

*Lane Regional Air Protection Agency*

*44 Years:*

*Community partners  
working together to  
ensure clean air for  
everyone*

**2011 Air Quality Review**



**Permitting  
Monitoring  
Public Education  
Compliance  
Administration**



**LRAPA**  
Lane Regional Air Protection Agency



# LRAPA ORGANIZATION

## Current LRAPA Board of Directors

### Bill Brommelsiek Chair

At-large - Springfield

### Mike Fleck Vice Chair

Cottage Grove City Council

### Jay Bozievich

Lane County Commissioner

### Brian Forge

At-Large - General (board appointee)

### Scott Lucas

Appointment - Eugene

### David Monk

Eugene City Council appointee

### Andrea Ortiz

Eugene City Councilor

### Jeannine Parisi

Eugene City Council appointee

### Dave Ralston

Springfield City Councilor

## 2012 LRAPA Budget Committee

The LRAPA Budget Committee consists of the LRAPA Board of Directors plus nine board-appointed citizens. The committee meets yearly to review and approve LRAPA's budget request. The nine board-appointed citizens include:

Dick Beers, Eugene

Bob Brew, Springfield

Maurie Denner, Representing General Public

Glenn Fortune, Representing Oakridge/Cottage Grove

Landa Gillette, At-Large, General

Chuck Gottfried, Representing Agriculture

Randy Hledik, Representing Industry, Eugene

Earl Koenig, Representing General Public

Tom Musselwhite, Representing General Public

## Current LRAPA Citizens Advisory Committee

The LRAPA Citizens Advisory Committee is comprised of local citizens representing specific areas of interest, including agriculture, community planning, fire suppression, industry, public health, and the general public. The committee is called upon to advise the board and staff on a variety of air quality issues, rules, and policies.

Russ Ayers - 12 yrs. service

Representing General Public

Jim Daniels - 2 yrs. service

Representing Large Industry

Maurie Denner - 7 yrs. service

Representing General Public

Larry Dunlap - 13 yrs. service

Representing Public Health

Paul Engelking - 14 yrs. service

Representing General Public

Chuck Gottfried - 3 yrs. service

Representing Agriculture

Randy Hledik - 1 yr. service

Representing Industry

Earl Koenig - 4 yrs. service — Chair

Representing General Public

Hugh Larkin II - 5 yrs. service

Representing General Public

Monique Lopez - 1 yr. service

Representing General Public

Laura Seyler - 1 yr. service

Representing Large Industry

Link Smith - 3 yrs. service

Representing Fire Suppression

John Tamulonis - 14 yrs. service

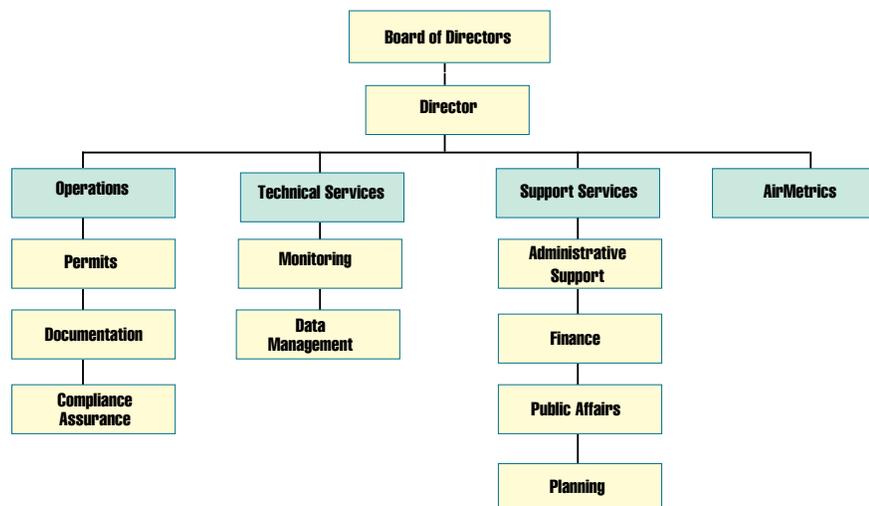
Representing Planning

Gary Vander Meer - 9 yrs. service

Representing General Public

The board of directors appoints the director of the agency, who has overall authority to appoint and direct the LRAPA staff. The director makes policy recommendations to the board and is responsible for implementing board decisions.

Staff Organizational Chart



# LRAPA ORGANIZATION

The LRAPA staff consists of 16 professional and technical employees who perform permitting, enforcement, planning, clerical, financial, enterprise, and public information and outreach programs.

## Operations: Permitting, Compliance and Enforcement

**Permitting** - establishes conditions under which regulated industrial sources may operate.

**Compliance/Enforcement** - assures permitted sources comply with permitting requirements; enforces all agency rules and regulations through education and enforcement actions.

## Technical Services: Monitoring and Data Management

**Monitoring**- collects ambient air quality data and provides quality assurance.

**Data Management** - determines whether ambient air quality standards are being met, and provides technical assistance for program priorities and planning.

## Administration and Planning: Planning, Finance and Human Resources

**Air Quality Planning** - identifies present and potential future air quality problems and develops appropriate control strategies.

**Finance** - provides the agency with full financial management services.

**Human Resources** - manages agency personnel matters.

## Public Information: Public Affairs Program

### Public Information/Education

- works with all sections of the agency to promote public understanding, education and awareness of the agency and local air quality issues.

### Airmetrics

Manufactures and markets portable air-sampling devices and services.

## LRAPA Phone Numbers

Business Office..... 541-736-1056

Home Wood Heating  
Advisory Line.....541-746-HEAT

Backyard Burning  
Advisory Line..... 541-726-3976

Florence Backyard Burning  
Advisory Line..... 541-997-1757

24-Hour Complaint  
Line..... 541-726-1930

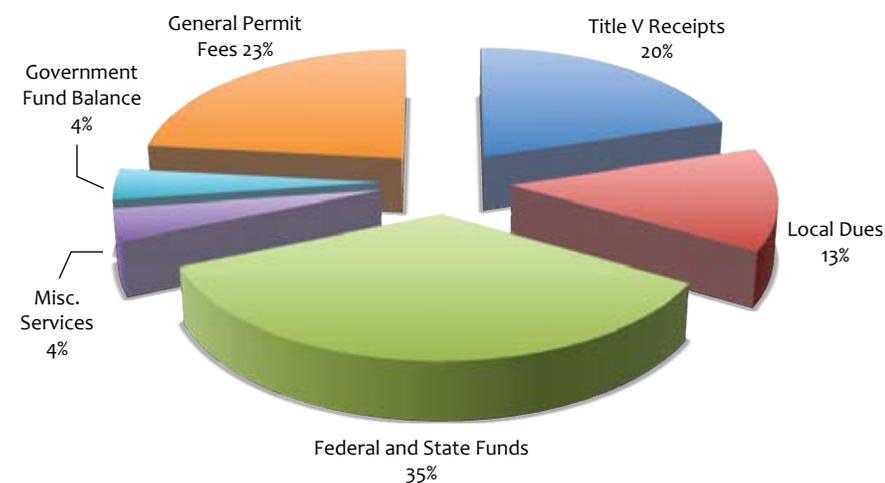
Toll-Free Line.....1-877-285-7272

Website ..... www.lrapa.org

E-mail ..... lrapa@lrapa.org

# FUNDING/BUDGET

Core Funding Resources FY 2011 — \$2,509,774



LRAPA's funding sources include: local contributions (Lane County and the cities of Eugene, Springfield, Oakridge, and Cottage Grove); state and federal grants; industrial and open burning permit fees; asbestos demolition/renovation fees; and miscellaneous contracts.

# PROGRAM SUMMARIES

## OPERATIONS

### Permitting

LRAPA-issued operating permits are required for a number of industries and businesses in Lane County. Of the 313 permitted sources in Lane County, 294 have basic Air Contaminant Discharge Permits (ACDP), and 19 hold Title V Federal Operating Permits. Permits for gasoline dispensing facilities were issued to 104 businesses.

ACDPs are issued to all industries required by LRAPA rules to obtain permits, except those “major” sources subject to federal operating permit requirements. Industrial sources are classified as “major” sources if they have the potential to emit more than 100 tons of any criteria pollutant, or 10 tons or more of any single hazardous air pollutant (HAP) or 25 tons or more of any combination of HAPs on an annual basis.

Industrial source categories in Lane County which require operating permits include: food and agriculture, wood products manufacturing, chemical products manufacturing, mineral products manufacturing, metal products manufacturing; waste treatment, fuel burning, fuel transfer operations, coating operations, sources of toxic air pollutants, and any source emitting more than 10 tons per year of any combination of criteria pollutants.

### 2011 PERMITTING SUMMARY –

Permits issued or renewed.....	95
Permits modified .....	18
Industries inspected .....	109

Note: Some industries have multiple inspections in a year.

### Enforcement

LRAPA initiates enforcement actions in instances of excessive industrial air pollution, illegal open burning activities, improper handling or transport of asbestos-containing materials, and failure to obtain necessary air pollution permits prior to construction or operation.

Typically, the dollar amount of penalties collected annually does not strictly reflect the penalties assessed or settled during the year, due to pending cases and collections received on previous years’ penalties.

LRAPA collected \$28,187 in penalties during 2011. All penalties collected are forwarded to the Lane County general fund; however, attorney fees associated with contested cases are deducted first. In 2011, LRAPA issued 64 administrative warnings/notices on non-compliance and 42 notices of violations with civil penalties.

### Asbestos Abatement

Remodeling and renovation projects in Lane County that include asbestos abatement must register with LRAPA. In 2011, LRAPA documented 359 notifications of asbestos abatement projects. LRAPA inspected 106, or 30 percent, of all projects. Eight violations were found. By category, the total number of abatement projects included:

Residential.....	188
Schools.....	61
Business/Industry .....	96
Other .....	14



## ENFORCEMENT ACTIONS 2001 - 2011

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Administrative warnings and Notices of non-compliance	102	129	103	52	55	51	48	57	37	57	64
Notices of violation with civil penalty	64	72	67	31	39	33	47	36	28	39	42

Total civil penalties collected \$	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
	49,437	97,584	49,590	31,097	14,700	16,404	46,050	46,526	53,786	27,941	28,187

# PROGRAM SUMMARIES

## Complaint Response

It is LRAPA's policy to investigate in a timely manner every complaint called into the agency. Staff investigated approximately 797 formal complaints in 2011. LRAPA also receives hundreds of phone inquiries that do not result in formal complaints being filed. Responsibility for LRAPA's comprehensive complaint response program is shared by staff in the operations and administrative divisions.

Overall, complaints increased slightly in 2011. Despite the changes in the Department of Agriculture's field burning program, LRAPA did receive 11 complaints. Agricultural field burning is now limited to parts of Linn and Marion counties. All of the complaints received by LRAPA were confirmed as ecological burns conducted in wetland areas around Eugene.

The number of complaints, and percent changes from the previous year are as follows by category:

Dust.....	-1%
General air quality.....	+66%
Home wood-heating.....	+54%
Field Burning.....	+30
Industry.....	-56%
Miscellaneous.....	+24%
Open burning.....	+21%
Slash burning.....	+68%
Unknown.....	+52%
<b>Total complaints.....</b>	<b>+12%</b>

### LRAPA COMPLAINTS 2001 - 2011

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Dust	27	25	15	17	35	33	6	21	21	34	33
Field burning	199	294	96	103	330	576	341	101	24	9	13
General Air Quality	4	4	6	2	8	7	63	14	21	2	6
Home Wood Heating	58	73	71	82	80	89	82	130	113	62	135
Industry	689	168	530	880	768	465	327	231	270	265	169
Miscellaneous	44	34	32	66	75	95	109	137	61	77	101
Open Burning	103	142	90	163	179	169	390	293	277	268	341
Slash Burning	18	23	9	8	31	41	33	25	3	5	16
Unknown	61	65	103	110	97	105	124	59	25	12	25
<b>Total</b>	<b>1301</b>	<b>950</b>	<b>1056</b>	<b>1525</b>	<b>1719</b>	<b>1643</b>	<b>1496</b>	<b>1011</b>	<b>815</b>	<b>734</b>	<b>839</b>

## Public Education

The LRAPA Public Affairs office provides a number of services to the agency including media relations, communications, public education, and community outreach.

The scope of work includes media relations; anti-idling campaigns targeting schools; classes for elementary, middle, high school and college students; specialized classes for real estate groups, outreach to new homeowners, assistance with air quality planning projects; community events-planning (the Lane County Home Show, vehicle emission testing); special projects; serving on interagency committees; public speaking; print and electronic design.



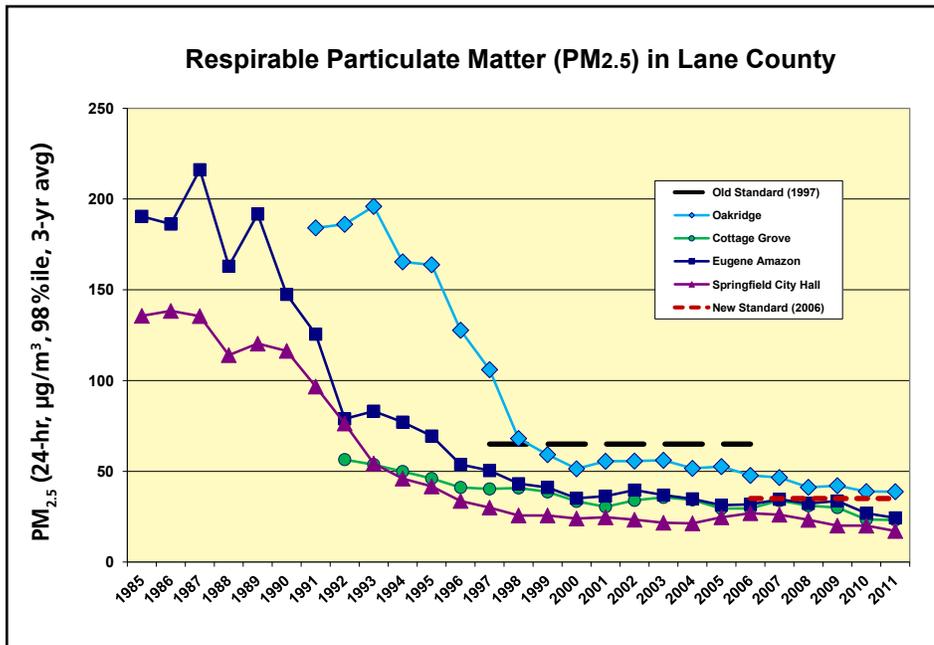
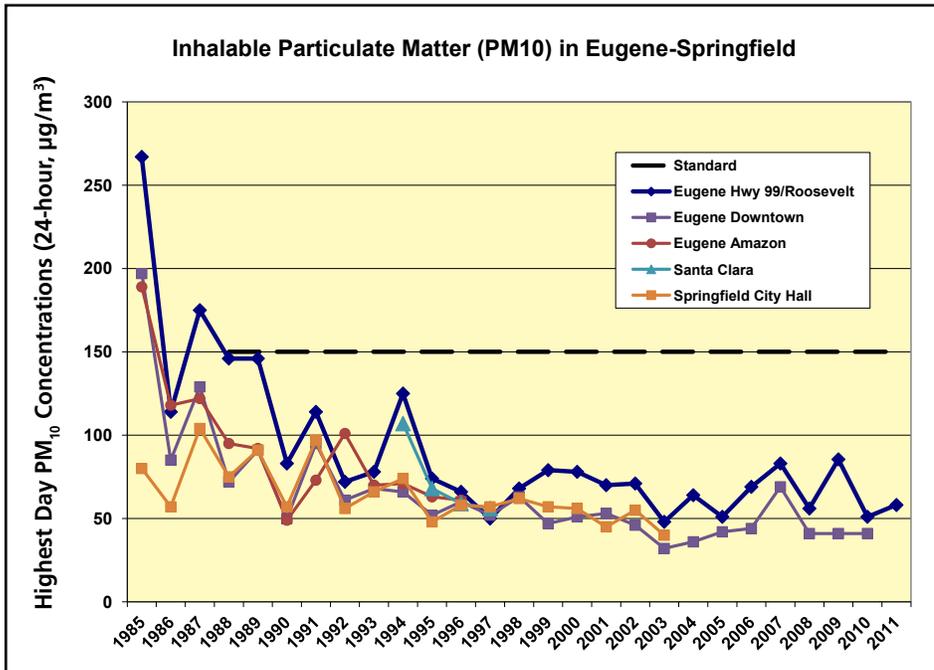
LRAPA held a successful vehicle emission testing event over two weekends in April, 2012 as part of the Earth Month celebration. Drivers received a free computerized check-up and a discount coupon for an EcoBiz certified auto shop.

# LANE COUNTY TRENDS

LRAPA's air quality monitoring network consists of 7 monitoring sites that measure a total of 43 parameters. The agency collected about 280,000 hours of pollutant-related data in 2011. At an estimated operational cost of \$346,000 per year, LRAPA's network provides Lane County with comprehensive data on local air quality. Without the local program, the

Lane County network could have as few as four sites, with a total of four to six sets of equipment, and a collection basis of fewer than 40,000 hours of pollutant-related data annually.

LRAPA's network includes three locations in Eugene, and one each in Springfield, Oakridge, Cottage Grove, and Saginaw.

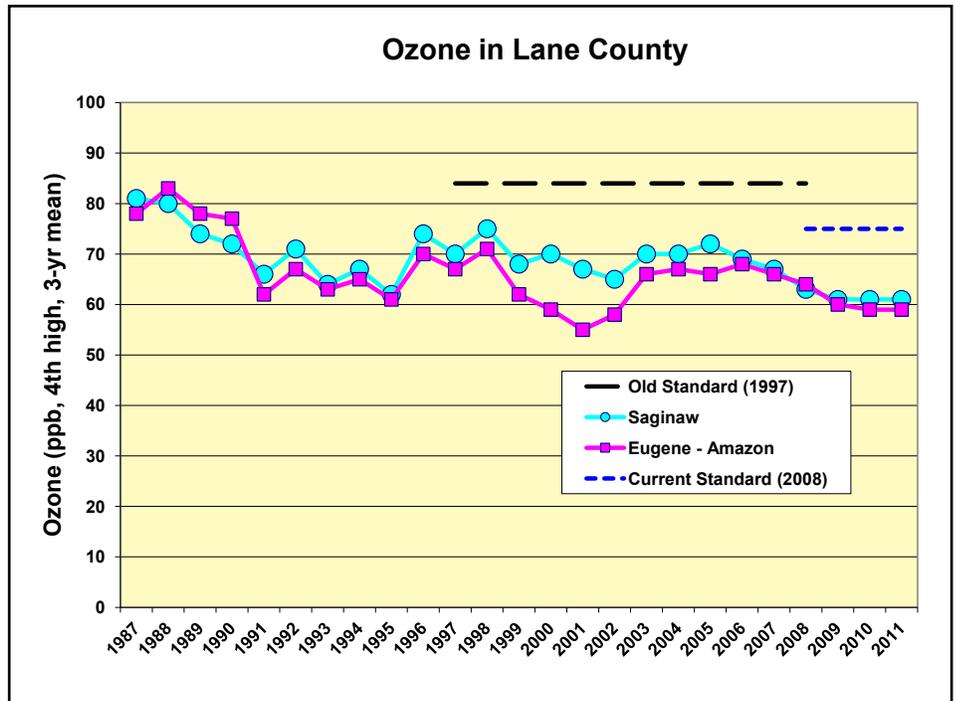


## 2011 Monitoring Sites:

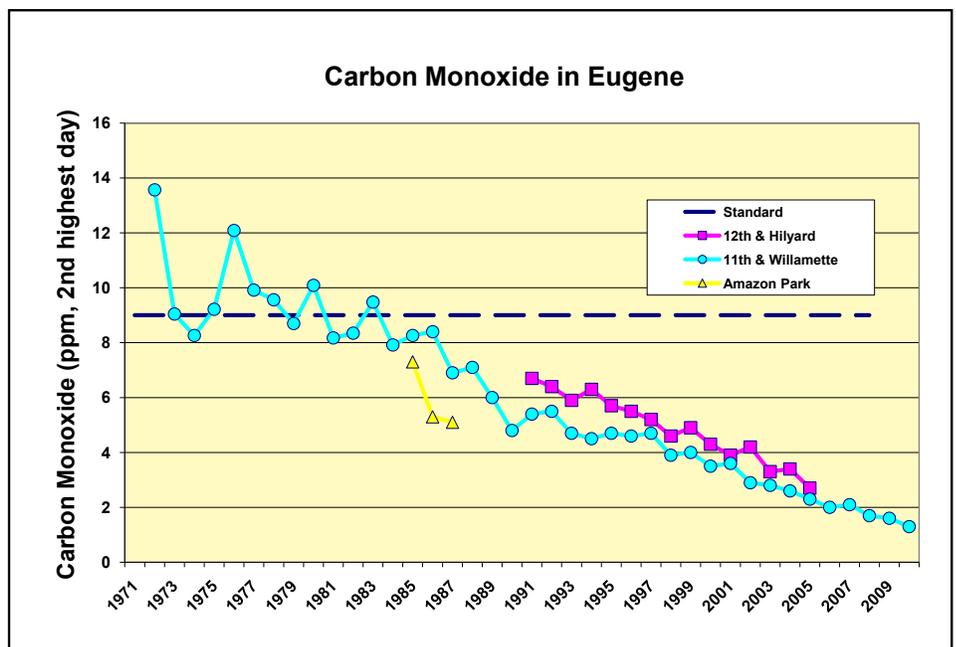
- ◆ Amazon Park (South Eugene)
- ◆ Cottage Grove (City Shops)
- ◆ Four Corners (Highway 99/Roosevelt),
- ◆ Oakridge Community Center (Oakridge)
- ◆ Saginaw (Delight Valley Elementary School)
- ◆ Santa Clara (meteorology only) (North Eugene)
- ◆ Springfield City Hall (Springfield)

*Levels of  $PM_{10}$  continue to decrease. All areas in Lane County meet the annual and 24-hour standard.  $PM_{2.5}$  levels continue a slight downward trend in Eugene, Springfield and Cottage Grove. Oakridge continues to violate the 24-hour standard.*

# LANE COUNTY TRENDS



Ozone is not a directly emitted pollutant, but is formed when volatile organic compounds and oxides of nitrogen undergo a chemical reaction when exposed to the sun's heat. Temperatures above 90 degrees and low wind speeds are favorable for ozone formation. Better pollution controls in Lane County and upwind of the southern Willamette Valley have helped keep ozone levels within the standard. Ozone levels have dropped since the late 1980's and remain below the revised tighter primary and secondary eight-hour standards despite large population increases in the Eugene/Springfield metro area.



Carbon monoxide (CO) levels have dropped steadily over the last decade and CO is no longer being monitored in the Eugene/Springfield Metropolitan area.

# AIR QUALITY INDEX



The United States Environmental Protection Agency (EPA) has developed the Air Quality Index (AQI) to provide the public with simple information about local air quality. Using data from local monitoring stations, the AQI provides a daily report about air quality and the possible health impacts on days with bad air quality.

quickly whether air pollution is reaching unhealthy levels in their community.

The LRAPA website, [www.lrapa.org](http://www.lrapa.org), displays the current AQI information for Eugene/Springfield and Oakridge on its home page. The AQI is updated on an hourly basis to provide current information to the public. More detailed technical information from all LRAPA monitoring sites can be accessed by clicking on the home page link to “real-time air quality data.”

## Good

Air quality is considered satisfactory and air pollution poses little or no risk.

## Moderate

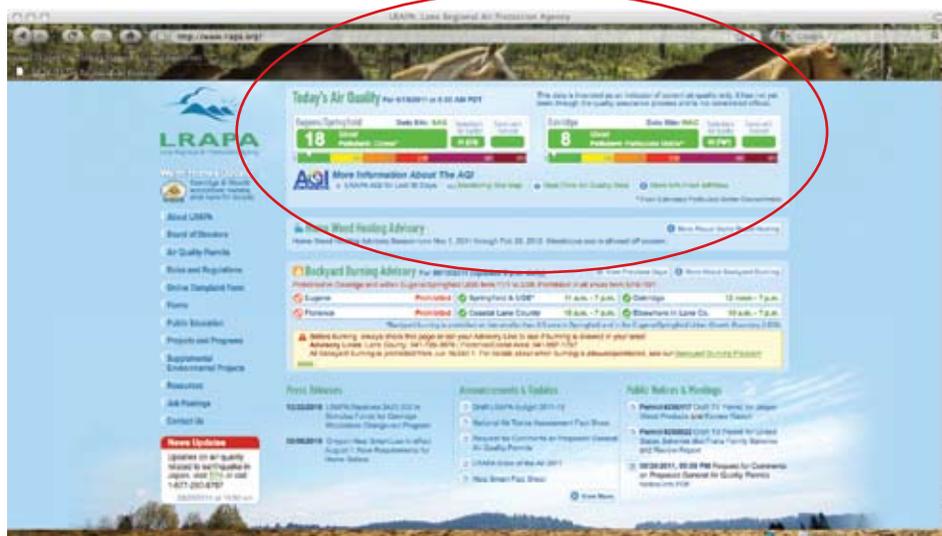
Air quality is acceptable, however, at these levels there may be a moderate health risk for a very small number of people.

## Unhealthy for Sensitive Groups

Certain groups of people who are particularly sensitive to the harmful effects of certain pollutants are likely to be affected at this level.

## Unhealthy

The general public may begin to experience adverse health effects. Members of sensitive groups may experience more serious health effects.



### AIR QUALITY INDEX SUMMARY

#### EUGENE/SPRINGFIELD (NUMBER OF DAYS)

Year	Good	Moderate	Unhealthy (Sensitive)	Unhealthy
2011	329	39	0	0
2010	347	18	0	0
2009	321	35	8	1
2008	325	40	1	0
2007	321	40	4	0

Totals using CO, PM<sub>2.5</sub> and O<sub>3</sub> data.

### AIR QUALITY INDEX SUMMARY

#### OAKRIDGE (NUMBER OF DAYS)

Year	Good	Moderate	Unhealthy (Sensitive)	Unhealthy
2011	299	53	12	0
2010	303	49	4	0
2009	282	59	20	4
2008	272	81	13	0
2007	295	60	10	0

Totals using CO, PM<sub>2.5</sub> and O<sub>3</sub> data.

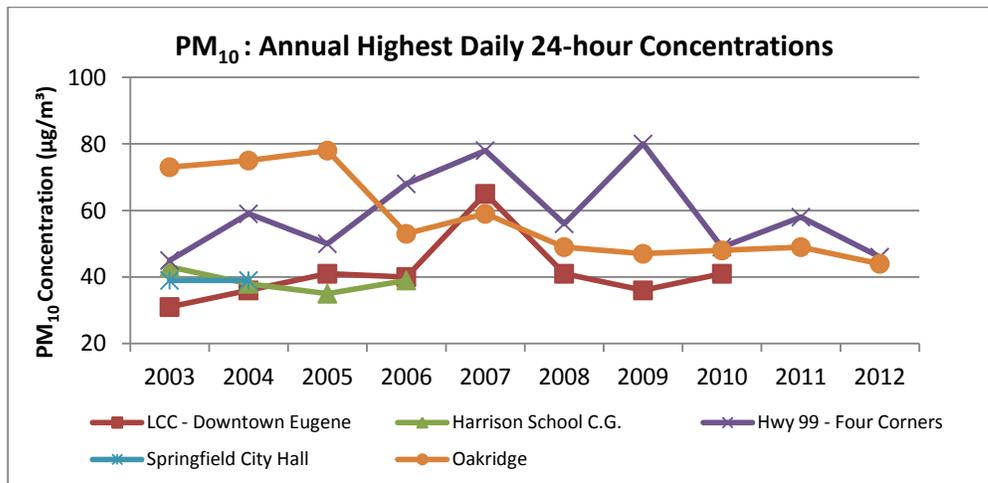
# DATA CHARTS

## PARTICULATE MATTER DATA – PM<sub>10</sub>

EPA has designated the following National Ambient Air Quality Standards (NAAQS) for PM<sub>10</sub>:

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

24-HOUR AVERAGE PM <sub>10</sub> LEVELS 2003 - 2012 (µg/m <sup>3</sup> )											
Site Name		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
LCC–Downtown Eugene	Highest 24-hour	31	36	41	40	65	41	36	41	---	---
Harrison School Cottage Grove	Highest 24-hour	43	38	35	39	---	---	---	---	---	---
Hwy 99 - Four Corners	Highest 24-hour	45	59	50	68	78	56	80	49	58	46
Springfield City Hall	Highest 24-hour	52	39	---	---	---	---	---	---	---	---
Oakridge	Highest 24-hour	73	75	78	53	59	49	47	48	49	44



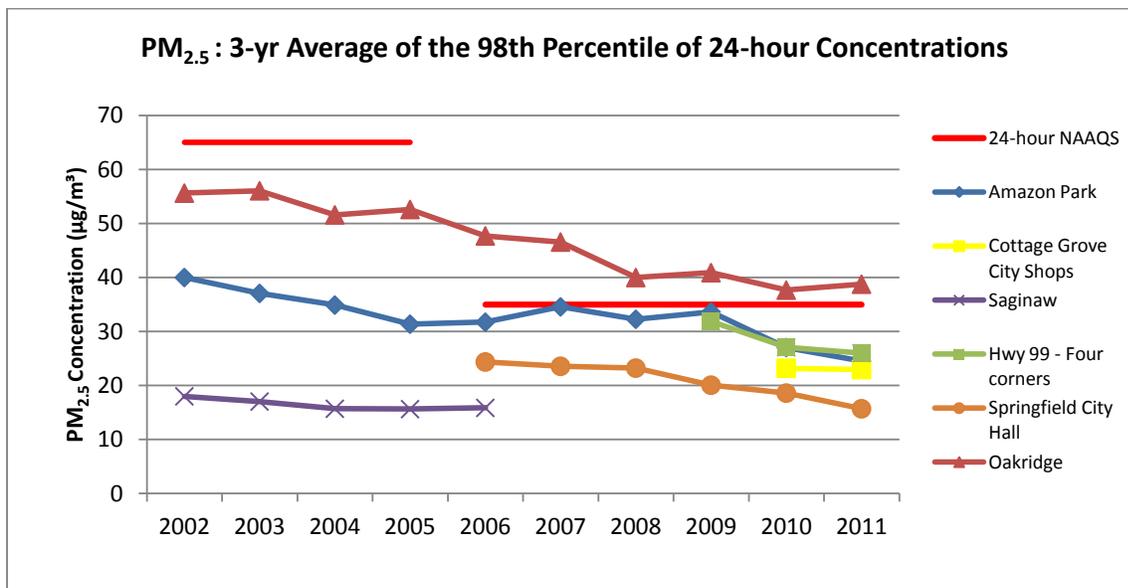
# DATA CHARTS

## PARTICULATE MATTER DATA – PM<sub>2.5</sub>

EPA has designated the following National Ambient Air Quality Standards (NAAQS) for PM<sub>2.5</sub>:

Level	Averaging Time	Description
15.0 µg/m <sup>3</sup>	Annual (Arithmetic Average)	To attain this standard, the 3-year average of the annual mean PM <sub>2.5</sub> concentrations from monitors must not exceed 15.0 µg/m <sup>3</sup> .
35 µg/m <sup>3</sup>	24-hour	To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations must not exceed 35 µg/m <sup>3</sup> (effective December 17, 2006).

24-HOUR AVERAGE PM <sub>2.5</sub> LEVELS 2002 - 2011 (µg/m <sup>3</sup> )											
Site Name		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Amazon Park	Annual mean	9.7	9.0	8.7	9.1	8.3	7.4	7.8	8.5	5.8	6.5
	Highest 24-hour	56.2	39.5	37.9	39.6	43.3	43.0	40.0	59.9	21.0	24.6
	Annual 98 <sup>th</sup> %-ile	46.2	30.7	27.8	35.6	31.8	36.3	28.7	35.9	16.5	21.2
	<b>3 year 98<sup>th</sup> %-ile</b>	<b>40</b>	<b>37</b>	<b>35</b>	<b>31</b>	<b>32</b>	<b>35</b>	<b>32</b>	<b>34</b>	<b>27</b>	<b>25</b>
Cottage Grove City Shops	Annual mean	---	---	---	---	---	---	8.1	8.5	6.9	7.1
	Highest 24-hour	---	---	---	---	---	---	31.8	33.6	21.1	32.1
	Annual 98 <sup>th</sup> %-ile	---	---	---	---	---	---	21.1	30.2	18.3	20.4
	<b>3 year 98<sup>th</sup> %-ile</b>	---	---	---	---	---	---	---	---	<b>23</b>	<b>23</b>
Saginaw	Annual mean	6.7	6.2	6.0	6.8	5.5	---	---	---	---	---
	Highest 24-hour	22.0	17.0	13.8	24.7	16.6	---	---	---	---	---
	Annual 98 <sup>th</sup> %-ile	18.1	15.9	13.1	17.9	16.6	---	---	---	---	---
	<b>3 year 98<sup>th</sup> %-ile</b>	<b>18</b>	<b>17</b>	<b>16</b>	<b>16</b>	<b>16</b>	---	---	---	---	---
Hwy 99 - Four Corners	Annual mean	---	---	---	---	---	8.4	8.3	8.2	6.3	10.0
	Highest 24-hour	---	---	---	---	---	53.5	32.4	47.9	22.9	26.7
	Annual 98 <sup>th</sup> %-ile	---	---	---	---	---	33.9	25.3	36.4	19.5	22.1
	<b>3 year 98<sup>th</sup> %-ile</b>	---	---	---	---	---	---	---	<b>32</b>	<b>27</b>	<b>26</b>
Springfield City Hall	Annual mean	---	---	7.8	8.0	7.4	6.8	6.9	6.8	5.8	5.6
	Highest 24-hour	---	---	21.0	32.1	30.2	38.6	32.3	21.9	17.9	18.8
	Annual 98 <sup>th</sup> %-ile	---	---	20.8	24.5	27.8	18.4	23.5	18.3	14.0	14.8
	<b>3 year 98<sup>th</sup> %-ile</b>	---	---	---	---	<b>24</b>	<b>24</b>	<b>23</b>	<b>20</b>	<b>19</b>	<b>16</b>
Oakridge	Annual mean	14.1	12.3	12.0	12.8	11.1	10.5	11.5	11.0	8.9	10.0
	Highest 24-hour	80.3	69.0	69.3	73.0	47.0	52.5	43.5	44.1	43.1	47.9
	Annual 98 <sup>th</sup> %-ile	55.4	53.3	46.1	58.4	38.6	42.7	38.7	41.3	33.0	42.0
	<b>3 year 98<sup>th</sup> %-ile</b>	<b>56</b>	<b>56</b>	<b>52</b>	<b>53</b>	<b>48</b>	<b>47</b>	<b>40</b>	<b>41</b>	<b>38</b>	<b>39</b>



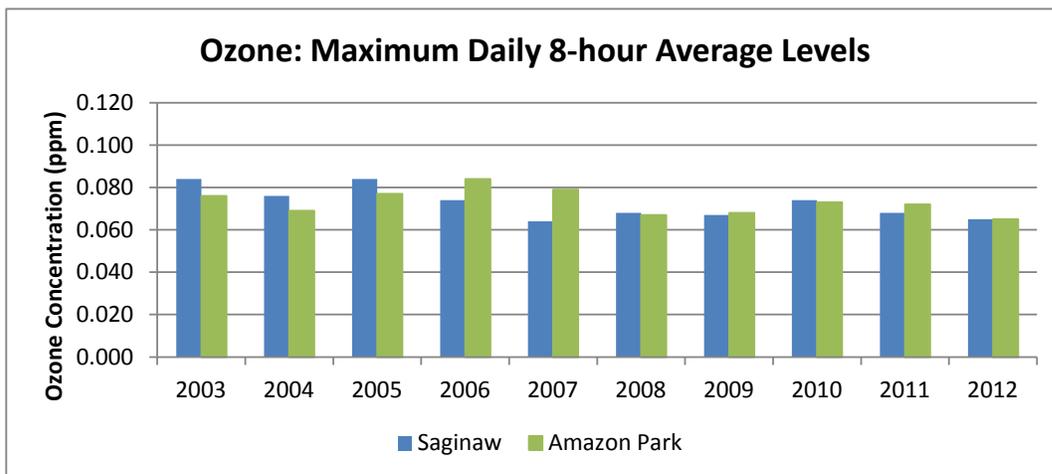
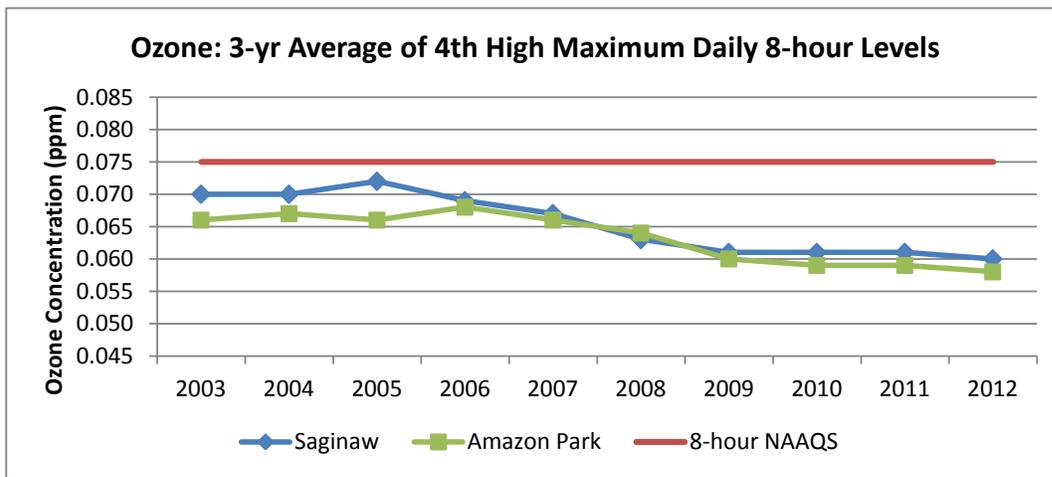
# DATA CHARTS

## OZONE DATA

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

Level	Averaging Time	Description
0.075 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 0.075 ppm. (effective May 27, 2008)

8-HOUR AVERAGE OZONE LEVELS 2003 - 2012 (ppm)											
Site Name		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Saginaw	Maximum	0.084	0.076	0.084	0.074	0.064	0.068	0.067	0.074	0.068	0.065
	4th highest	0.079	0.068	0.071	0.070	0.060	0.059	0.066	0.060	0.059	0.062
	<b>3-year 4<sup>th</sup> high</b>	<b>0.070</b>	<b>0.070</b>	<b>0.072</b>	<b>0.069</b>	<b>0.067</b>	<b>0.063</b>	<b>0.061</b>	<b>0.061</b>	<b>0.061</b>	<b>0.060</b>
	# Exceedances	0	0	0	0	0	0	0	0	0	0
Amazon Park	Maximum	0.076	0.069	0.077	0.084	0.079	0.067	0.068	0.073	0.072	0.065
	4th highest	0.071	0.064	0.064	0.076	0.059	0.059	0.063	0.056	0.059	0.059
	<b>3-year 4<sup>th</sup> high</b>	<b>0.066</b>	<b>0.067</b>	<b>0.066</b>	<b>0.068</b>	<b>0.066</b>	<b>0.064</b>	<b>0.060</b>	<b>0.059</b>	<b>0.059</b>	<b>0.058</b>
	# Exceedances	0	0	0	0	0	0	0	0	0	0



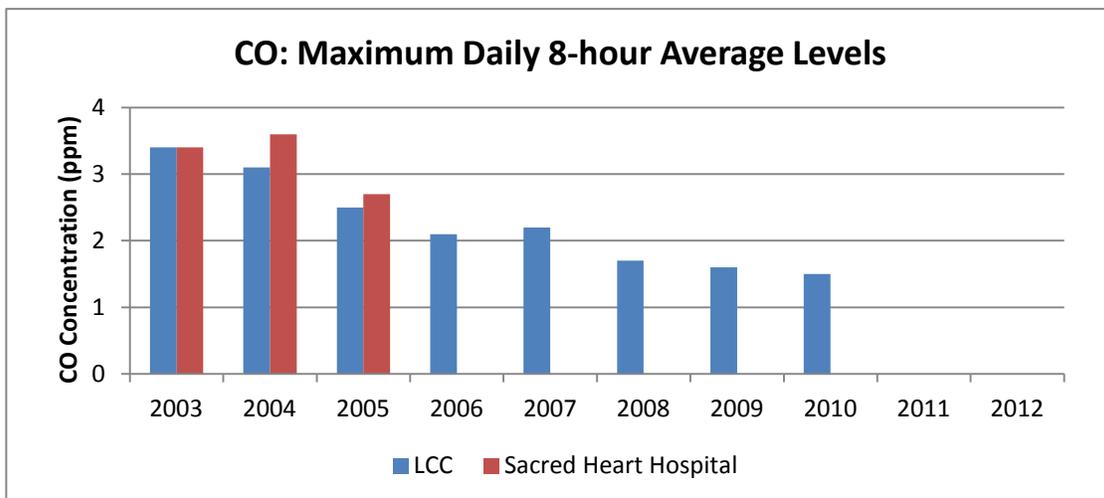
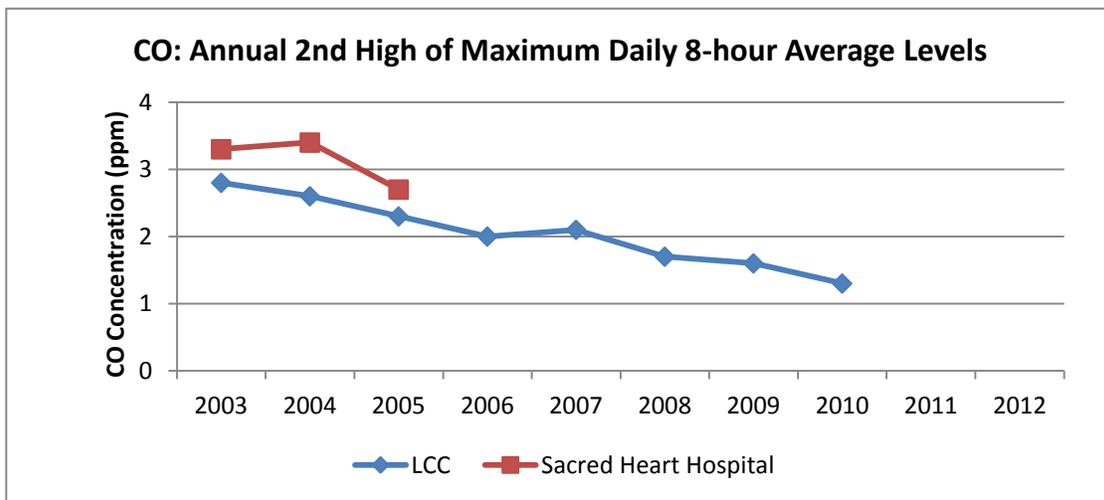
# DATA CHARTS

## CARBON MONOXIDE DATA

EPA has designated the following National Ambient Air Quality Standards (NAAQS) for CO:

Level	Averaging Time	Description
9 ppm	8-hour	Not to be exceeded more than once per year.
35 ppm	1-hour	Not to be exceeded more than once per year.

CARBON MONOXIDE (CO) LEVELS 2003 - 2012 (ppm)											
Site Name		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
LCC - Downtown Eugene	Highest 8-hour	3.4	3.1	2.5	2.1	2.2	1.7	1.6	1.5	---	---
	<b>2<sup>nd</sup> high 8-hour</b>	<b>2.8</b>	<b>2.6</b>	<b>2.3</b>	<b>2</b>	<b>2.1</b>	<b>1.7</b>	<b>1.6</b>	<b>1.3</b>	---	---
	# Exceedances	0	0	0	0	0	0	0	0	---	---
Sacred Heart Hospital	Highest 8-hour	3.4	3.6	2.7	---	---	---	---	---	---	---
	<b>2<sup>nd</sup> high 8-hour</b>	<b>3.3</b>	<b>3.4</b>	<b>2.7</b>	---	---	---	---	---	---	---
	# Exceedances	0	0	0	---	---	---	---	---	---	---





**LRAPA**  
Lane Regional Air Protection Agency

1010 Main Street  
Springfield, Oregon 97477

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[www.lrapa.org](http://www.lrapa.org)