



ANNUAL REPORT 2022

Lane Regional Air Protection Agency

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www.LRAPA.org

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Springfield, Or. 97477

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LRAPA, WHO ARE WE?

The Vision: Community partners working together to ensure cleaner air for everyone.



The Lane Regional Air Protection Agency (LRAPA) is the local air quality authority for Lane County, Oregon. Founded in 1968 and collectively supported by the Cities of Eugene, Springfield, Cottage Grove, Oakridge, and the Lane County Government, LRAPA is the only local air authority in Oregon. Outside Lane County air quality is monitored and regulated by the Oregon Department of Environmental Quality.

As a local government Agency, LRAPA presents more opportunity for voices in our communities to be recognized, heard, and provide input on decisions made regarding Lane County's air. LRAPA plays an active role in community development and planning by working collectively with other local government and non-profits to achieve federal National Ambient Air Quality Standards (NAAQS) set by the Clean Air Act, and to implement Oregon's statewide air toxics assessment program called Cleaner Air Oregon.

Despite an increase in population and traffic, Lane County's air quality area has seen continued improvement since Agency inception. All of Lane County meets the federal NAAQS due in part to LRAPA's efforts to administer state regulations in addition to local mandatory and voluntary programs.

The Mission: To protect public health, quality of life and the environment as a leader and advocate for the continuous improvement of air quality in Lane County.

LETTER FROM THE DIRECTOR

The year 2022 will be remembered as a productive year with important accomplishments, especially when it comes to the Lane Regional Air Protection Agency (LRAPA) facility safety, employee benefits, community engagement, and air quality. I am now in my second year as Executive Director and I am pleased with the continued improvements in air quality even though wildfire smoke continues to challenge us all. At the same time, I am proud of the great work and customer service LRAPA staff continue to provide.

“I am proud of the great work and customer service LRAPA staff continue to provide.”

First and foremost, LRAPA has made significant progress in improving the safety and security of our building. We installed outside flood lights, security cameras, expanded perimeter fencing, upgraded an access gate with motorized operation and keypad entry, and installed a security box

over the public water service backflow valve. These upgrades have enhanced the security of our facility and the safety for our staff and visitors.

Our annual budget process began in March, and we successfully presented a revised budget and format to our Board of Directors and obtained approval. This change has allowed us to more effectively allocate our resources and provide better monitoring and regulating outdoor air quality in Lane County. In this same month, we were thrilled to receive a second Targeted Airshed Grant (TAG) from the Environmental Protection Agency for \$2.7 million. This funding will allow us to continue our important work in protecting and improving air quality in our region, especially in the Oakridge-Westfir airshed.

In August, we met with our partners (Lane Co., Springfield, Eugene, Oakridge, Cottage Grove) to introduce our staff and discuss the existing intergovernmental agreement. This has allowed us to begin to strengthen our partnerships and work more effectively towards shared goals.

“We were thrilled to receive a second Targeted Airshed Grant from the Environmental Protection Agency.”

As part of our ongoing employee benefits review project, we were pleased to obtain Board approval to participate in the Oregon Public Employees Retirement System (PERS) in April. This will ensure that our staff members have access to quality retirement benefits as they serve the community. It also helps LRAPA remain effective in attracting and retaining staff long term. I am also pleased to report that we were able to successfully hire two new staff in 2022, namely Chantal Green and Amanda Atkins, enhancing our compliance and finance programs.

As I previously mentioned in our annual report for 2021, the work associated with the Oakridge Air TAG has resulted in continued significant reductions in particulate matter, including PM₁₀ and PM_{2.5}, emissions in the Oakridge-Westfir area. The result was EPA approval in September

2022 of the PM₁₀ and PM_{2.5} Maintenance plans and redesignation to attainment. The EPA's recognition of air quality improvements in Oakridge and Westfir is one of many highlights in 2022.

"The EPA's recognition of air quality improvements in Oakridge and Westfir is one of many highlights in 2022."

LRAPA continues the implementation of the Cleaner Air Oregon (CAO) program. The program was started in 2016 as a state air toxics program to evaluate potential health risks to people near commercial and industrial facilities that emit regulated toxic air contaminants and communicate those results to affected communities and ultimately reduce those risks to below health standards.

We shared our findings through increased community engagement and focused on improving the air permit issuance process for Facilities of Potential Significant Interest (FOPSI). Through our efforts, we developed criteria to determine the level of community engagement for each facility, resulting in a more consistent and transparent process. This has already been exemplified in our work with some of the facilities regulated by the CAO program.

In September, we launched a new website that is more user-friendly and easier to navigate. This has allowed us to better share timely information with our stakeholders and the community.

Finally, I am pleased to report that by the end of 2022, LRAPA reduced the Title V air permit issuance backlog to fourteen percent. Beating the EPA's goal of twenty percent. As you may already know, Title V facilities are the biggest emitters of regulated air pollutants. By keeping these permits up to date, LRAPA can regulate and enforce the most current regulations and emission control technology at these facilities. It also demonstrates our commitment to meeting our regulatory obligations in a timely manner.

"I am pleased to report that by the end of 2022, LRAPA reduced the Title V air permit issuance backlog to fourteen percent."



As Lane County begins the new year, we will continue to face many challenges ahead, but our work will continue with renewed effort. LRAPA continues to explore new ways to meet and overcome the many challenges we encounter. At the same time, LRAPA remains ready and able to assure that our air is healthy and breathable for all our family, friends, and community members!

Steven A. Dietrich

Steven A. Dietrich
Executive Director

BOARD OF DIRECTORS

LRAPA's Board of Directors is a nine-member group of appointed fiduciaries who steer the organization toward a sustainable future by adopting sound and ethical legal governance, as well as financial management policies and assuring LRAPA has adequate resources to advance its mission.

2022 Board of Directors	
Joe Pishioneri - Chair Representing Springfield	Jeannine Parisi - Vice Chair Representing Eugene
Terry Fitzpatrick Representing Springfield	Matt Keating Representing Eugene
Mike Fleck Representing Cottage Grove	Howard Saxion Representing Eugene
Chrissy Hollett Representing Oakridge	Jenna Knee Representing Eugene
	Joe Berney Representing Lane County

Board members volunteer their time to LRAPA and are appointed by their respective city councils and the Lane County Board of Commissioners. Seat distribution on LRAPA's Board is representative of population size and density. 2022 membership included four seats for the City of Eugene, two for the City of Springfield, one for the City of Cottage Grove, one for the City of Oakridge, and one for Lane County.

The Board met 10 times in 2022. Meetings usually occur on the second Thursday of every month with no meetings generally scheduled in August or December. Board meetings are open to the public with opportunity for statements at the start of each meeting.

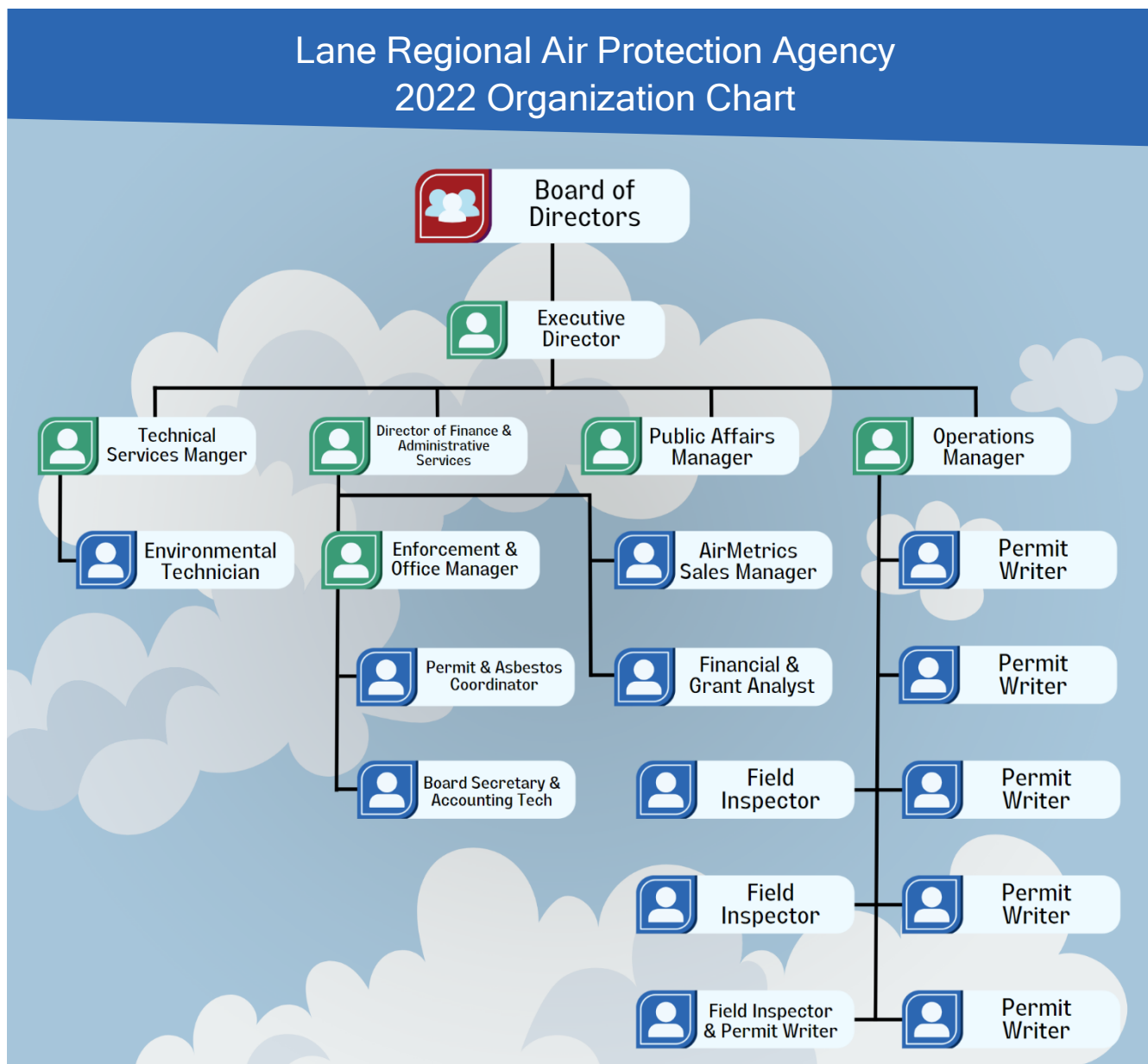
CITIZENS ADVISORY COMMITTEE

LRAPA's Citizens Advisory Committee (CAC) is a group of volunteers who meet to discuss air quality topics, provide opinions or recommendations to the Board when requested, and conduct special projects assigned by the Board. There are at least seven and no more than 15 seats on the CAC with membership to include backgrounds in public health, planning, industry, agricultural, fire suppression, and general interest.

2022 Citizen Advisory Committee	
Jim Daniels - Chair Representing Large Industry	Kelly Wood - Vice Chair Representing Industry
Jeffrey Carman Representing Public Health	Evelina Davidova-Kamis Representing Industry
Mysti Frost Representing General Public	Chris Cline Representing Fire Suppression
Paul Metzler Representing General Public	Peter Dragovich Representing Community Planning
Terry Richardson Representing General Public	Eric Burdette Representing Community Planning
	Shane Ruddell Representing Agriculture

The CAC met 10 times in 2022. Meetings usually occur on the final Tuesday of every month with no meetings generally scheduled August or December. These meetings are open to the public with opportunity for statements at the start of each meeting.

STAFFING & AGENCY DEPARTMENTS



LRAPA's staffing has varied over the years as annual budgets were adjusted to account for economic fluctuations. In 2008, LRAPA had the highest staffing level with 23 full-time equivalent (FTE) employees. The lowest staffing level since then was in 2014, when LRAPA had only 13 FTE employees.

In 2022, LRAPA maintained 19 FTE employees by filling two vacancies. In September, a hybrid permit writer/field inspector was hired, this position will help maintain lower permitting backlogs while also ensuring that issued permits receive timely and thorough inspections. In November, LRAPA hired a financial and grant analyst, a role that is vital to the Agency's pursuit of grant opportunities that can increase the Agency's service to Lane County.

BUDGET & FINANCES

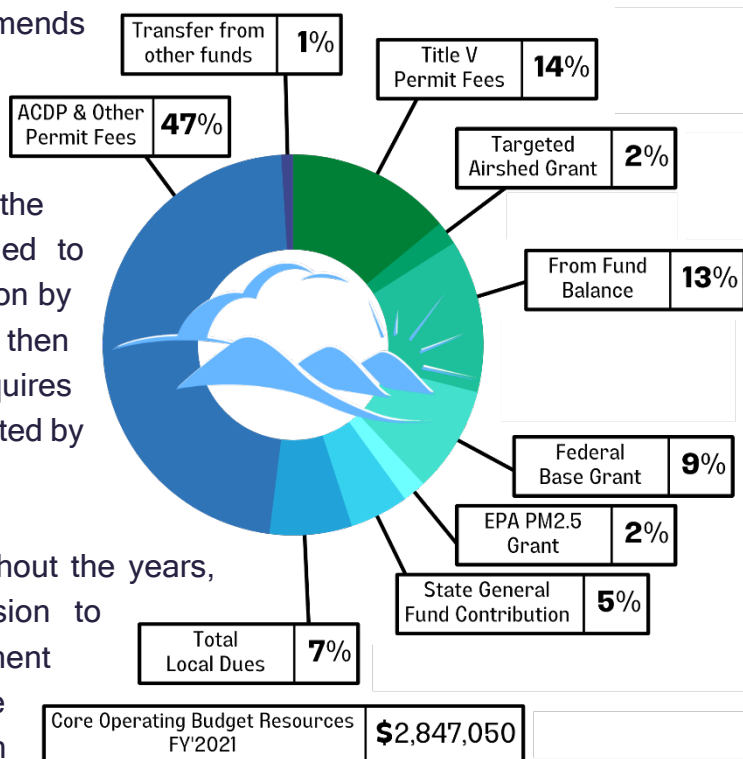
LRAPA's General Fund operating budget for fiscal year 2022 was \$2,847,050. The budget is reviewed and set annually by the Budget Committee. This 18-member committee is made up of LRAPA's nine Board of Directors plus nine Board-appointed citizens who represent the same jurisdiction as their Board appointee.

FY'2021-2022 Appointed Budget Committee	
Adam Rue - Chair Representing Eugene	Steve Schmunk - Vice Chair Representing Springfield
Marianne Dugan Representing Eugene	Ruth Linoz Representing Springfield
Lisa Arkin Representing Eugene	Iva Pfeifer Representing Cottage Grove
Dylan Plummer Representing Eugene	Dawn Kinyon Representing Oakridge
	Michelle Webber Representing Lane County

Budget committee meetings occur in March and April of each year, with the possibility for a meeting in May if needed. During these public meetings the committee reviews a proposed budget, ask questions, and recommends changes.

After revisions are implemented and the committee votes to approve the budget, a public hearing is scheduled to record public testimony for consideration by the Board of Directors. The Board then votes to adopt the budget. State law requires the next fiscal year's budget to be adopted by June 30.

Despite fluctuations in funding throughout the years, LRAPA has succeeded in its mission to advocate for the continuous improvement of air quality in Lane County. The airsheds in our jurisdiction have seen significant improvement over the last decade due to LRAPA's commitment and efforts to deliver on its mission and responsibilities to all of Lane County's diverse communities.



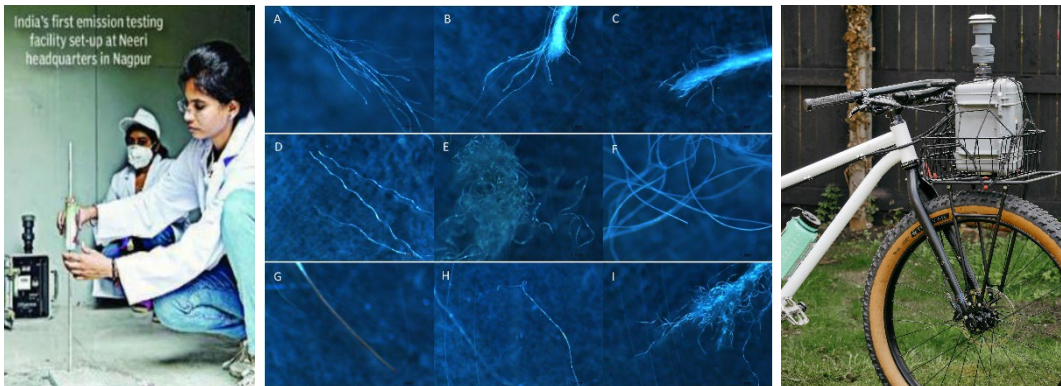
AIRMETRICS

AirMetrics is a government enterprise operated by the Lane Regional Air Protection Agency. The enterprise was created as a revenue source generated by sales of the MiniVol TAS; a low flow, filter-based, battery-powered portable air sampler.

Current users of the MiniVol TAS include environmental consultants, domestic and international air quality authorities, government agencies and universities around the world. The MiniVol TAS has proven to be effective in mining operations, prescribed burns, emissions testing facilities and remediation sites after Hurricane Katrina. Recently the MiniVol TAS was implemented as the active air sampler in a proposed methodology for identifying the presence of microplastics in indoor and outdoor air.



Above: A MiniVol TAS portable air sampler.



Above: Photos of applicable uses of the MiniVol TAS.

In October, AirMetrics moved into a new location on Olympic St. in Springfield. In November, the Business Manager and LRAPA's financial director provided a business plan to LRAPA's Board of Directors exploring approaches to increase sales and share of the niche low-flow sampling market.

Annual sampler sales have declined since the beginning of the COVID-19 pandemic related to a drop in international market sales, particularly in Asia. Annual sampler sales for 2022 were 89 units.



Above: Photos of AirMetrics's new business location in Springfield.

Expanding the customer base, adding to the product line, and finding new applications for the MiniVol TAS are paramount to the enterprise's viability.

PERMITTING

An important function of LRAPA in Lane County is to administer and enforce operational air permits issued to industrial and commercial businesses. LRAPA permits a variety of activities such as: wood products manufacturing, chemical products manufacturing, mineral products manufacturing, metal products manufacturing, water treatment, fuel burning, fuel transfer operations, coating operations, and other sources of toxic air pollutants. LRAPA's rules and regulation cannot be less stringent than federal and state rules and regulations.

Title V Operating Permits & Air Contaminant Discharge Permits (ACDPs)

In 2022, 296 sources held an LRAPA air permit; of those 279 were Air Contaminant Discharge Permits (ACDP), 14 were Title V Federal Operating Permits, and 3 were Registered Sources. Gasoline dispensing facilities account for 39% of ACDPs. Being local, LRAPA provides greater service to regulated sources and maintains a lower permitting backlog.



Above: LRAPA Staff during a facility inspection.

Issuance, Renewals & Inspections

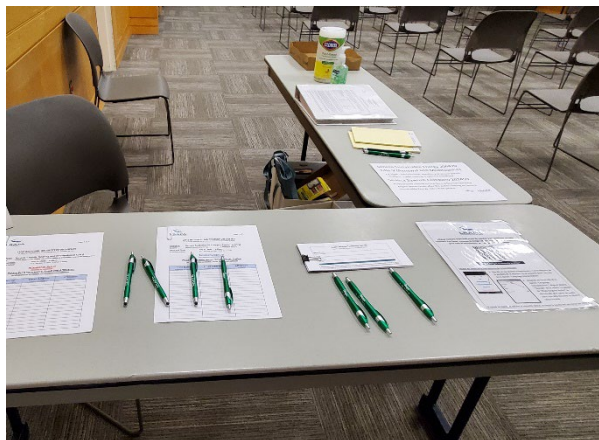
LRAPA issued or renewed 53 air permits in Lane County. 24 air permits received a modification to their air permit. Agency officers inspected 125 commercial or industrial facilities over the year.

Looking to 2023

Operational staff will focus to maintain Title V permit backlog under 20% and reduce the ACDP backlog percentage in 2023.

Permit Backlog

In 2022, LRAPA operational staff were successful in reducing the Title V permit issuance backlog to 14% – which is lower than the EPA's goal of 20%. This equates to the issuance of 6 Title V permits and demonstrates the Agency's commitment to meeting regulatory obligations in a timely manner.



Above: The check-in table at a public hearing for Seneca Sustainable Energy, LLC's Title V permit renewal and modification in July of 2022.

CLEANER AIR OREGON

What is Cleaner Air Oregon?

Cleaner Air Oregon (CAO) is a statewide air regulatory program designed to regulate stationary sources of air pollution based on the potential health risk of air toxic emissions. In addition to closing gaps in existing air quality rules, CAO provides greater public access to air toxics emissions data and creates more certainty for regulated facilities in addressing community health concerns.



LRAPA implements CAO in Lane County. The Agency's Board of Directors adopted the program by reference to the Oregon Department of Environmental Quality's rules in 2019.

Regulation by Potential Health Risk

Lane County CAO Facilities	
<i>Facilities currently called-in, or soon to be called in.</i>	<i>Facilities that have completed the program.</i>
<ul style="list-style-type: none">• Emerald Forest Products, Inc. Plant #1• Hexion, Inc.• J.H. Baxter & Co.• International Paper (IP) - Springfield• Seneca Sawmill Company	<ul style="list-style-type: none">• Arcimoto, Inc.• Seneca Sustainable Energy, LLC• The Willamette Valley Company

The Cleaner Air Oregon program provides additional authority to LRAPA to regulate industrial facilities for releasing any of 600 different pollutants called "toxic air contaminants."

The first step of the process is for facilities called into the

program to develop a list of toxic air contaminants released into the atmosphere and in what quantity. This is called the emissions inventory. Developing an emissions inventory is the slowest step in the process, and LRAPA is interested in reviewing a complete and detailed emissions inventory because any pollutant missing from the inventory would not be included in the health risk assessment conducted of the facility's emissions.

Once an emissions inventory is approved by LRAPA, a computer software models the movement of these pollutants through the air using meteorological and topographical information about Lane County. The health risk assessment is conducted by determining where the pollutants go, how much, and who is exposed to them.

Depending on the level of health risk from pollutant exposure to those who live, work, and play nearby, LRAPA may require changes at the facility to lower the risk to a regulatory acceptable level, or require the facility to participate in public engagement with the surrounding community.

After a facility completes the program, any significant changes to its process or pollutants list can require a new health risk assessment to be conducted. New facilities applying for their first air permit are required to complete CAO before the Title V operating permit or ACDP can be issued.

CLEANER AIR OREGON, CONT'D

Community Engagement

Community engagement is a core tenant of Cleaner Air Oregon. In 2022, LRAPA kept to this tenant through direct outreach to stakeholders on facilities in the program.



Above: LRAPA participating in the "Bethel Summer Fun" zone park events at Grasshopper Meadows park in July of 2022.

LRAPA connected with the Whiteaker Neighborhood Community Council (WCC) and offered a presentation on Arcimoto's Cleaner Air Oregon health risk assessment. WCC was more interested in a presentation on air monitoring and air quality complaints which occurred in November. LRAPA also offered presentations on the public commenting process and how to write a more substantive comment to the Industrial

Corridor Community Organization (ICCO), Active Bethel Community (ABC) neighborhood association, and the Santa Clara Community Organization (SCCO). This offer was accepted by ABC and SCCO with presentations given in June and July.

Throughout 2022 LRAPA remained engaged with core group of community, agency, and local government representatives to discuss information on environmental pollution regarding the J.H. Baxter facility in the Bethel Neighborhood of West Eugene. In 2022, the facility halted operations which has paused some of the Cleaner Air Oregon effort, however LRAPA continues to keep the interested community apprised to the status of the facility's air permit and any changes.

In July, LRAPA hosted a hybrid virtual and in-person public hearing for Seneca Sustainable Energy's Title V permit renewal and modification. LRAPA approved a request from Beyond Toxics and ABC to extend the public comment period and allow more time for public to review the draft permit and submit public comments.



Above: LRAPA staff during a hybrid in-person and virtual public hearing for Seneca Sustainable Energy, LLC's Title V permit renewal and modification in July of 2022.

Finally, LRAPA published five Cleaner Air Oregon email updates in 2022. These narrative updates describe progress made by facilities in the program and provided updates on timelines. These updates can be read on LRAPA's Cleaner Air Oregon webpage.



Scan the QR code to visit [LRAPA's webpage](#) and sign up to receive email updates on CAO facilities.

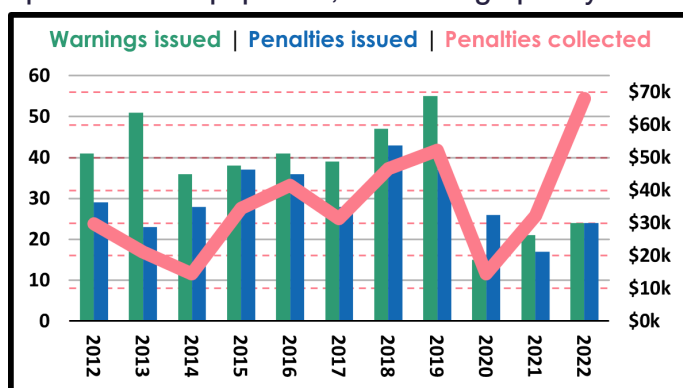
OPERATIONS

Asbestos

LRAPA's asbestos permit and inspection program handles hundreds of abatement notices per year. To legally remove asbestos, an asbestos survey must be conducted by an accredited inspector prior to commencing a building demolition or remodel. A proper permitting notice needs to also be filed and the removal or abatement of asbestos conducted following the criteria outlined in title 43 of LRAPA's rules.

Enforcement

LRAPA can initiate enforcement in instances of industrial or commercial air permit violations, illegal outdoor burning activities, improper handling or transport of asbestos-containing materials, failure to obtain necessary air permits prior to construction or operation of equipment, exceeding opacity limits from woodstoves



Complaints

A vital service LRAPA provides to Lane County is to receive, record, and investigate air quality complaints submitted to the Agency. Complaints can be made on our website, over the phone, or via email. LRAPA's works hard to provide robust, involved, and timely responses to air quality complaints received.

Air quality complaints range a broad number of categories. The three most common air quality complaint categories in 2022 were industry, outdoor burning, and home wood heating.

LRAPA investigated 96% of the 725 air quality complaints received in 2022.

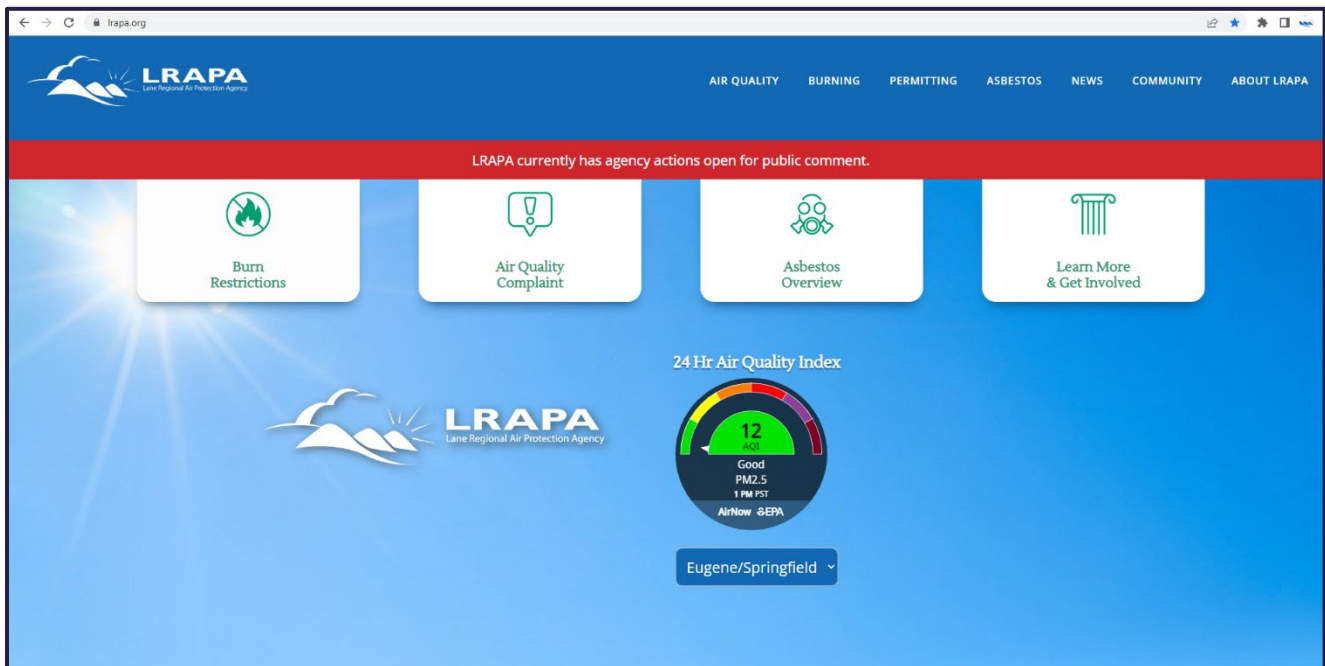
Asbestos Notices	
Schools	17
Residences	262
College	22
Industry	4
Commercial	142
Other	18
Total	465
Asbestos Inspections	
Total	115
Asbestos Fees Received	
Total	\$203,002.50

and chimneys, and burning prohibited materials. The dollar amount of penalties collected annually does not reflect the penalties assessed or settled during the year due to pending cases and collections received on previous years' penalties. Money collected from penalties is transferred to Lane County's General Fund.

Air Quality Complaints 2013-2022										
Year	13	14	15	16	17	18	19	20	21	22
Dust	30	14	25	32	25	26	15	17	26	12
Ag/Field Burning	17	4	12	9	1	0	6	2	7	2
General Air Quality	26	30	15	20	14	6	12	4	8	1
Home Wood Heating	219	121	342	130	194	126	128	474	57	67
Industry	122	127	52	58	74	50	170	100	337	198
Miscellaneous	52	57	85	164	138	66	67	59	40	102
Outdoor Burning	321	279	251	266	281	351	402	423	243	292
Slash Burning	5	7	11	26	13	24	16	12	10	6
Unknown	14	35	46	56	63	29	39	74	71	45
Total	806	674	839	761	806	678	855	765	799	725

LRAPA.org

A New & Improved Website



Above: LRAPA's new homepage with navigational buttons leading directly to services, resources, and information.

In 2022, LRAPA launched a new website to better connect users with information. The new website features more intuitive navigation, an expanded public calendar, a monitoring webpage, and more direct access to important documents, like meeting agendas or minutes, as well as facility air permits or review reports.

HOME WOOD HEATING ADVISORY

Thursday, Dec 22, 2022

Eugene/Springfield
Allowed

Oakridge
Allowed

HOME WOOD HEATING ADVISORY HISTORY

Date	Eugene/Springfield	Oakridge
12/22/2022	Allowed	Allowed
12/21/2022	Allowed	Allowed

Above: The home wood heating advisory displayed on LRAPA's website for Thursday, December 22, 2022.

Development of the website began in the fall of 2021 and it was launched in September of 2022. The website's homepage continues LRAPA's tradition of linking directly to frequently used resources. This is the current outdoor burning or home wood heating restrictions, required asbestos forms, and the air quality complaint form.

A new section of the website, dubbed the "Community Center," focuses on the community. This space will be a growing repository of common air quality topics of interest, such as indoor air quality, prescribed fires, Cleaner Air Oregon, Air Quality Index 101, and more!



Scan the QR code to visit [LRAPA's webpage](https://lrapa.org) and sign up to receive email notices of yellow and red home wood heating advisories and outdoor burning notices.

THE AIR QUALITY IN OAKRIDGE

Oakridge-Westfir Airshed Reattainment

In September 2022, the U.S. Environmental Protection Agency (EPA) announced that the air quality in the Oakridge-Westfir airshed now meets the fine particulate National Ambient Air Quality Standard (NAAQS) under the Clean Air Act. Prior to 2016, Oakridge's air quality exceeded the NAAQS, largely due to the community's reliance on wood burning for heat.

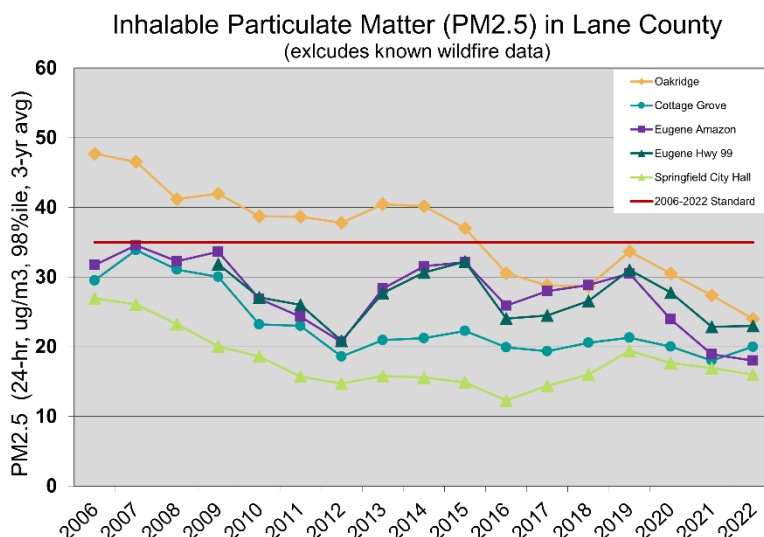
Air quality improvements are attributed to the community's interest in and support for improving air quality by burning cleanly and efficiently, programmatic efforts implemented through the Oakridge Air program, and the LRAPA's Green/Yellow/Red home wood heating program.

As a result of the redesignation from nonattainment of the NAAQS to maintenance for the Oakridge-Westfir airshed, all of Lane County's air now meets the health-based standards for criteria pollutants set under the Clean Air Act.

A second Targeted Airshed Grant for the Oakridge-Westfir airshed

Lasting air quality improvements in the Oakridge-Westfir airshed are made possible through grant funding that supports efforts to reduce PM2.5 emissions. In March 2022, LRAPA was awarded a targeted airshed grant for \$2,739,425 to further reduce emissions in the airshed. This second grant supplements a \$4,938,190 targeted airshed grant first awarded to LRAPA in 2019.

This second grant will allow homes to participate in the program and receive home heating interventions. It also provides funding to promote the program and generate interest and participation. Finally, the grant will fund research with the University of Oregon to study the impact of home heating interventions on indoor air quality, as well as how air quality is communicated and understood throughout the community.



Above: A graph of Particulate Matter 2.5 in Lane County from 2007 - 2022. This chart excludes wildfire data.

OAKRIDGE AIR

The Oakridge Air Program



Above: Oakridge Air at the 2022 Oakridge Festival of Trees in May.

“Oakridge Air” is a brand made after LRAPA secured the first



Targeted Airshed Grant in 2019. The goal of the Oakridge Air brand is to create an identifiable and relevant banner to help connect the many programmatic efforts for which the two targeted airshed grants provide funding.

Oakridge Air is primarily operated by the Southern Willamette Solutions, a 501(c)(3) nonprofit who has been contracted as the Residential Upgrade Coordinator to serve as the project manager and facilitator for the home heating and weatherization upgrades. Good Company, a division of Parametrix, is contracted to serve as Program Manager and Contract Coordinator to LRAPA for the Targeted Airshed Grants funding Oakridge Air work.

Programmatic Efforts

These grants fund a multitude of air pollution reduction strategies in the Oakridge-Westfir airshed, including:

- Affordable dry firewood
- Woodstove upgrades & changeouts
- Weatherization upgrades for homes
- Increased community & school education
- Indoor air filters for schools & residences
- Increased air quality monitoring
- Strengthened compliance program
- Univ. of Oregon air quality research
- Reader board installations in Oakridge
- Chimney sweep vouchers
- And more!

Grant efforts through 2022	
Homes Enrolled	62
Pre Home Audits	49
Wood Stoves Installed	21
Ductless Heat Pumps Installed	27
Homes Weatherized	22
After Action Review	8
Completed Homes	13

Cedar Creek Fire Emergency Response

During the Cedar Creek Wildfire, Oakridge Air responded to the dual emergencies presented. Prior to the mandatory evacuation of the City of Oakridge, Oakridge Air prepared fliers with instructions during an evacuation notice as well as coordinated with the city on bus evacuations. In response to the air



Above: Oakridge Air distributing air purifiers in September during severely degraded air quality caused by smoke from the Cedar Creek Wildfire.

quality emergency caused by oppressive wildfire smoke in the community, Oakridge Air worked tirelessly to source and successfully distribute 1,113 HEPA air purifiers to residents living in Oakridge or Westfir.

THE 2022 WILDFIRE SEASON

Oregon's wildfire season in 2022 began late in the summer and persisted well into the fall. In Lane County, the Cedar Creek Fire had a significant impact on air quality. The 127,311-acre fire was ignited by lightning on August 1st, 15 miles west of the City of Oakridge. The proximity of the Oakridge-Westfir airshed to the fire caused residents to experience 37 days of a 24-hour Air Quality Index (AQI) at or above unhealthy for sensitive groups. Nine of those days were in the category of hazardous, eight days were very unhealthy, and 17 were unhealthy.

LRAPA issued air quality advisories for Lane County due to smoke intrusions from the Cedar Creek Fire. In 2022, there were 42 days with an air quality advisory in effect for some portion of Lane County due to wildfire smoke. LRAPA participated in 27 statewide meetings focused on air quality with state and local agencies, in addition to tri-weekly cooperators' meetings for on-the-ground wildfire suppression efforts and community response.

At the direction of the Board of Directors, LRAPA sent a letter to the Regional Forester of the U.S. Forest Service's Pacific Northwest region, alerting the federal agency to the severity of

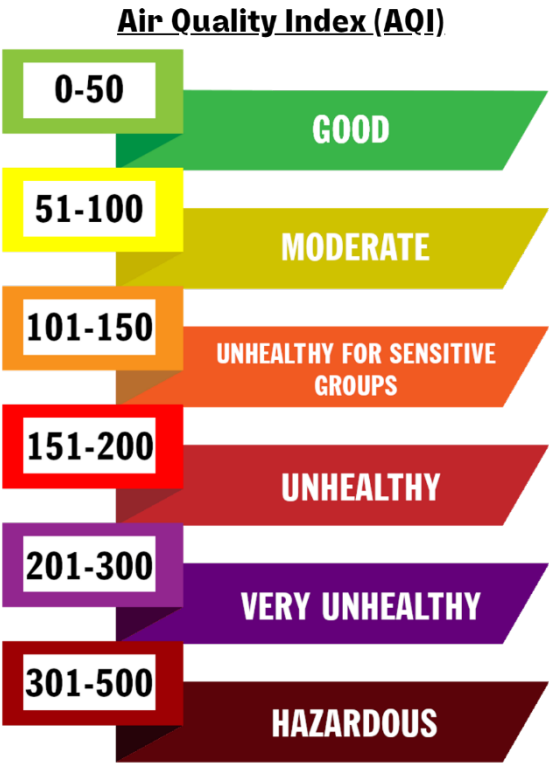


Above: Photo taken by Air Tactic Group Supervisor Justin Wood looking west southwest over Waldo Lake the afternoon of Friday, September 9, 2022.

measured particulate levels that created ongoing unhealthy and hazardous air quality for portions of Lane County. The letter requested that the U.S. Forest Service consider air quality impacts to local smoke-sensitive receptor areas when making wildfire suppression decisions.

In November, LRAPA attended a multi-day workgroup hosted by the Oregon Department of Environmental Quality (DEQ) to improve smoke response between DEQ, regional National Weather Service (NWS) forecast offices, the

Oregon Health Authority (OHA), the Oregon Department of Forestry (ODF), and LRAPA for the 2023 wildfire season.



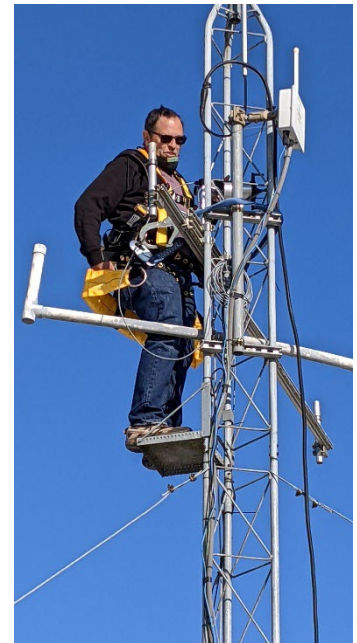
AIR MONITORING

One primary function of LRAPA's role in Lane County is to monitor and report the ambient air quality. Through partnerships and funding, LRAPA brings additional monitoring in the county that otherwise



Above: The air monitoring station at Amazon Park in Eugene.

would exist. LRAPA's monitoring network consists of eight stationary sites that measure a variety of air pollutants and meteorological parameters. At an estimated operations costs of over \$500,000 a year, LRAPA collects over 750,000 hours of comprehensive pollutant and meteorological data each year. The network includes three locations in Eugene, and one in Springfield, Oakridge, Cottage Grove, Saginaw, and Florence. LRAPA monitors for particulate matter, seasonal ozone, and air toxics.



Above: Monitoring staff performing maintenance on meteorological equipment at the Springfield City Hall monitoring site in February of 2022.

Air Toxics Sampling

Air toxics sampling occurs at two sites in Lane County. LRAPA has partnered with the Oregon Department of Environmental Quality (DEQ) to allow for two air toxics sites by leveraging labor and equipment resources. LRAPA provides labor, initial setup, and equipment costs, while DEQ provides ongoing lab and analysis costs. This cooperative agreement allows current funding, earmarked for one air toxic site, to cover the cost and operation of two sites in Lane County.

Throughout 2022, LRAPA maintained air toxic sampling at the long-term trend site in West Eugene. The second site at Amazon Park was moved to the Willamette Activity Center in Oakridge in July. The decision to move air toxics



Above: Regulatory air monitoring sites throughout Lane County.

monitoring from Amazon Park in Eugene to Oakridge was driven by the desire to understand the air toxics makeup of wildfire smoke uninfluenced by urban pollution.

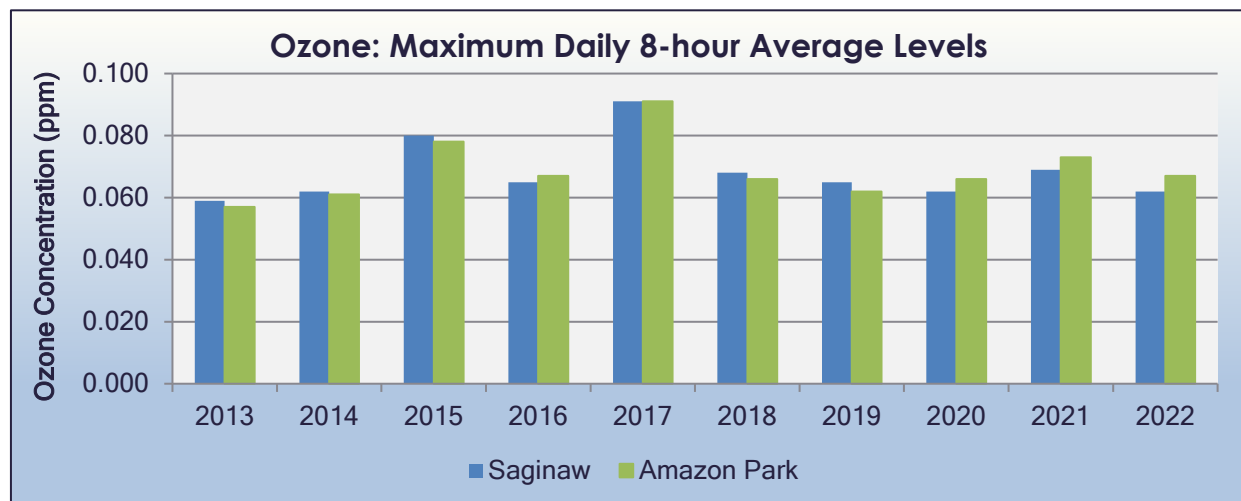
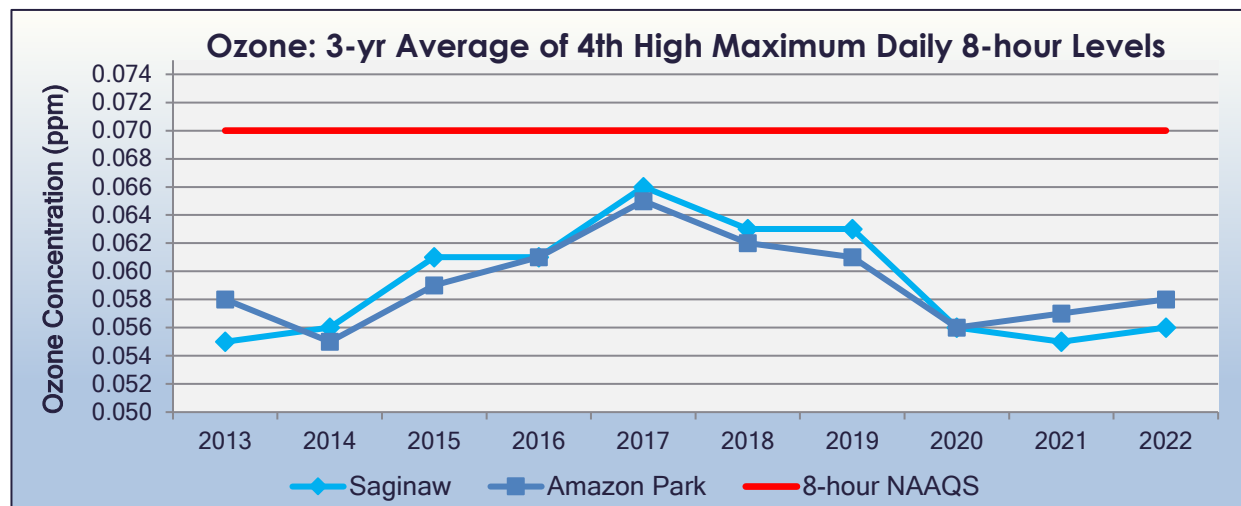
Air toxic sampling will continue in Oakridge through 2023 before being moved to the City of Springfield in 2024.

OZONE DATA

The EPA has set the following National Ambient Air Quality Standards (NAAQS) for Ozone:

Level	Averaging Time	Description
0.070 ppm	8-hour	To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.070 ppm. (Effective October 1, 2015)

8-HOUR AVERAGE OZONE LEVELS 2013 – 2022 (ppm)											
Site Name		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Saginaw	Maximum	0.059	0.062	0.080	0.065	0.091	0.068	0.065	0.062	0.069	0.062
	4th highest	0.058	0.058	0.071	0.056	0.073	0.061	0.055	0.052	0.060	0.056
	3-year 4th high	0.058	0.058	0.061	0.061	0.066	0.063	0.063	0.056	0.055	0.056
	# Exceedances	0	0	4	0	4	0	0	0	0	0
Amazon Park	Maximum	0.057	0.061	0.078	0.067	0.091	0.066	0.062	0.066	0.073	0.067
	4th highest	0.053	0.058	0.068	0.058	0.070	0.060	0.055	0.055	0.062	0.059
	3-year 4th high	0.057	0.056	0.059	0.061	0.065	0.062	0.061	0.056	0.057	0.058
	# Exceedances	0	0	3	0	3	0	0	0	0	0



PARTICULATE MATTER DATA – PM_{2.5}

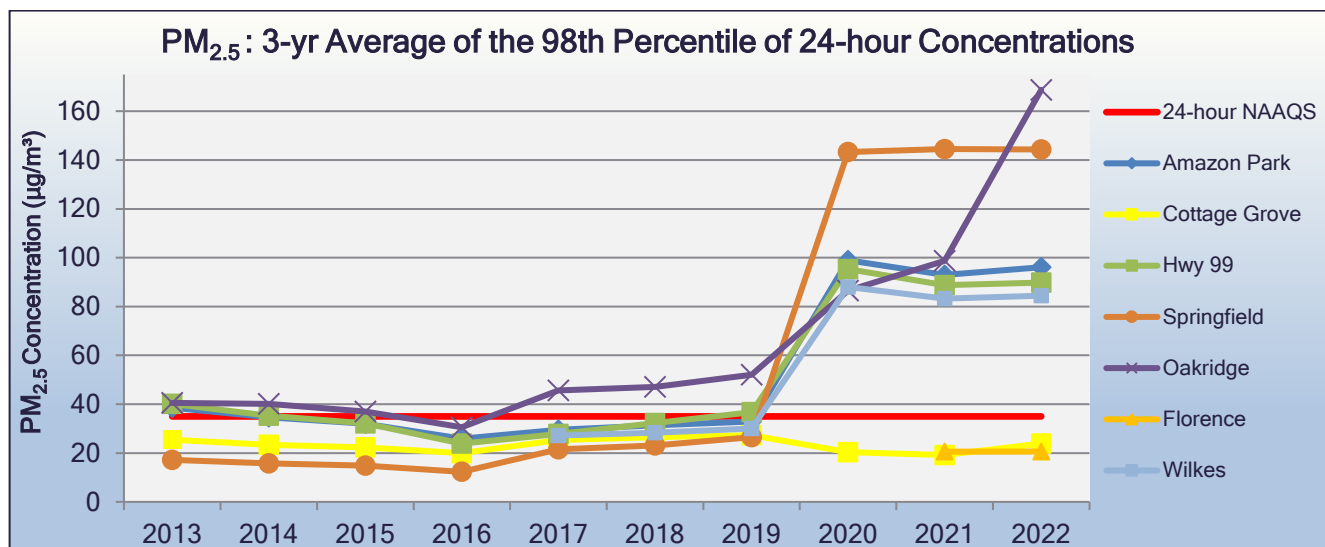
WILDFIRE DATA INCLUDED

The EPA has set the following National Ambient Air Quality Standards (NAAQS) for PM_{2.5}:

Level	Averaging Time	Description
12.0 µg/m ³	Annual (Arithmetic Average)	To attain this standard, the 3-year average of the annual mean PM _{2.5} concentrations from monitors must not exceed 12.0 µg/m ³ (effective December 14, 2012).
35 µg/m ³	24-hour	To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations must not exceed 35 µg/m ³ (effective December 17, 2006).

24-HOUR AVERAGE PM _{2.5} LEVELS 2013 - 2022 (µg/m ³)											
Site Name		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Amazon Park	Annual mean	7.8	7.2	7.4	5.4	9.0	7.5	7.3	14.9	5.5	8.2
	Highest 24-hour	51.9	35.5	55.3	38.2	145.3	40.4	30.1	528.3	21.7	69.9
	Annual 98 th %-ile	38.6	30.7	26.7	20.3	41.6	32.0	25.3	239.5	14.1	34.6
	3 year 98 th %-ile	28	32	32	26	30	31	33	99	93	96
Cottage Grove City Shops	Annual mean	7.5	6.9	7.3	5.8	8.8	7.8	7.3	13.3	6.1	7.8
	Highest 24-hour	38.1	34.0	39.6	26.2	116.0	43.5	29.1	499.2	45.0	92.4
	Annual 98 th %-ile	25.4	21.3	20.1	18.3	37.7	23.7	20.5	16.8	20.3	34.5
	3 year 98 th %-ile	21	21	22	20	25	27	28	20	19	24
Florence*	Annual mean	---	---	---	---	---	---	5.8	7.7	3.8	4.3
	Highest 24-hour	---	---	---	---	---	---	15.3	425.3	10.2	21.9
	Annual 98 th %-ile	---	---	---	---	---	---	12.2	42.5	7.0	12.4
	3 year 98 th %-ile	---	---	---	---	---	---	---	---	21	21
Hwy 99 - Four Corners	Annual mean	8.3	7.2	8.0	5.7	10.9	8.7	8.0	14.9	6.6	8.8
	Highest 24-hour	54.6	43.6	56.4	18.0	330	45.6	30.9	454.2	36.9	69.8
	Annual 98 th %-ile	40.2	30.5	25.6	15.5	42.5	38.9	28.9	218.2	19.1	32.3
	3 year 98 th %-ile	28	30	32	24	28	33	37	95	89	90
Springfield City Hall*	Annual mean	6.3	6.4	6.3	4.7	12.1	6.1	6.6	21.9	6.2	4.1
	Highest 24-hour	18.8	35.6	54.0	10.4	286.8	18.2	21.0	589.3	53.2	51.6
	Annual 98 th %-ile	17.2	14.2	13.3	9.4	41.4	18.1	19.7	392.2	21.6	19.3
	3 year 98 th %-ile	16	15	15	12	21	23	26	143	145	144
Oakridge	Annual mean	9.8	10.0	8.9	6.7	13.0	9.0	9.2	14.4	9.9	23.2
	Highest 24-hour	54.9	46.1	39.3	30.7	200.0	62.0	42.0	576.6	134.3	330.4
	Annual 98 th %-ile	41.0	41.1	28.9	21.7	35.7	33.2	36.7	189.5	69.8	246.9
	3 year 98 th %-ile	41	40	37	31	46	47	52	87	99	169
Wilkes*	Annual mean	---	---	10.2	8.6	9.5	7.6	8.5	16.4	5.1	6.2
	Highest 24-hour	---	---	80.7	32.2	239.2	41.4	29.9	564.1	34.0	58.2
	Annual 98 th %-ile	---	---	26.8	17.8	36.9	30.4	22.7	210.9	16.0	26.3
	3 year 98 th %-ile	---	---	---	---	27	28	30	88	83	84

*non-reference method sampler, if levels approach the NAAQS, reference method sampler will be installed.



PARTICULATE MATTER DATA – PM_{2.5}

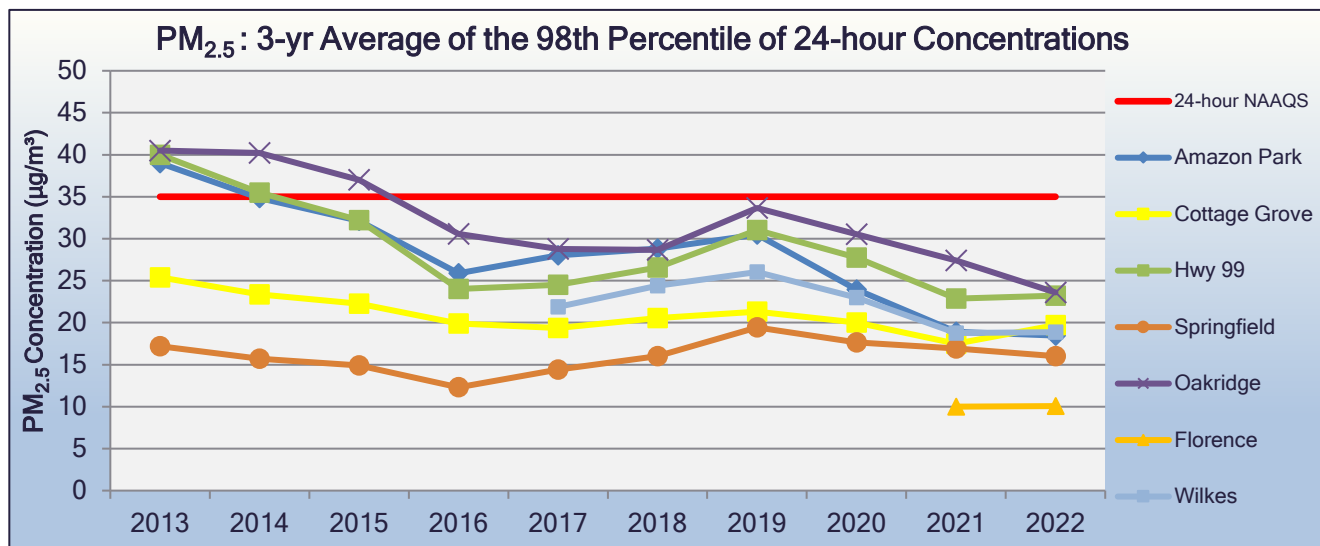
WILDFIRE DATA EXCLUDED

The EPA has set the following National Ambient Air Quality Standards (NAAQS) for PM_{2.5}:

Level	Averaging Time	Description
12.0 µg/m ³	Annual (Arithmetic Average)	To attain this standard, the 3-year average of the annual mean PM _{2.5} concentrations from monitors must not exceed 12.0 µg/m ³ (effective December 14, 2012).
35 µg/m ³	24-hour	To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations must not exceed 35 µg/m ³ (effective December 17, 2006).

24-HOUR AVERAGE PM _{2.5} LEVELS 2013 - 2022 (µg/m ³)											
Site Name		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Amazon Park	Annual mean	7.8	7.2	7.4	5.4	7.0	7.5	7.3	5.8	5.5	7.4
	Highest 24-hour	51.9	35.5	55.3	38.2	41.6	40.4	30.1	26.2	21.7	34.6
	Annual 98 th %-ile	39.0	30.7	26.7	20.3	37.0	29.2	25.3	17.3	14.1	24.0
	3 year 98 th %-ile	28	32	32	26	28	31	33	24	19	18
Cottage Grove City Shops	Annual mean	7.5	6.9	7.3	5.8	6.8	7.8	7.3	6.1	5.9	7.1
	Highest 24-hour	38.1	34.0	39.6	26.2	27.7	43.5	29.1	16.8	45.0	35.0
	Annual 98 th %-ile	25.4	21.3	20.1	18.3	19.7	23.7	20.5	15.9	16.1	27.1
	3 year 98 th %-ile	21	21	22	20	19	27	28	20	18	20
Florence*	Annual mean	---	---	---	---	---	---	5.8	4.3	3.8	4.3
	Highest 24-hour	---	---	---	---	---	---	15.3	20.7	10.2	21.9
	Annual 98 th %-ile	---	---	---	---	---	---	12.2	10.8	7.0	12.4
	3 year 98 th %-ile	---	---	---	---	---	---	---	---	10	10
Hwy 99 - Four Corners	Annual mean	8.3	7.2	8.0	5.7	7.2	8.7	8.0	6.9	6.3	8.5
	Highest 24-hour	54.6	43.6	56.4	18.0	46.8	45.6	30.9	31.2	31.5	41.5
	Annual 98 th %-ile	40.0	31.0	25.6	15.5	32.4	31.8	28.9	22.6	17.1	29.9
	3 year 98 th %-ile	28	30	32	24	25	30	37	28	23	23
Springfield City Hall*	Annual mean	6.3	6.4	6.3	4.7	6.2	6.1	6.6	5.7	5.9	5.0
	Highest 24-hour	18.8	35.6	54.0	10.4	27.9	18.2	21	24.2	22.3	26.7
	Annual 98 th %-ile	17.2	14.2	13.3	9.4	20.5	18.1	19.7	15.2	15.9	16.9
	3 year 98 th %-ile	16	15	15	12	14	16	26	18	17	16
Oakridge	Annual mean	9.8	10.0	8.9	6.7	8.8	8.5	9.2	7.5	6.3	8.4
	Highest 24-hour	54.9	46.1	39.3	30.7	41.6	35.3	42.0	38.5	24.1	34.9
	Annual 98 th %-ile	41.0	41.1	28.9	21.7	35.7	28.6	36.7	26.2	19.2	25.3
	3 year 98 th %-ile	41	40	37	31	29	29	34	31	27	24
Wilkes*	Annual mean	---	---	9.8	8.6	6.8	7.3	8.5	7.1	5.0	5.9
	Highest 24-hour	---	---	40.6	32.2	39.0	41.4	29.9	32.6	23.3	41.8
	Annual 98 th %-ile	---	---	20.4	17.8	27.4	28.0	22.7	19.8	13.8	23.0
	3 year 98 th %-ile	---	---	---	---	22	24	26	23	19	19

*non-reference method sampler, if levels approach the NAAQS, reference method sampler will be installed.



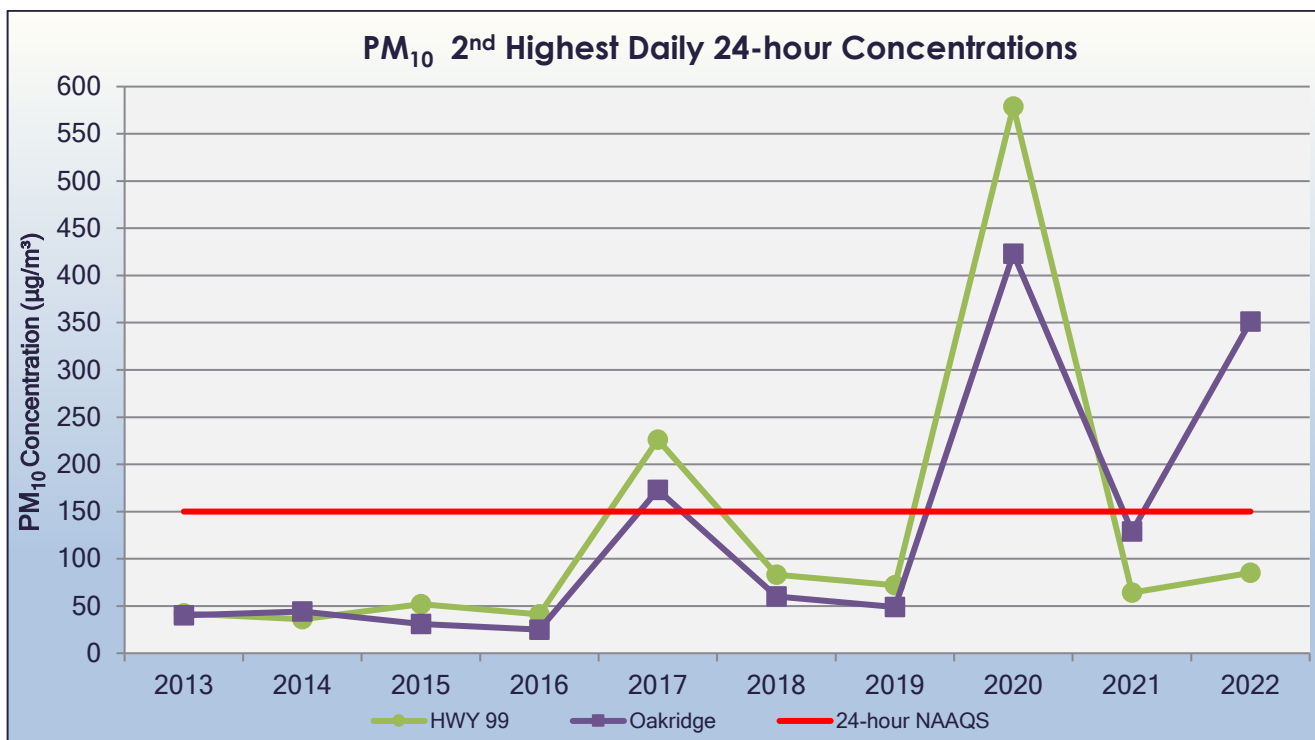
PARTICULATE MATTER DATA – PM₁₀

WILDFIRE DATA INCLUDED

The EPA has set the following National Ambient Air Quality Standards (NAAQS) for PM₁₀:

Level	Averaging Time	Description
150 µg/m ³	24-hour	Not to be exceeded more than once per year on average over 3 years.

PM ₁₀ Levels 2013 - 2022 (µg/m ³)											
Site Name		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Hwy 99	Highest 24-hour	59	42	96	56	239	134	77	587	66	86
	2 nd Highest 24-hour	42	36	52	41	226	83	72	579	64	85
	Exceedances	0.0	0.0	0.0	0.0	3.0	0.0	0.0	10.1	0.0	0.0
	3yr Avg. of Exceedances	0.0	0.0	0.0	0.0	1.0	1.0	1.0	3.4	3.4	3.4
Oakridge	Highest 24-hour	53	51	37	30	210	76	53	591	157	363
	2 nd Highest 24-hour	40	44	31	25	173	60	49	423	129	351
	Exceedances	0.0	0.0	0.0	0.0	4.3	0.0	0.0	8.1	1.0	19.9
	3yr Avg. of Exceedances	0.0	0.0	0.0	0.0	1.4	1.4	1.4	2.7	3.0	9.7



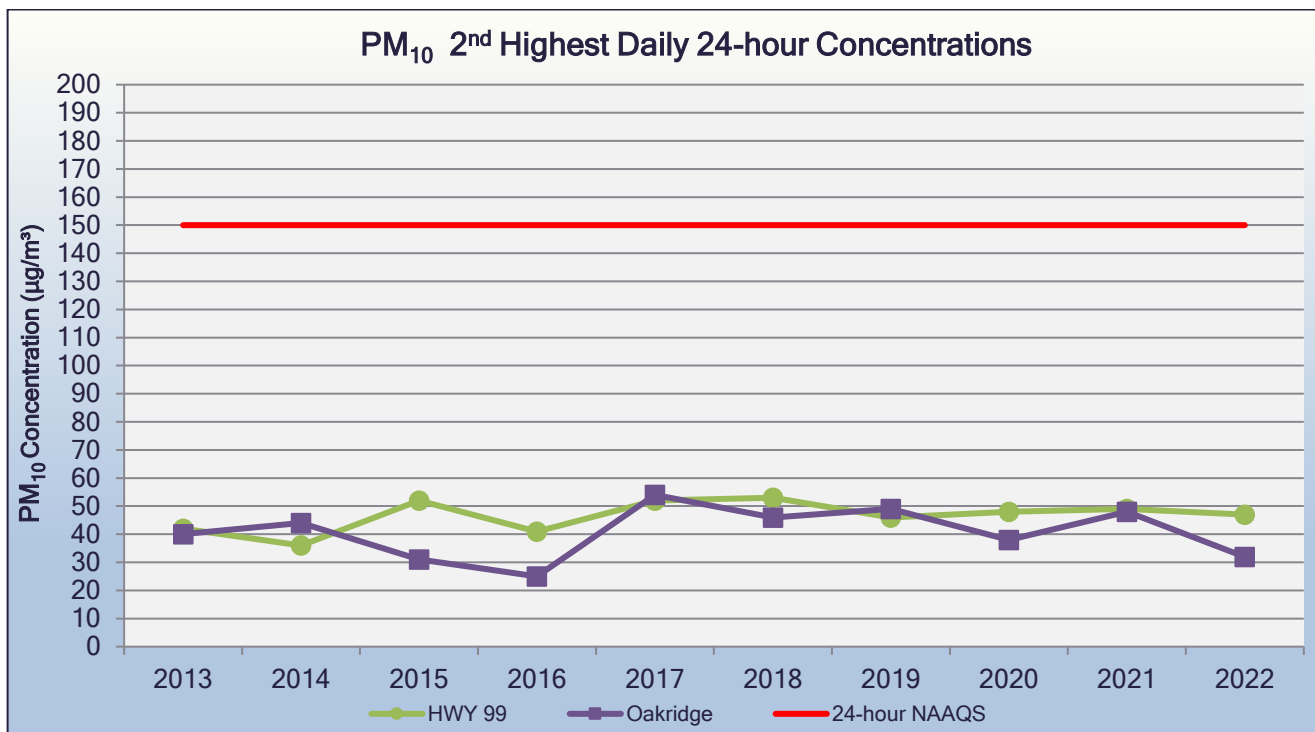
PARTICULATE MATTER DATA – PM₁₀

WILDFIRE DATA EXCLUDED

EPA has set the following National Ambient Air Quality Standards (NAAQS) for PM₁₀:

Level	Averaging Time	Description
150 µg/m ³	24-hour	Not to be exceeded more than once per year on average over 3 years.

PM ₁₀ Levels 2013 - 2022 (µg/m ³)											
Site Name		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Hwy 99	Highest 24-hour	59	42	96	56	69	59	77	59	49	49
	2 nd Highest 24-hour	42	36	52	41	58	58	72	57	49	47
	Exceedances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	3yr Avg. of Exceedances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oakridge	Highest 24-hour	53	51	37	30	96	76	53	98	49	35
	2 nd Highest 24-hour	40	44	31	25	84	60	49	48	48	32
	Exceedances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	3yr Avg. of Exceedances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





Lane Regional Air Protection Agency
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