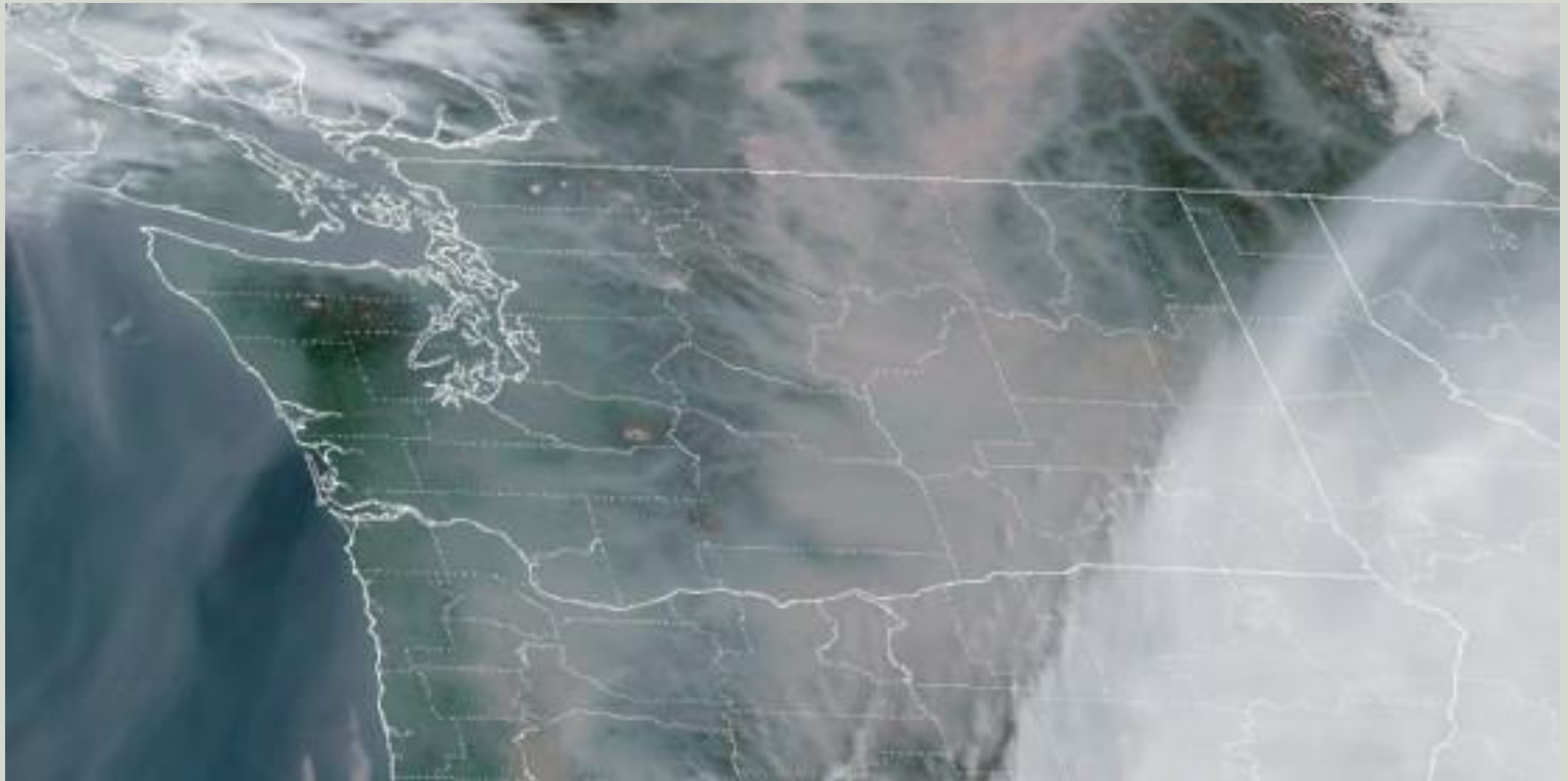


20-YEAR FOREST HEALTH STRATEGIC PLAN EASTERN WASHINGTON



Prescribed Burning Planning





*20 Aug 2023 19:01Z - NOAA/NESDIS/STAR GOES-West
Washington Smoke Blog*

Community Smoke Perceptions



- There is a lot of concern and uncertainty around the health impacts of smoke.
 - Compared to fire, smoke is considered a less urgent concern.
 - Prescribed fire is viewed as relatively safe and beneficial.
 - While prescribed fire is appreciated for its role in mitigating wildfire risk, smoke impacts to communities need to be acknowledged.
-



“I think that it [smoke] ranks very high when it's around and it ranks fairly low when it's not. People tend to forget about fires and smoke when it's not fire and smoke seasons.”

Youth Worker Interviewee, Non-Tribal

“I know for some of our elders that have breathing issues, we actually have to move some of them out of the valley just so they can actually get the clean air to survive.”

Emergency Management Interviewee,
Tribal





“PTSD is often the label that gets slapped on it. I don't know that anyone's really carefully looked at that. But it feels very fitting that because of that ongoing repeated trauma of having to deal with wildfires and wildfire smoke-- they're difficult to tease apart.”

Air Quality Interviewee, Non-Tribal

“I think what needs to happen is more support for folks who are vulnerable to smoke when there is going to be a prescribed fire in the area and coming up with some strategies that can help with that, because I do think it's an effective tool and maybe one of the only ways we're going to get ahead of the wildfire problem.”


Elder Care Interviewee, Non-Tribal






"It seems sometimes we just got done having wildfires, then all of a sudden, they're out there trying to do prescribed burns. So it just flows in from one situation into the other, and it's a difficult thing to deal with. Sometimes you just want to – you don't want to see smoke; you don't want to smell it; you don't want to be around it."

Air Quality Interviewee, Tribal



What can we do to create smoke-ready communities?



We are all affected by smoke, but not everyone is affected equally.

EXPOSURE SENSITIVITY



Where you live



Health



Where you work



Age



ADAPTIVE CAPACITY



Wealth



Education



Energy



Healthcare



Housing



Social
Cohesion



Transportation



Behavior



**RISK OF SMOKE
IMPACTS**

Recommended Actions

- **Clarify what is known** about the short-, medium-, and long-term impacts of wildfire smoke, including mental health impacts.
- **Clarify the actions people can take** to mitigate the health impacts of smoke exposure.
- **Coordinate between local groups** to ensure accuracy, consistency, and reach of risk communication.
- Emphasize **smoke-readiness and preparation**.
- Address and **mitigate increasingly frequent and severe wildfires**.
- Acknowledge and emphasize **there is no level of “good smoke”**.

Tools & Resources



EJScreen EPA's Environmental Justice Screening and Mapping Tool (Version 2.2)
Please note: Territory data (except Puerto Rico) is not available as comparable to the US. It is only comparable to the territory itself.

☒ Compare to US ☐ Compare to State

Environmental Justice Indexes

Supplemental Indexes

Pollution and Sources

Socioeconomic Indicators

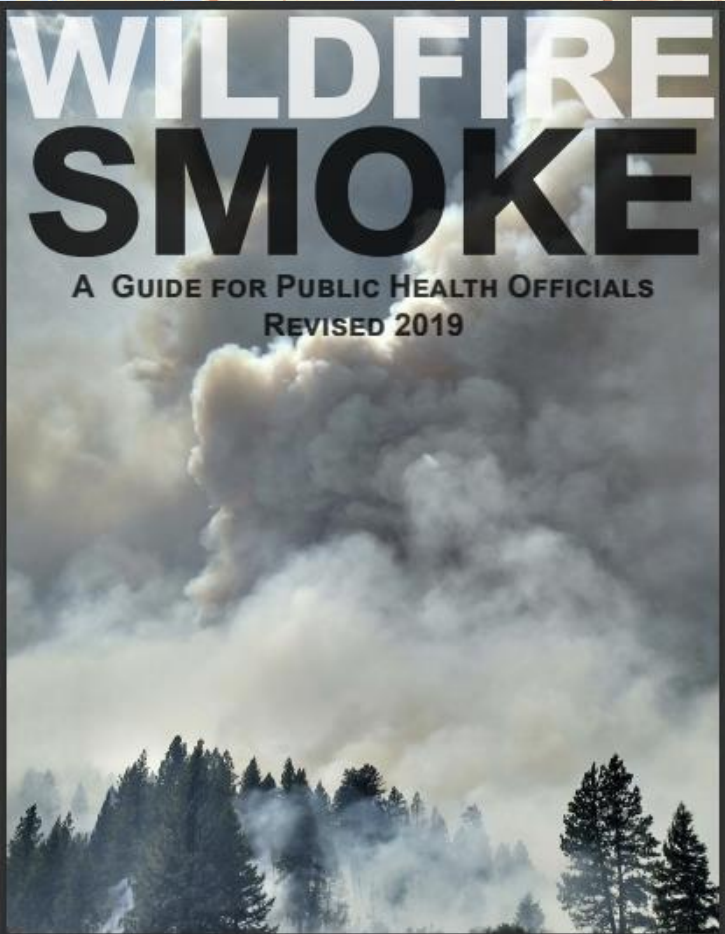
Health Disparities

Climate Change Data

Critical Service Gaps

Additional Demographics

Threshold Map



Smoke Outlook
NorthCentral_Washington - Regional Fire Activity

8/29 - 8/30

We are missing opportunities for positive impact by working as separate disciplines. We must intentionally further the integration of forest/fire and health disciplines (including the practitioners, tools and resources) needs to occur to lessen the human health effects of smoke exposure due to prescribed and managed fires.

THANK YOU!

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The Nature
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