

SB 762 (2021) Implementation

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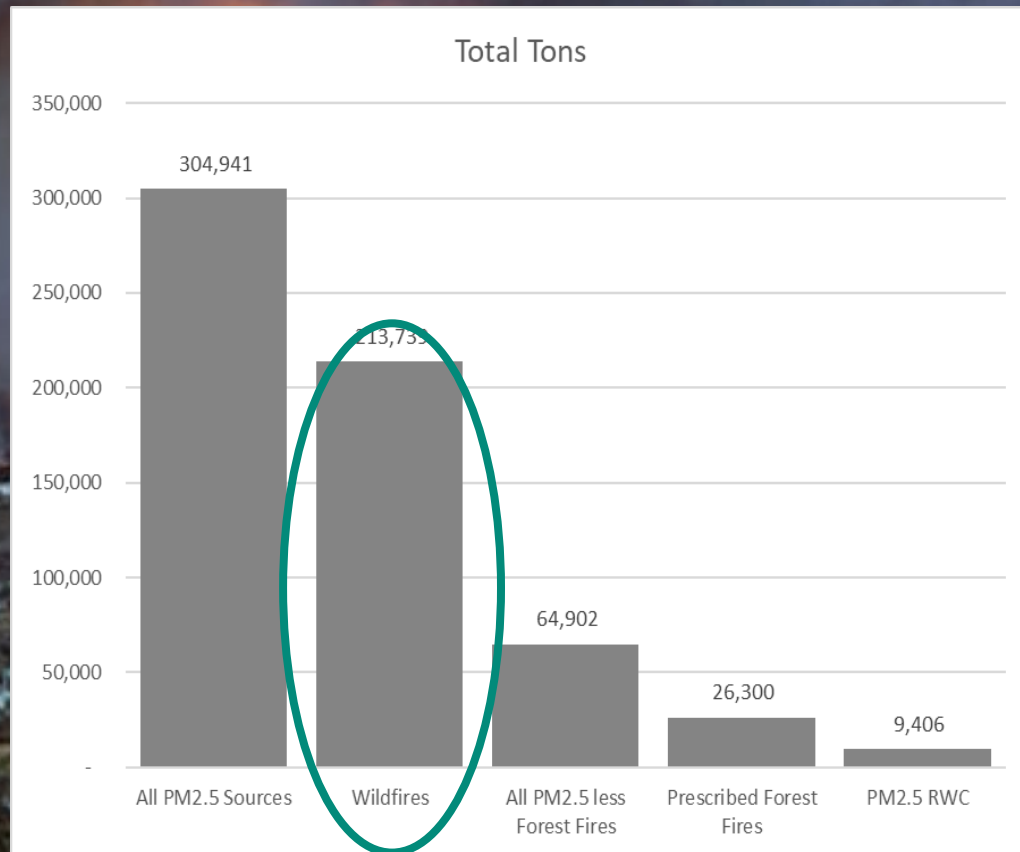
**Carissa Heinige, Public Health Emergency Preparedness Coordinator
Deschutes County**

April 24, 2023



MORE WILDFIRE MEANS MORE WILDFIRE SMOKE

2017 NEI Tons PM2.5



Forest Fires = Wildfires + Prescribed Fires



SENATE BILL 762, SECTION 13

13. The Department of Environmental Quality shall **develop and implement** a program for **supporting local communities, in detecting, preparing for, communicating or mitigating the environmental and public health impacts** of wildfire smoke.

13a. The Department of Environmental Quality shall establish a program for supporting local communities through intergovernmental agreements, grants, contracts or cooperative agreements to **develop and implement community response plans to enhance the communities' readiness and mitigation capacity for smoke.**

13b. (1) The Department of Environmental Quality shall establish and implement a program to **support communities across this state in monitoring, interpreting and communicating data** related to ambient air quality conditions caused by wildfire smoke.

(2) As part of the program, the department shall:

- (a) Conduct **community outreach** in areas of this state that are prone to poor air quality attributable to elevated levels of particulate matter.
- (b) Deploy **air quality monitoring** equipment in a manner sufficient to evaluate an increased prevalence of poor air quality attributable to elevated levels of particulate matter.
- (c) Monitor meteorological conditions in a manner sufficient to **forecast** occurrences of poor air quality.



Section 13: Wildfire Communications Smoke Coordination & Air Quality Advisories

- Maintain comprehensive response protocol
- Hosted over 18 coordination calls in 2022

Oregon Wildfire Response Protocol for Severe Smoke Episodes

June 30, 2022

The following agencies collaborated on this guidance document:

- Oregon Department of Environmental Quality
- Lane Regional Air Protection Authority
- Oregon Health Authority
- Oregon Occupational Safety and Health Administration
- Oregon Emergency Management
- Oregon Department of Forestry
- U.S. Forest Service Pacific Northwest Region
- U.S. Bureau of Land Management Oregon State Office



Cover photos by:
Oregon Department of Transportation

Based on an agreement between the participating agencies, the original version of this multi-agency document is maintained by DEQ.

All parties may collaborate on updates.

**List of collaborators on next slide



American Red Cross

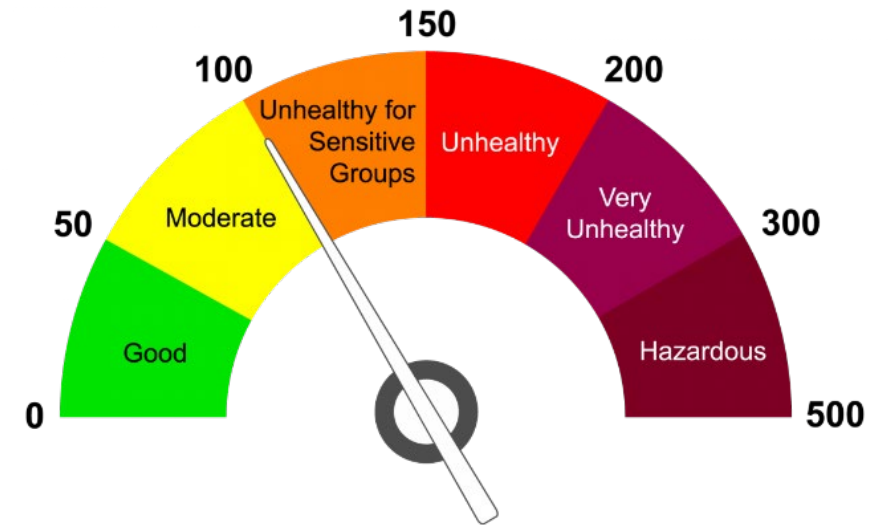
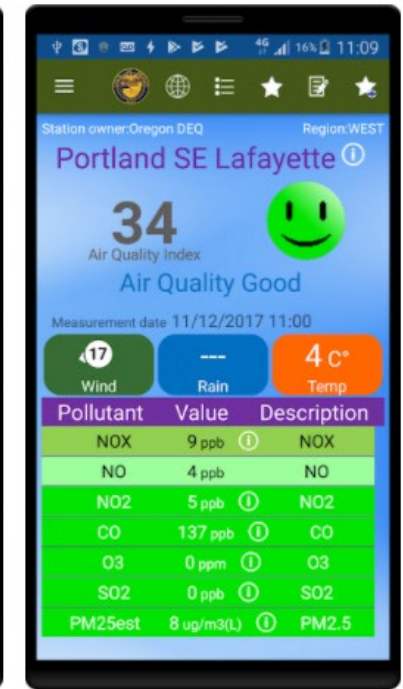
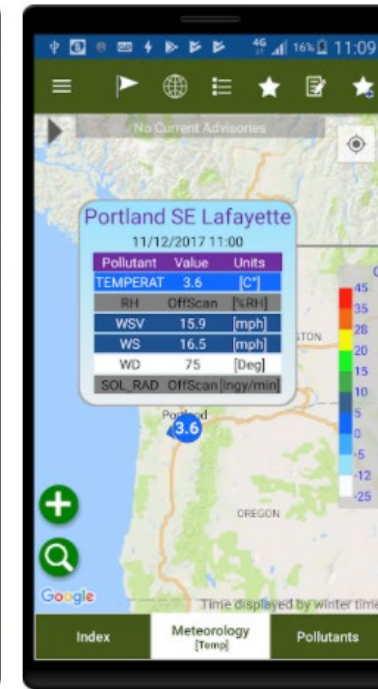
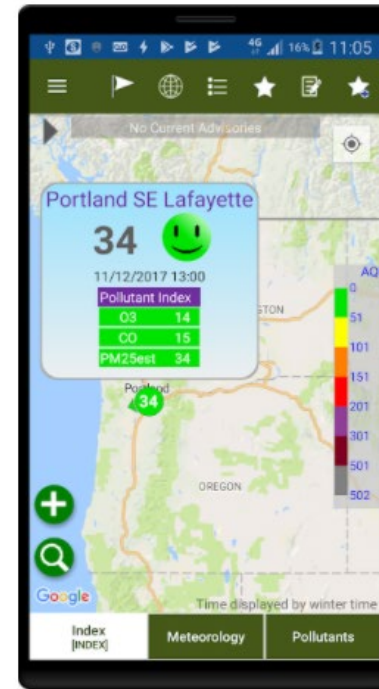
Oregon Health Authority



Section 13: Wildfire Communications

Air Quality Monitoring

- Maintain Oregon Smoke Blog
- Oregon AQI Map
- OregonAir App
- ORAlerts Messaging



Community Response Plans

Bend, Oregon*

Ashland, Oregon*

Wallowa/Enterprise, Oregon*

Lakeview, Oregon

Oakridge, Oregon *(was a nonattainment area)*

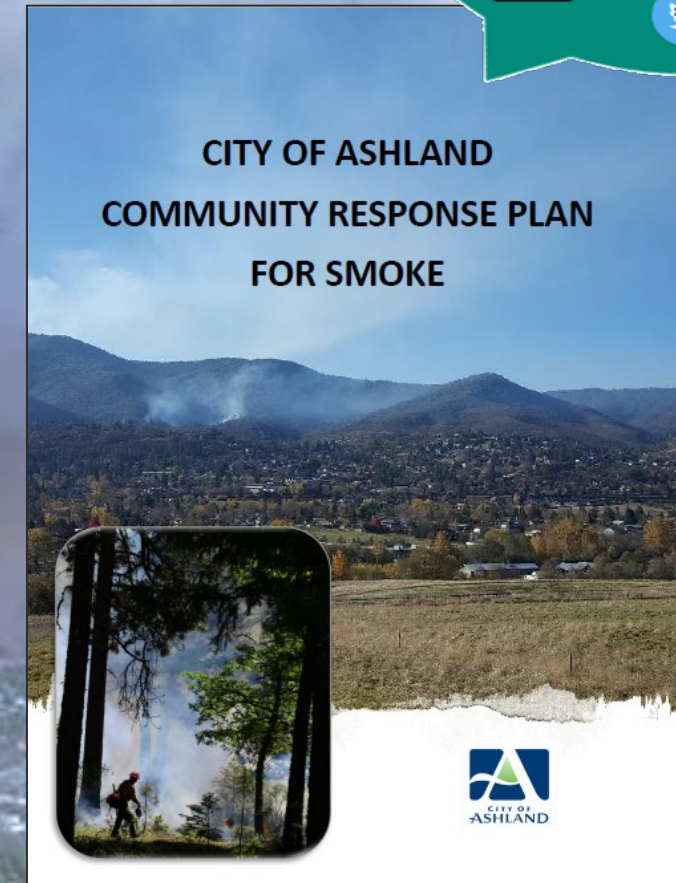
2022 CRP Development Recipient

Jackson County, Oregon

Klamath County, Oregon

Union County/La Grande, Oregon

Hood River County & Wasco County Oregon



*SSRA with active 1-hr Exemption



Section 13a: Pass-Through Funding

Four CRP development project

- City of Medford/Jackson County
- Klamath County
- Union County
- Wasco and Hood River Counties

Five CRP staffing and implementation project

- Deschutes County
- City of Ashland
- Wallowa County
- Town of Lakeview
- City of Oakridge



Section 13a: Pass-Through Funding

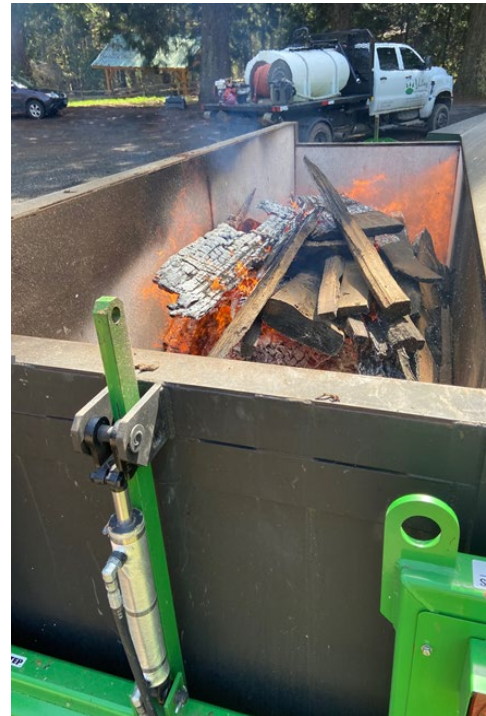
Tribal Smoke Preparedness

8 Tribal smoke preparedness projects

Smoke Mitigation and Alternatives to Burning

3 mitigation and alternatives to burning projects

2 ACI emissions testing and EAB control projects



LEARN ABOUT WILDFIRE SMOKE AND HOW REDUCE EXPOSURE

Contributed by Ali Grove, Air Protection Specialist

We are blessed to live in the lush Pacific Northwest, with plenty of fresh air and cool coastal winds. However, wildfire smoke knows no boundaries, and even from far away can find its way into our communities. The composition of wildfire smoke is complex and the chemical species are determined by the burn site, vegetation burned, and weather conditions. All wildfire emissions have a substantial amount of PM2.5 (about 90%), which has a significant impact on human health. Particulate matter at this size is especially harmful because the hazardous chemicals are so tiny, they can enter the bloodstream. Proactive planning is essential for keeping our families and loved ones safe during smoke events. I would like to look back on a traditional Coos story that was shared with me about a "fire wind" - a big fire that came over the sea and people hid in the mud to escape it.



What is PM2.5?

PM2.5 means particulate matter measuring 2.5 microns or less across. A micron is a very small unit of measure - one millionth of a meter.

- These particles are so small that they cannot be seen by the human eye.
- Particles this small can be easily inhaled and travel deep into the respiratory tract and have been associated with a variety of short-term and long-term health conditions.

Source: United States Environmental Protection Agency
<https://www.epa.gov/pm-pollution/particulate-matter-pm-basics>

A version that Frank Drew, Hanis Coos, told in English: "One time long ago there came from the west, in the daytime, five gusts or layers of fire, from the ocean; they swept across the land. It seems as if the people knew just what to do to save themselves. Everything burned. One sheet of fire came east quickly. Seeing it coming the people all went into the river and mud flats, crawling into the west mud and water until the sheet of fire had passed over them. Only the mud did not burn. Four more sheets of flame were evaded the very same way. The people had taken sealion paunches and put into them the infants that could not run. The people could not explain what made the fire come that way, but maybe it was to purify the earth."

While we need not hide in the mud from wildfire smoke, this story tells of the resiliency of the first people and how preparedness can help in times of need. There are a few precautionary actions that we can take to get ready for wildfire smoke events:

- Designate a room in your home to be a "clean room." This room should have as few windows or doors as possible, or they should be closed, to keep smoke out. Use an indoor air cleaner or filter fan to make the air in the room even cleaner. HEPA filters are highly rated.
- When the air looks and smells smoky, it may not be the best time for activities outdoors. Use your best judgement.
- If you must be outdoors, NIOSH approved masks with the label "N95" or "N100" are the most effective type of mask that protects you from air pollution.
- Keep an eye on PM2.5 levels in your area during wildfires. AirNow's Fire and Smoke Map is a reliable source, which can let you know if there are fires or smoke plumes within a 150-mile radius of your selected location (fire.airnow.gov).

The Cultural and Natural Resources Department will be hosting regalia classes, please email drculture@ctclusi.org or call Enna at (541) 297-7538.

Looking for Tribal Artists available and interested in teaching a range of regalia classes



Material Gathering
 for bark, roots, sticks, sedge, etc

The Cultural and Natural Resources Department will be hosting material gathering days on our Tribal lands, please email drculture@ctclusi.org or call (800) 877-2718

May 6th, Smith River Tract
 RSVP by May 5th if interested in caravanning

May 20th, Lake Creek Tract
 RSVP by May 19th if interested in caravanning

Call for details if you are interested in attending

Department of Natural Resources
 Clean Air Program

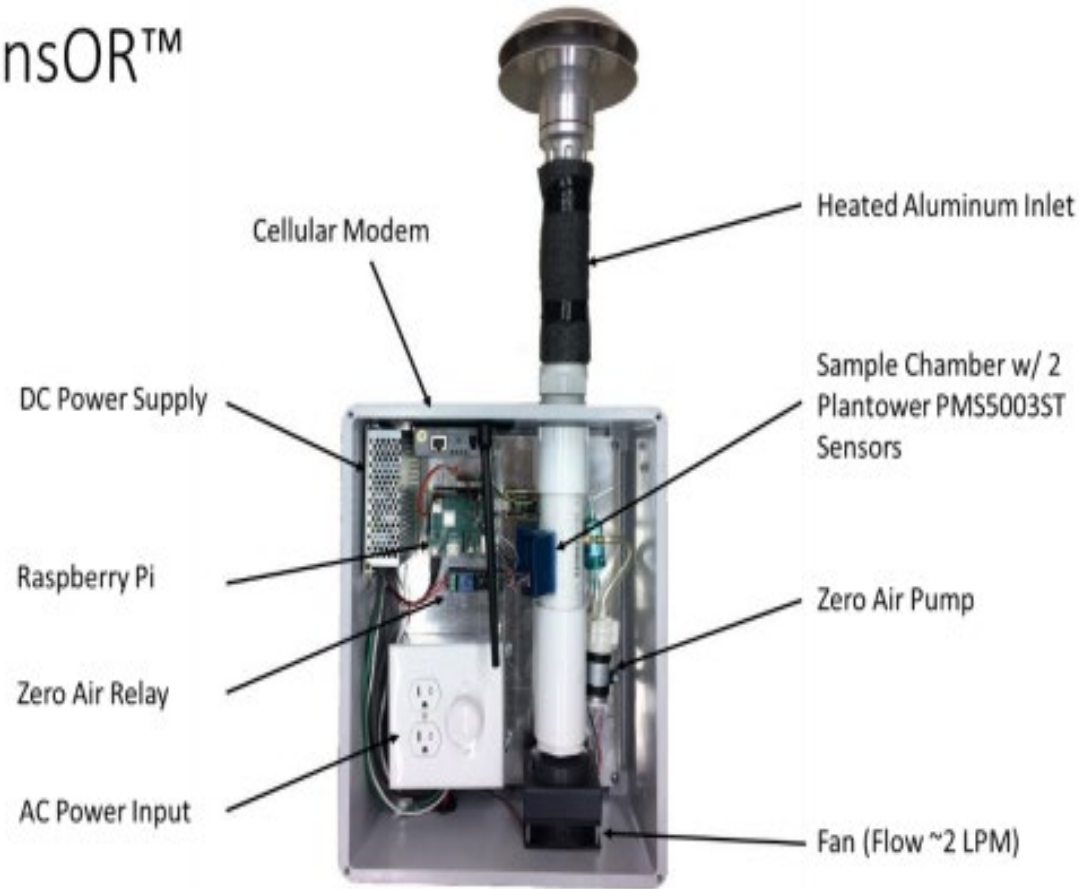
Has received a grant from DEQ to promote Clean Air in Tribal Communities

Survey to follow

For more information please contact:
 Ali Grove: (541) 294-6136
agrove@ctclusi.org

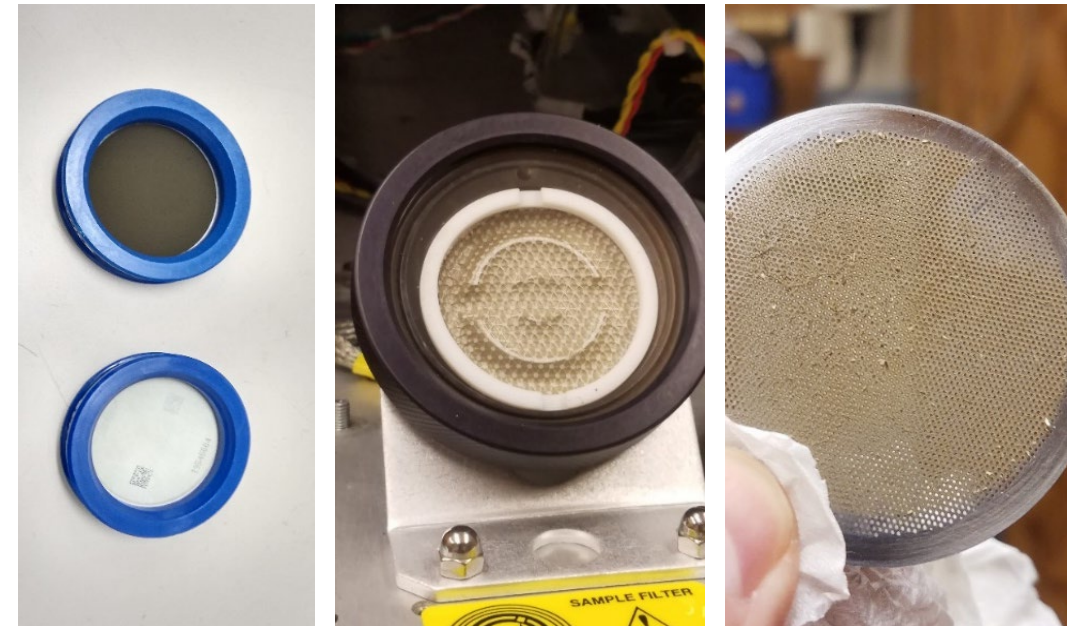
Section 13b: Monitoring Network

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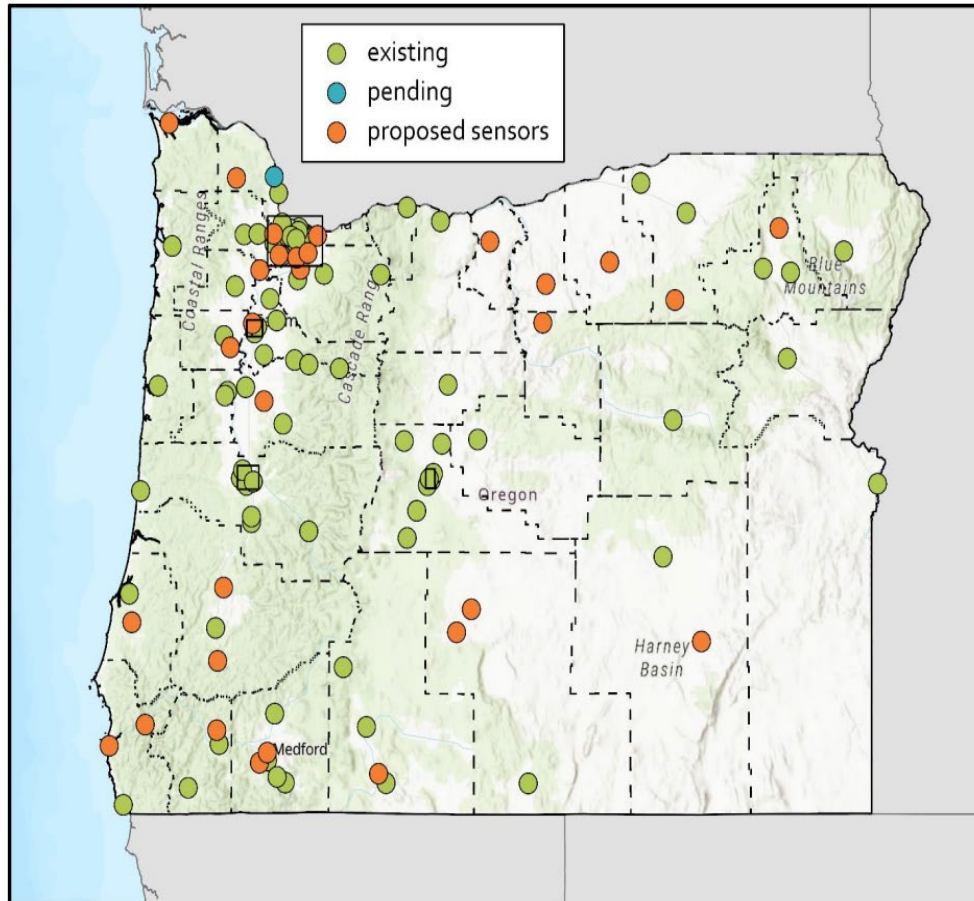
SB 762 Section 13b

Build and deploy 20 additional monitors



Statewide Monitoring Input Survey

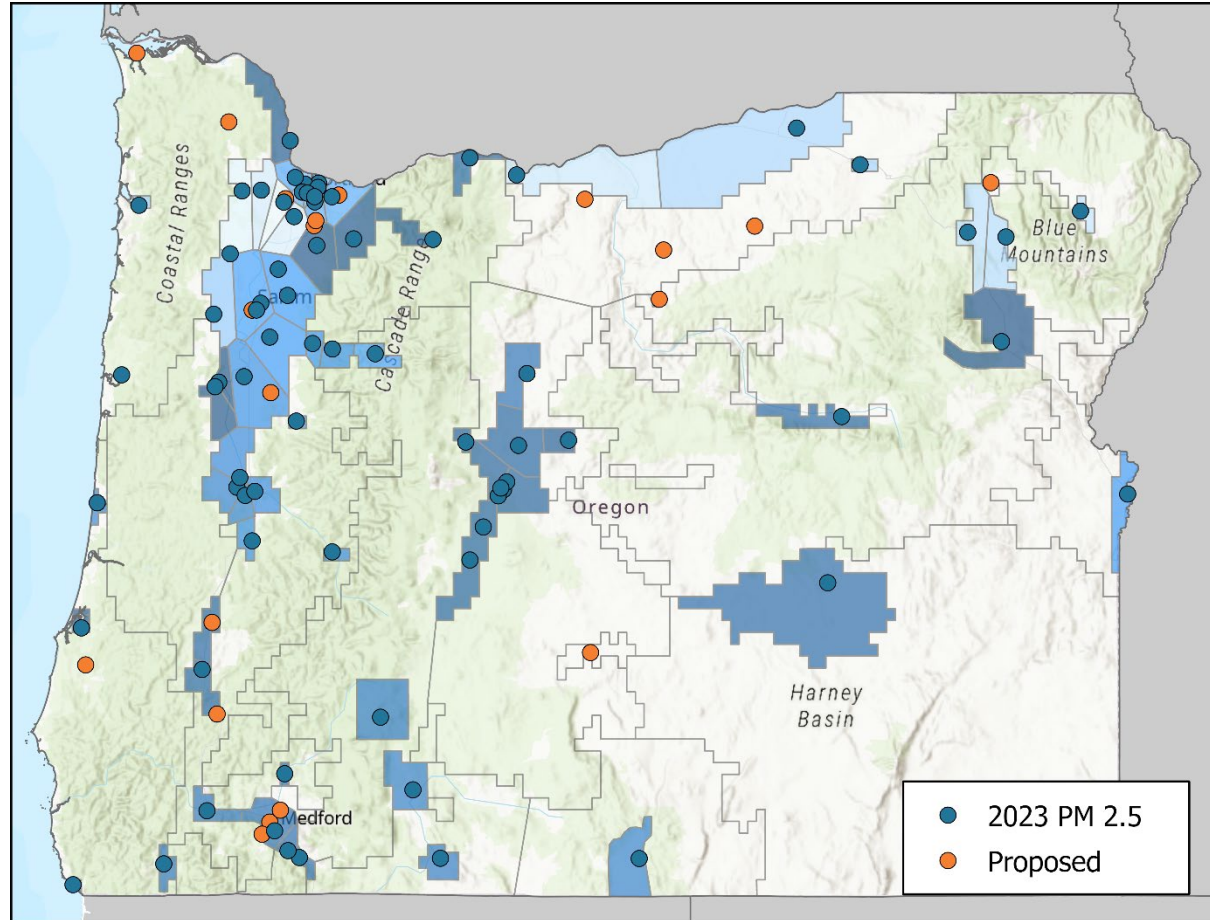
Oregon Air Quality Monitoring Sites in 2022



City	County
Damascus	Clackamas
Gladstone	Clackamas
Oregon City	Clackamas
Seaside/Astoria	Clatsop
Vernonia	Columbia
Myrtle Point/Coquille	Coos
Agness	Curry
Gold Beach	Curry
Canyonville	Douglas
Sutherlin	Douglas
Condon	Gilliam
Steens Mtn	Harney
Central Point	Jackson
Jacksonville	Jackson
Merlyn	Josephine

City	County
Klamath Falls (2 nd monitor)	Klamath
Christmas Valley	Lake
Paisley or Silver Lake	Lake
Lebanon	Linn
Salem/Keizer	Marion
Heppner	Morrow
Downtown Gresham	Multnomah
Monmouth/Independence	Polk
Moro	Sherman
Ukiah	Umatilla
Elgin	Union
Beaverton (2 nd monitor)	Washington
Tigard	Washington
Fossil	Wheeler
Newberg	Yamhill

Section 13b: Monitoring Network



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatasystemen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Understanding our network gaps

Polygon Mapping Project

- Partnership with OHA
- Gap analysis of network

New Monitor Locations Selected

SB 762 Next Steps

- Monitor Placement
- Grants and Contract Close-out
- Finalize Accomplishments and Lessons Learned
- Prepare for Fire Season and Staff Transitions

City of Medford CRP Development

Aaron Ott

Emergency Manager City of Medford

We want your input!

Help us better understand how smoke from wildfires and prescribed fires affects you.


Your input will be used to create the Jackson County Smoke Management Community Response Plan.



Photo courtesy of Gary Halvorson, Oregon State Archives



Community Response Plan Jackson County




Source: Ashland Forest Resiliency, Gary Halvorson, Oregon State Archives, Jennifer Horton, DEQ

March 2023 Final Report

Prepared for
Jackson County
10 S Oakdale Ave Rm #214
Medford, OR 97501

Prepared by
The University of Oregon
Institute for Policy Research & Engagement
School of Planning, Public Policy, and Management



Deschutes County Smoke Preparedness Staffing and CRP Implementation

Carissa Heinige

Public Health Emergency Preparedness Coordinator

Be Prepared This Fire Season



Sign up for emergency alerts. Visit DeschutesAlerts.org to sign up for emergency alerts this wildfire season.

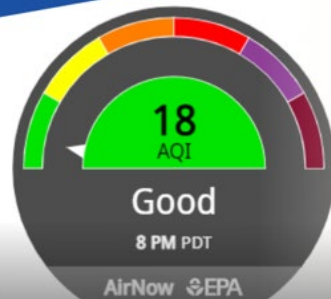


Visit CentralOregonFire.org for information about protecting your health this fire season.

Check Air Quality Index



Use AQI when planning trips outdoors to help prevent exposure to smoke.



Visit CentralOregonFire.org for information about protecting your health this fire season.

Protect Your Health During Smoke Events



During fire season in Central Oregon, it's important to protect your health from smoke exposure. The following list are things you can do to protect your health during periods of wildfire smoke:

- Limit your exposure to smoke.
- Check the air quality index (AQI) daily to plan your outdoor activities when AQI is at lower levels. Visit CentralOregonFire.org/smoke-air-quality/ for more information about air quality.
- Reduce the amount of time spent outdoors, if possible.
- Avoid vigorous outdoor activity.
- Stay hydrated and drink plenty of water.
- Use over the counter tear drops to relieve eye irritation caused by particulate matter in the air.
- Wear a properly fitted N-95 respirator indoors or outdoors to prevent lung irritation from large and small particulate matter (not gases). Wet towels or bandanas will provide little protection from small particulate matter and gases. Visit CentralOregonFire.org/frequently-asked-questions/ for a video about properly fitting an N-95 respirator.
- If you must be outdoors, wear goggles in areas of high ash & dust to prevent eye irritation.
- Visit CentralOregonFire.org for more information about fires in Central Oregon and protecting your health from smoke.
- Dial "211" to find out where cleaner air centers are located during periods of elevated smoke.
- Have an evacuation bag ready for leaving at a moment's notice. Make sure to include a supply of any medications you might need.
- Implement your plan for protecting your health at each evacuation level. Deschutes County evacuation levels can be found at CentralOregonFire.org/wildfire-smoke-air-quality-maps2/.

Visit CentralOregonFire.org for information about protecting your health this fire season.

Community smoke response planning in Central Oregon

Community partnerships
serving public health



Community Smoke Response Plan



- Deschutes County Health Services,
- Deschutes County Natural Resources
- Deschutes Collaborative Forest Project (DCFP)
- ODF
- DEQ
- Oregon Health Authority (OHA)
- Project Wildfire
- The Nature Conservancy (TNC)
- U.S. Forest Service – Deschutes National Forest (DNF)
- Central Oregon Fire Management Service (COFMS)

PRESCRIBED FIRE, SMOKE, AND PUBLIC HEALTH:
A Community Response Plan for the Bend Smoke Sensitive Receptor Area





The Source For Comprehensive Fire, Health, And Air Quality Information In Central Oregon

PRESCRIBED FIRE UPDATE

BLM plans to begin ignitions on a 1,243-acre fuels reduction project southeast of Brothers

TEXT "COFIRE" TO 888-777 TO RECEIVE WILDFIRE & PRESCRIBED FIRE TEXT ALERTS

Protect Your Health

In Central Oregon, dry and warm conditions – usually in summer – can bring smoke from wildfires both near and far. Whether you are a local or a visitor, there is always a chance that smoky air will change your plans. The best thing to do is be ready. Smoky air can be harmful to your health- but there are things you can do to protect yourself and your loved ones. Here is what you need to know.

What You Can Do To Protect Your Health

There are things everyone needs to know to protect their health when it's smoky outside. For a list of guidelines, visit the [Smoke and Your Health](#) page or [download the checklists below](#). Watch the videos of Dr. Mark Press from Mosaic Medical talking about some specific things you can do.



Smoke and Your Health Campaign

[Link to PSA on Youtube](#)



Smoke and Your Health Campaign

Check Air Quality Index

Learn what AQI is and how to use it to protect your health.



Visit CentralOregonFire.org for information about protecting your health this fire season.



Smoke and Your Health Campaign

Esté preparado esta temporada de incendios



Durante la temporada de incendios en Oregón Central, es importante proteger su salud ante la exposición al humo. La lista a continuación, describe medidas que puede tomar para prepararse para los períodos de humo de incendios forestales:

- Abastézcase de filtros HEPA con un Valor de Reporte de Eficiencia Mínima (MERV, por sus siglas en inglés) de 13 o mayor.** Coloque uno en su unidad de HVAC o construya un filtro casero usando un filtro HEPA y un ventilador de caja moderno (de 2012 en adelante). Visite [Deschutes.org/Health/Page/indoor-air-quality-iaq](https://www.deschutes.org/Health/Page/indoor-air-quality-iaq) para encontrar las indicaciones de cómo construir usted mismo un filtro de aire con ventilador de caja.
- Destine una habitación en su vivienda para que sea una habitación limpia.** Selle todas las ventanas y puertas para evitar que entre el humo de afuera, agregue un purificador de aire o un filtro de ventilador de caja casero y asegúrese de que en la habitación no se realicen actividades generadoras de partículas como cocinar o freír alimentos, fumar, aspirar, encender velas o incienso y usar aerosoles como ambientadores.
- Obtenga un purificador de aire y un humidificador si no cuenta con unos ya.**
- Mantenga cerradas todas las puertas y ventanas de autos y edificios para evitar que entren partículas.**
- Pregúntele a un amigo o familiar si pueden quedarse con ellos durante un período de cantidades elevadas de humo o en una emergencia.**
- Regístrese para recibir alertas por mensajes de texto.** Envíe "COFIRE" al 888-777 para recibir alertas sobre incendios controlados e incendios forestales en su área. Regístrese en [DeschutesAlerts.org](https://www.DeschutesAlerts.org) para recibir alertas de emergencia.
- Conozca dónde obtener información sobre incendios en Oregón Central.** Visite [CentralOregonFire.org](https://www.CentralOregonFire.org) para recibir información sobre incendios y cómo proteger su salud ante el humo.
- Conozca dónde verificar el índice de calidad del aire (AQI, por sus siglas en inglés) y revíselo diariamente** para planificar sus actividades en torno a los períodos de cantidades elevadas de humo. Visite [CentralOregonFire.org](https://www.CentralOregonFire.org) para recibir más información referente a la calidad del aire.
- Marque al "211" para descubrir dónde se encuentran ubicados los centros de aire limpio durante los períodos de cantidades elevadas de humo.**
- Prepare una mochila de evacuación y téngala lista para salir en cualquier momento.** Asegúrese de incluir un suministro de medicamentos.
- Conozca el significado de los diferentes niveles de evacuación y tenga un plan para proteger su salud en cada nivel.** Los niveles de evacuación del condado de Deschutes pueden encontrarse en [CentralOregonFire.org/wildfire-smoke-air-quality-maps-2/](https://www.CentralOregonFire.org/wildfire-smoke-air-quality-maps-2/)

Visite [CentralOregonFire.org](https://www.CentralOregonFire.org) para recibir información sobre cómo proteger su salud durante esta temporada de incendios.



Be Prepared This Fire Season



During fire season in Central Oregon, it's important to protect your health from smoke exposure. The following list are things you can do to prepare for periods of wildfire smoke:

- Stock up on HEPA filters with a Minimum Efficiency Reporting Value (MERV) of 13 or higher.** Put one in your HVAC or build a DIY filter using a HEPA filter and newer (2012 or later) box fan. Visit [Deschutes.org/Health/Page/indoor-air-quality-iaq](https://www.Deschutes.org/Health/Page/indoor-air-quality-iaq) for instructions on building a DIY box fan air filter.
- Create a clean room in your home.** Seal windows and doors to prevent outdoor smoke from entering, add an air purifier or DIY box fan filter, and make sure the room is free of particulate causing activities like cooking or frying foods, smoking, vacuuming, burning candles or incense, and using aerosol sprays like air fresheners.
- Get an air purifier and a humidifier if you don't already own one.**
- Keep doors and windows of cars and buildings closed** to prevent particulate matter from entering.
- Ask a friend or relative if they would be willing to let you stay with them** during periods of elevated smoke or in an emergency.
- Sign up for text alerts.** Text "COFIRE" to 888-777 to get text alerts about prescribed burns and wildfires in your area. Sign up for emergency alerts at [DeschutesAlerts.org](https://www.DeschutesAlerts.org).
- Know where to get information about fires in Central Oregon.** Visit [CentralOregonFire.org](https://www.CentralOregonFire.org) for information about fires and protecting your health from smoke.
- Know where to check the air quality index (AQI) and check it daily** to plan your activities around periods of elevated smoke. Visit [CentralOregonFire.org](https://www.CentralOregonFire.org) for more information about air quality.
- Dial "211" to find out where cleaner air centers are located** during periods of elevated smoke.
- Pack an evacuation bag and have it ready for leaving at a moment's notice.** Make sure to include a supply of medications.
- Know what evacuation levels mean and have a plan for protecting your health at each level.** Deschutes County evacuation levels can be found at [CentralOregonFire.org/wildfire-smoke-air-quality-maps-2/](https://www.CentralOregonFire.org/wildfire-smoke-air-quality-maps-2/)

Visit [CentralOregonFire.org](https://www.CentralOregonFire.org) for information about protecting your health this fire season.

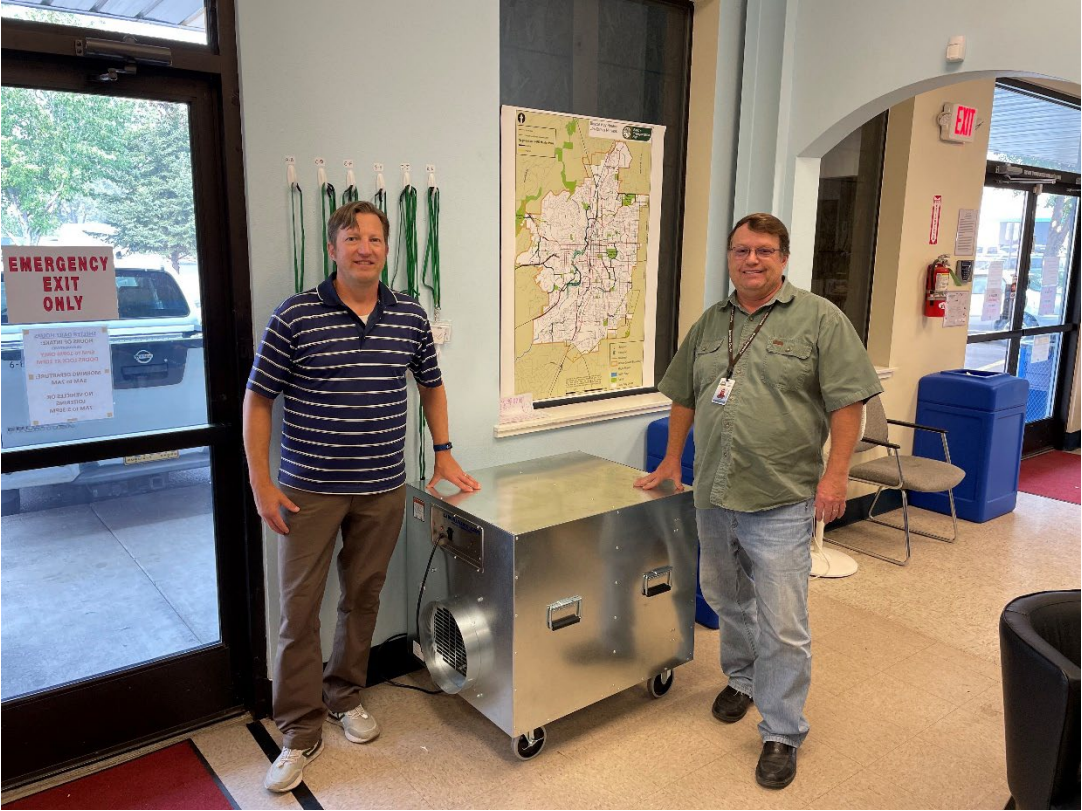


Partnerships and Outreach

- **Council on Aging of Central Oregon**
- **Latino Community Association**
- **Central Oregon Wildfire Education Campaign**
- **Deschutes Collaborative Forest Project**
- **OSU Cooperative Extension**
- **Oregon State Fire Marshal**
- **Deschutes National Forest**
- **Discover Your Forest**
- **Oregon Department of Forestry**



Gaps and Opportunities



Thank you

Carissa Heinige

