



State of Oregon Department of Environmental Quality

Location Selection and Rationale for the 30 New Particulate Monitoring Sites

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Air Quality Monitoring Section

In 2017 the Oregon Legislature approved funding for the Oregon Department of Environmental Quality to install and operate 30 new air quality, particulate monitoring sites around the state. These monitors will enhance DEQ's current network of approximately 40 particulate monitoring sites in Oregon. This memo provides the rationale DEQ is using to select the locations for these additional monitors, and a list of the locations relative to current monitoring sites.

Background

The rationale for choosing new particulate monitors starts with understanding the objective for monitoring. These monitors will be placed to fill air quality information voids in larger communities and in small populated areas with no information. The Portland metropolitan area currently has four particulate monitors, and with roughly half of the state's population this is not an adequate number of monitors. The Salem metropolitan area has only one monitor for approximately 400,000 people and this also is not adequate. In comparison, the Eugene/Springfield area which is roughly the same size as Salem, has four Lane Regional Air Pollution Authority operated monitors. Other areas such as Redmond and Coos Bay have populations of around 25,000 and have no monitors.

Location Selection for Particulate Monitoring Sites

To fill in these data gaps, DEQ asked DEQ regional offices and county health agencies to give input on where DEQ should place additional monitors. DEQ also worked with modelers and emission inventory staff to identify locations for placing monitors where wood stove surveys have shown high levels of use.

In addition, DEQ has been researching new particulate sensor technology and is developing monitoring equipment that can be deployed at locations around the state easier and at lower cost than current monitoring equipment.

A list of new monitoring sites is in the table below along with existing sites for comparison. Comments in the table provide some additional information on location selection. As DEQ moves forward with implementation, new information may result in changes to the proposed locations.

New PM 2.5 Sensor Sites

(Proposed locations – subject to change)

Incorporated City/Town	# of new sites	Total Sites	Proposed Location
NWR			
Portland	6	7	
-Sellwd/Wdstk	1	1	Sellwood Middle School or Lane Middle School
-Cully	0	1	Helensview School
-St Johns	1	1	Sitton Elementary
-NE	1	1	Grant High/Beverly Cleary School
-NW	1	1	Chapman Elementary
-SW	1	1	Jesuit HS
-N	1	1	Jefferson HS
Gresham	1	1	Lynchview Elementary
Tigard	1	1	Fowler Middle School
West Lynn	1	1	or Oregon City west
Gladstone	1	1	Gladstone High School
Forest Grove	1	1	Pacific University
Estacada	1	1	High School or nearby school
Hillsboro	0	1	HHF - complete
Beaverton	0	1	BHP - complete
Total	12	15	
WR			
McMinnville	1	1	McMinnville HS
Woodburn	1	1	1) Woodburn Fire District or 2) Lincoln Elementary
Salem/Keizer	3	4	
-Salem	0	1	SSH - complete
-Keizer	1	1	Keizer Cummings Elementary
-S Salem	1	1	Salem Judson JHS
-Dallas	1	1	Lyle Elementary
Roseburg Area	1	2	
-Garden Valley	0	1	RGV - complete
-S Roseburg	1	1	Douglas Co Fire #2
Grants Pass	0	1	GPP - complete
Central Point	1	1	Central Point Elementary
Medford	0	1	MWJ - complete
Ashland	0	1	AFD - complete
Shady Cove	0	1	SCH - complete

North Coast	1	1	Newport-Toledo and/or Tillamook – Newport High School
North Bend	1	1	Marshfield High School
Brookings	1	1	ODF office
Applegate Vly	0	1	USFS/BLM funded
Cave Junction	0	1	USFS/BLM funded
Total	10	18	
ER			
Hood River	1	1	WS Fire #1
The Dalles	0	1	TDC - complete
Hermiston	0	1	HMA – complete – Relocate to Hermiston High School
Pendleton	0	1	PMC - complete
La Grande	0	1	LHN - complete
Enterprise	0	1	EFS – complete – Move to HS or add sensor at HS.
Baker City	0	1	BFS - complete
Ontario	1	1	May Roberts Elementary
Madras	0	1	MWS - complete
Redmond	1	1	John Tuck Elementary or Redmond High
Prineville	0	1	PDP - complete
Sisters	0	1	SFS - complete
Bend	1	3	
-Central	0	1	BPS – complete – New AT site > Orchard Park
-SE	1	1	Bend Senior Center
-SW	1	1	Pine Ridge Elementary
La Pine	1	1	La Pine Elementary / La Pine Library
Klamath Falls	0	1	KFP - complete (added T640X)
Chiloquin	1	1	Tribal office
Lakeview	0	1	LCM - complete
Burns	0	1	BWS – complete (added T640X)
John Day	0	1	JDD - complete
Total	7	21	
Grnd Total	29	54	
*Requests for future sites			
Lincoln City			
Florence			LRAPA
Newberg			
Astoria			
Cascade Locks			
Monmouth/Independance			

Salem – East - Sal			Salem Academy HS – Go Crusaders
Bend			West Bend
Klamath Falls			KFalls second site
Corvallis			SE Corvallis
Lebanon			

