



DEQ

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Department of
Environmental
Quality

Oregon Air Toxics and Wildfire: The New Norm

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Air Toxics Monitoring Lead

Oregon Department of Environmental Quality

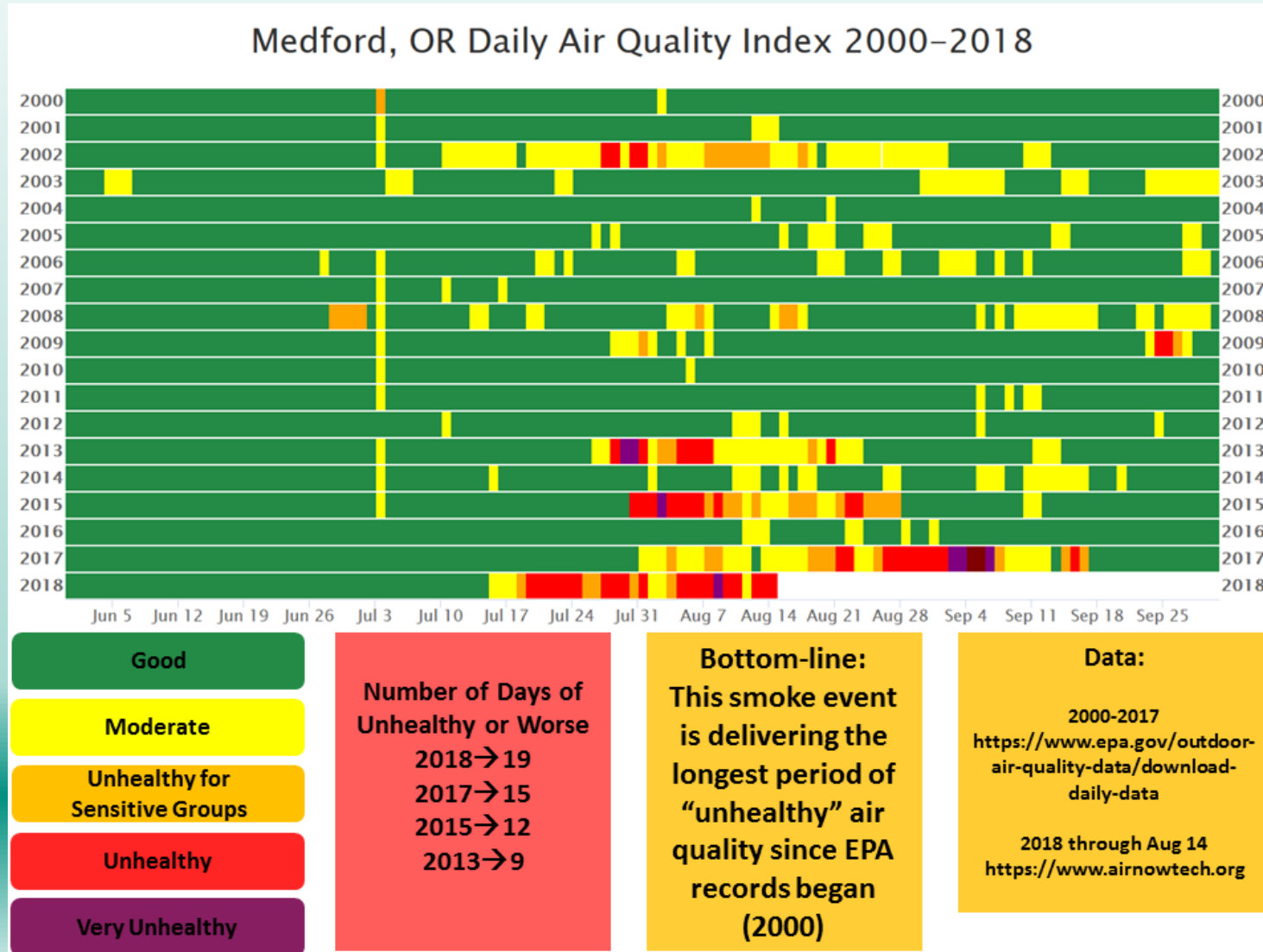
Air Quality Monitoring

Air Toxics Station



- HiVol/LoVol Metals
- PUF/PAH
- Carbonyl
- MET
- VOC
- Cr⁶⁺
- Black Carbon
- PM

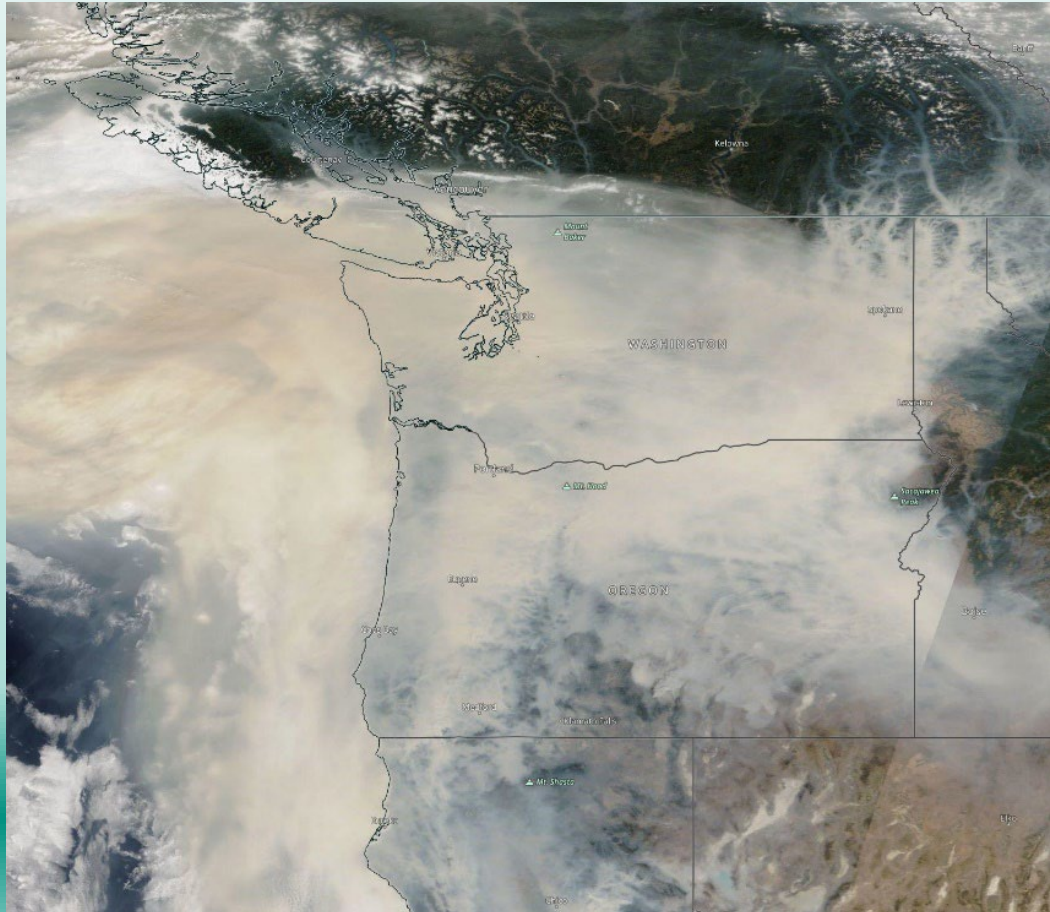
Wildfire History 2000 – 2018



Health Risks and Life Disruption



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A screenshot of an NPR news article. The top navigation bar includes the NPR and OPB logos, along with links for NEWSLETTERS, SIGN IN, NPR SHOP, and DONATE. Below the navigation bar, the article is categorized as 'NATIONAL'. The main headline reads: 'More than 2,000 Oregon homes are evacuated as the Cedar Creek fire quadruples in size'. The article is dated 'SEPTEMBER 11, 2022 - 2:14 PM ET' and is written by 'Becky Sullivan'. Below the text is a photograph of a large, dark plume of smoke rising from a fire, with a smaller plume visible in the distance under a blue sky.

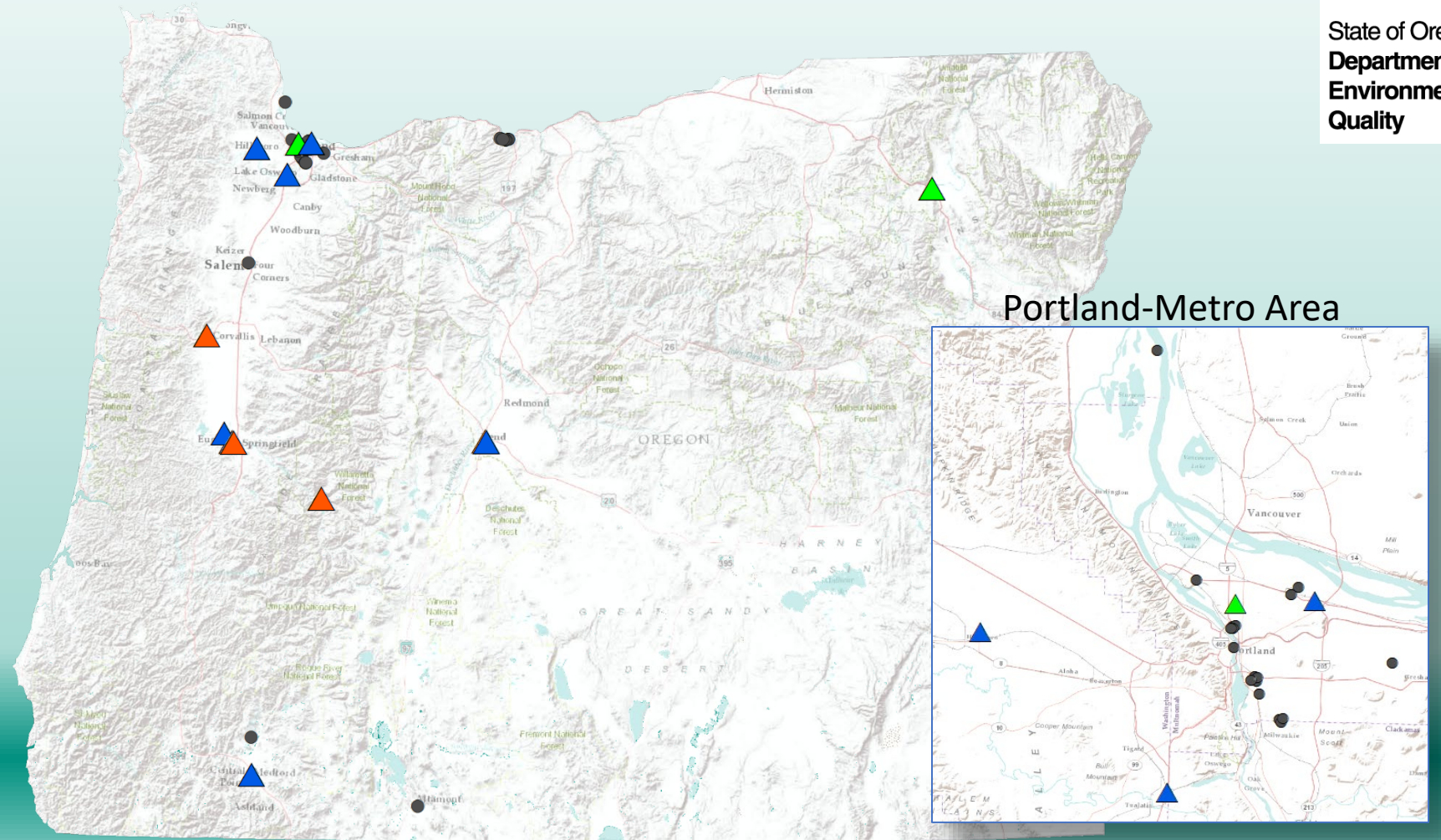
<https://www.npr.org/2022/09/11/1122268757/cedar-creek-fire-oregon>



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Oregon Air Quality Monitoring

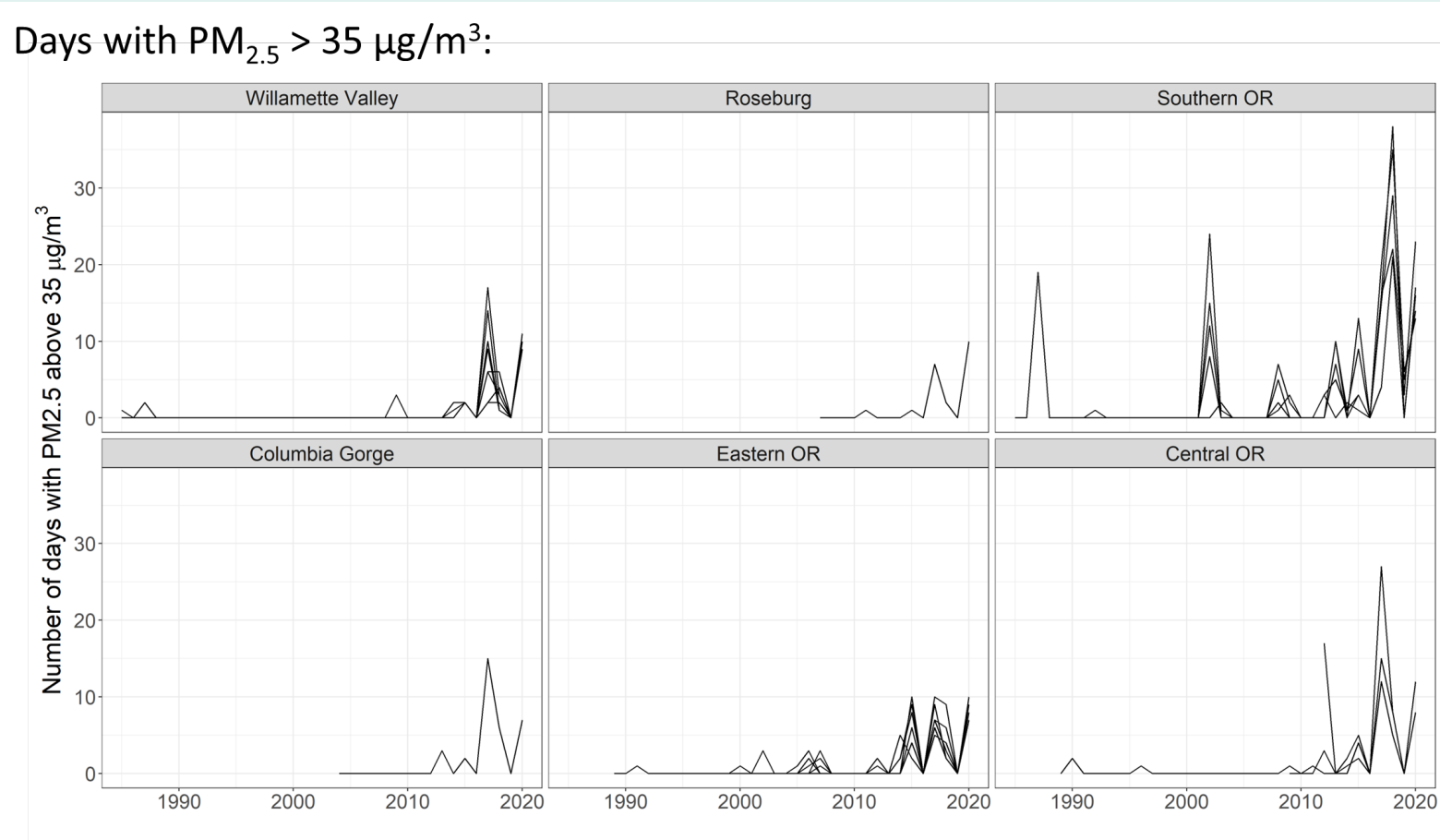
- 2 NATTS
- 6 OATTS
- 1-4 AATS
- 50+ PM monitors
- 1 NAAQS
- 1 Near Roadway



35 $\mu\text{g}/\text{m}^3$ since 1990



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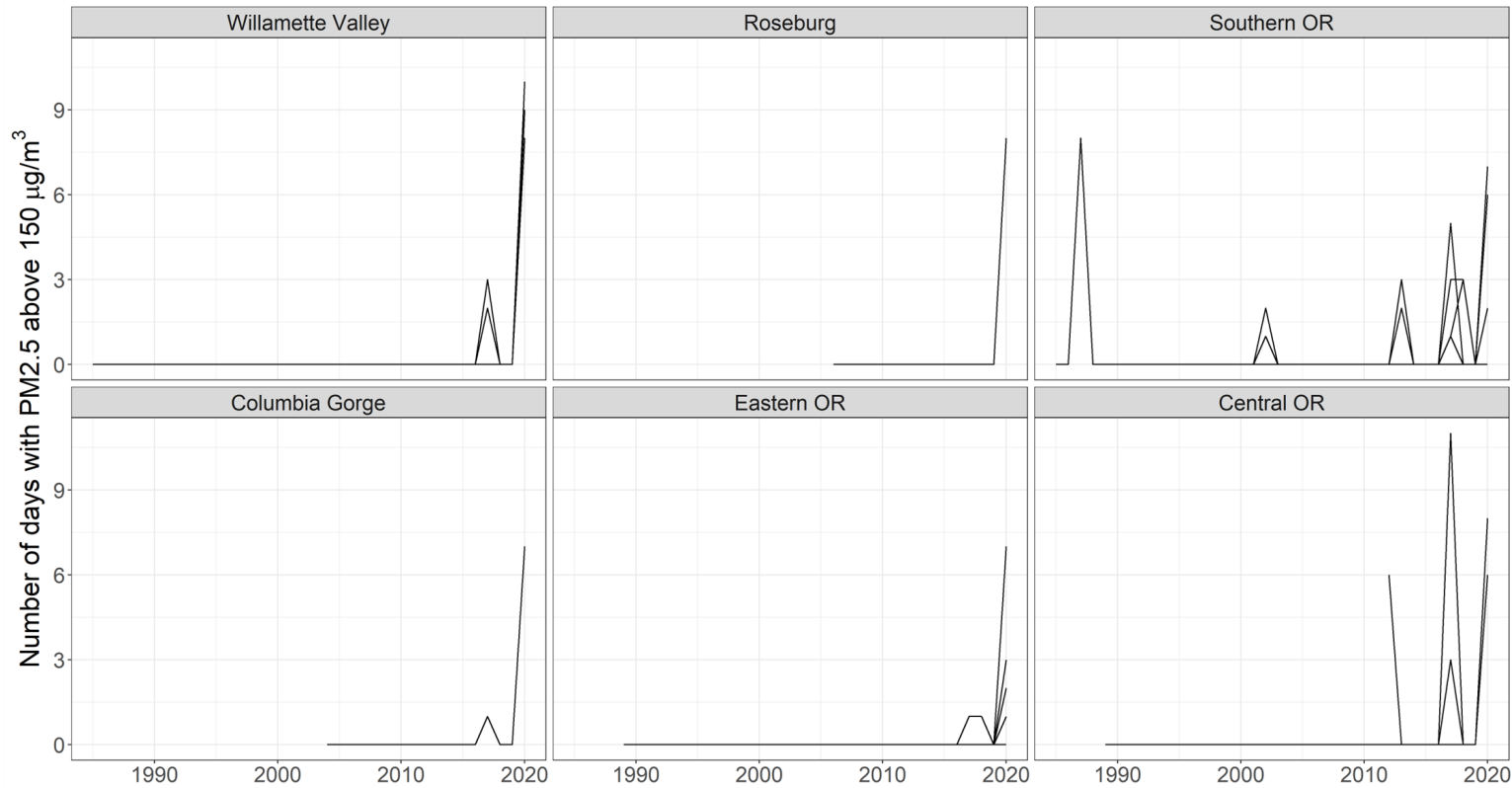


150 $\mu\text{g}/\text{m}^3$ since 1990



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Days with $\text{PM}_{2.5} > 150 \mu\text{g}/\text{m}^3$:

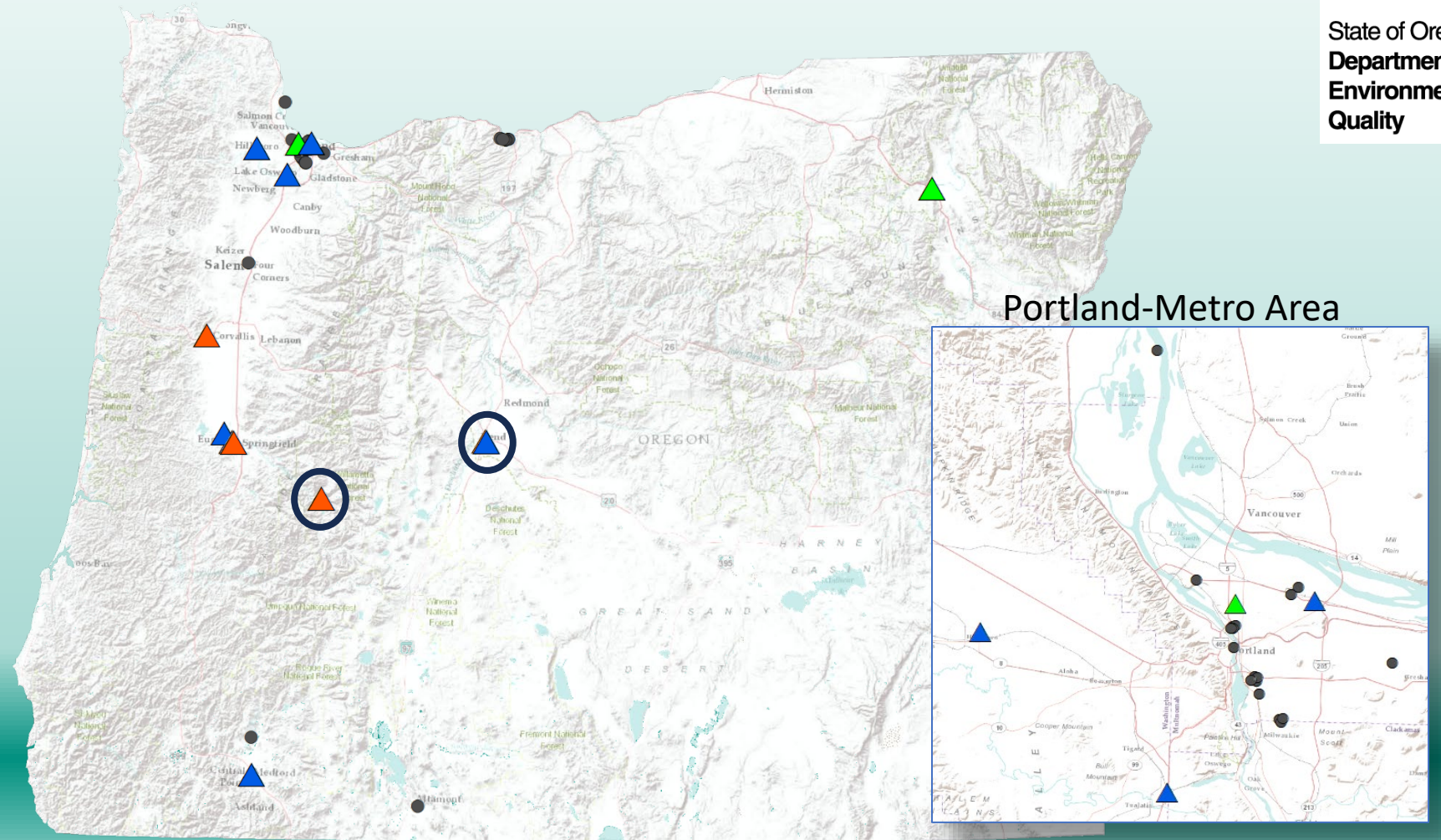




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Oregon Air Quality Monitoring 2023

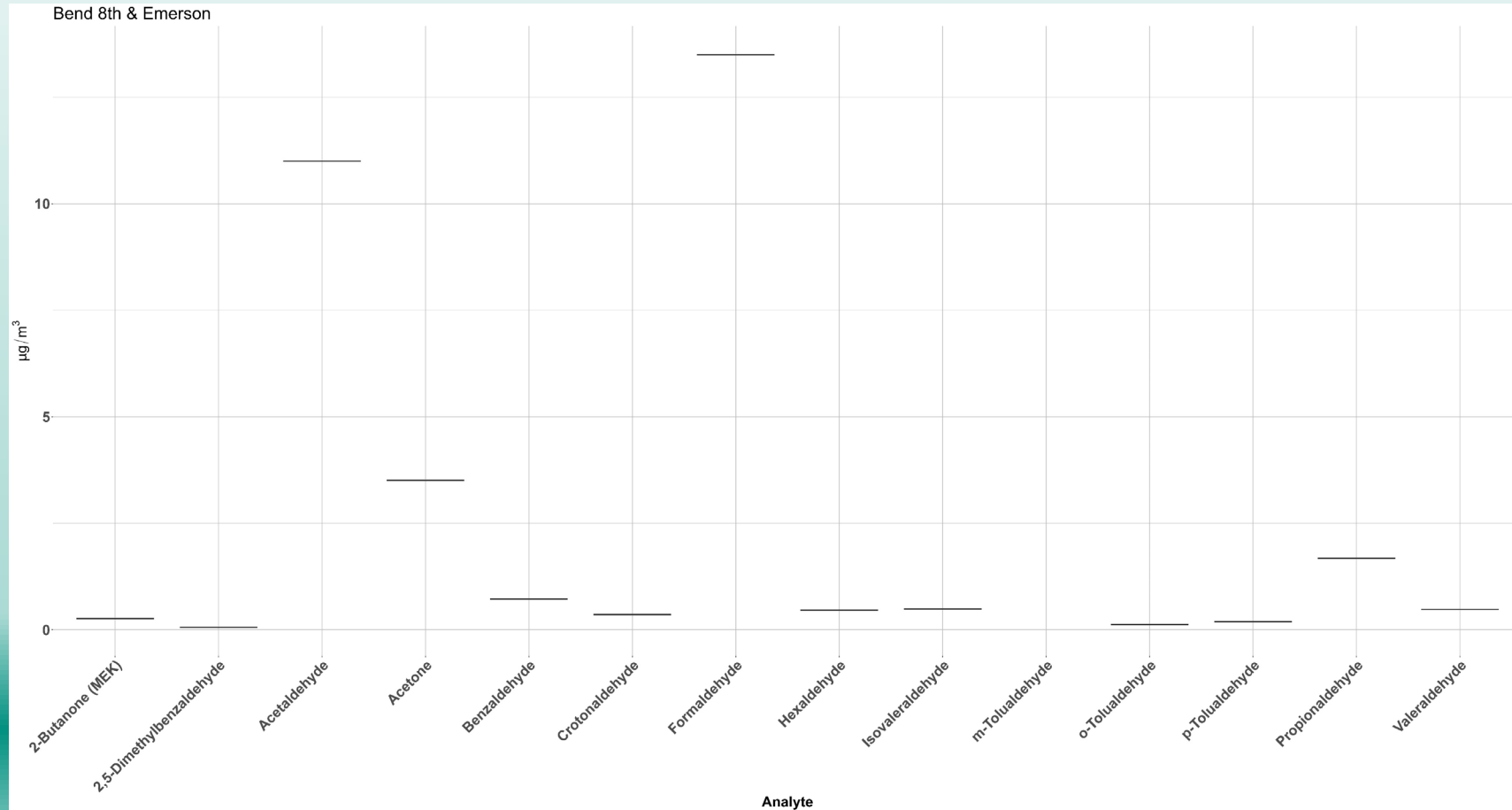
- 2 NATTS
- 6 OATTS
- 1-4 AATS
- 50+ PM monitors
- 1 NAAQS
- 1 Near Roadway



Bend AT 2023 Carbonyl



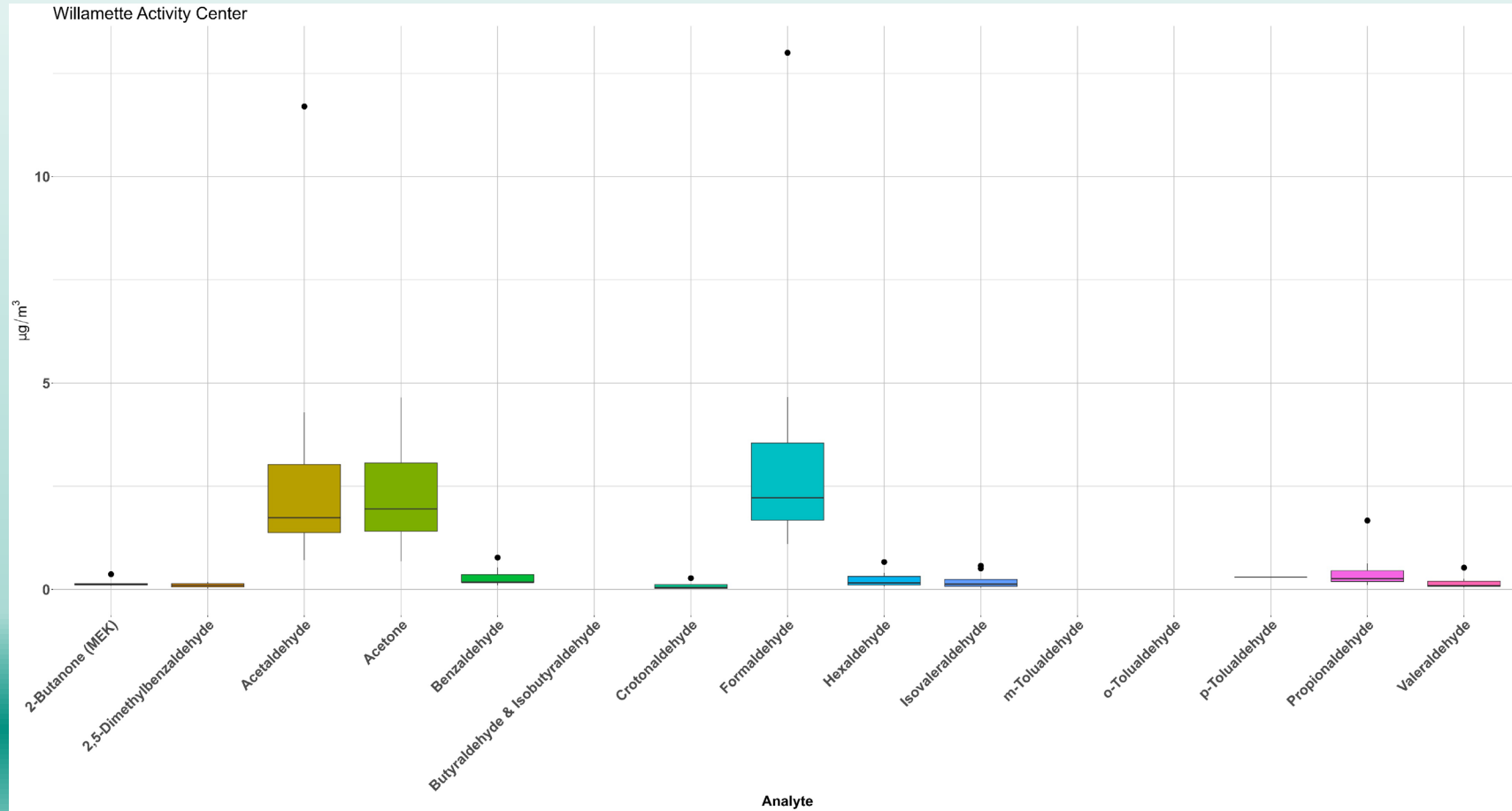
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Oakridge AT 2023 Carbonyl



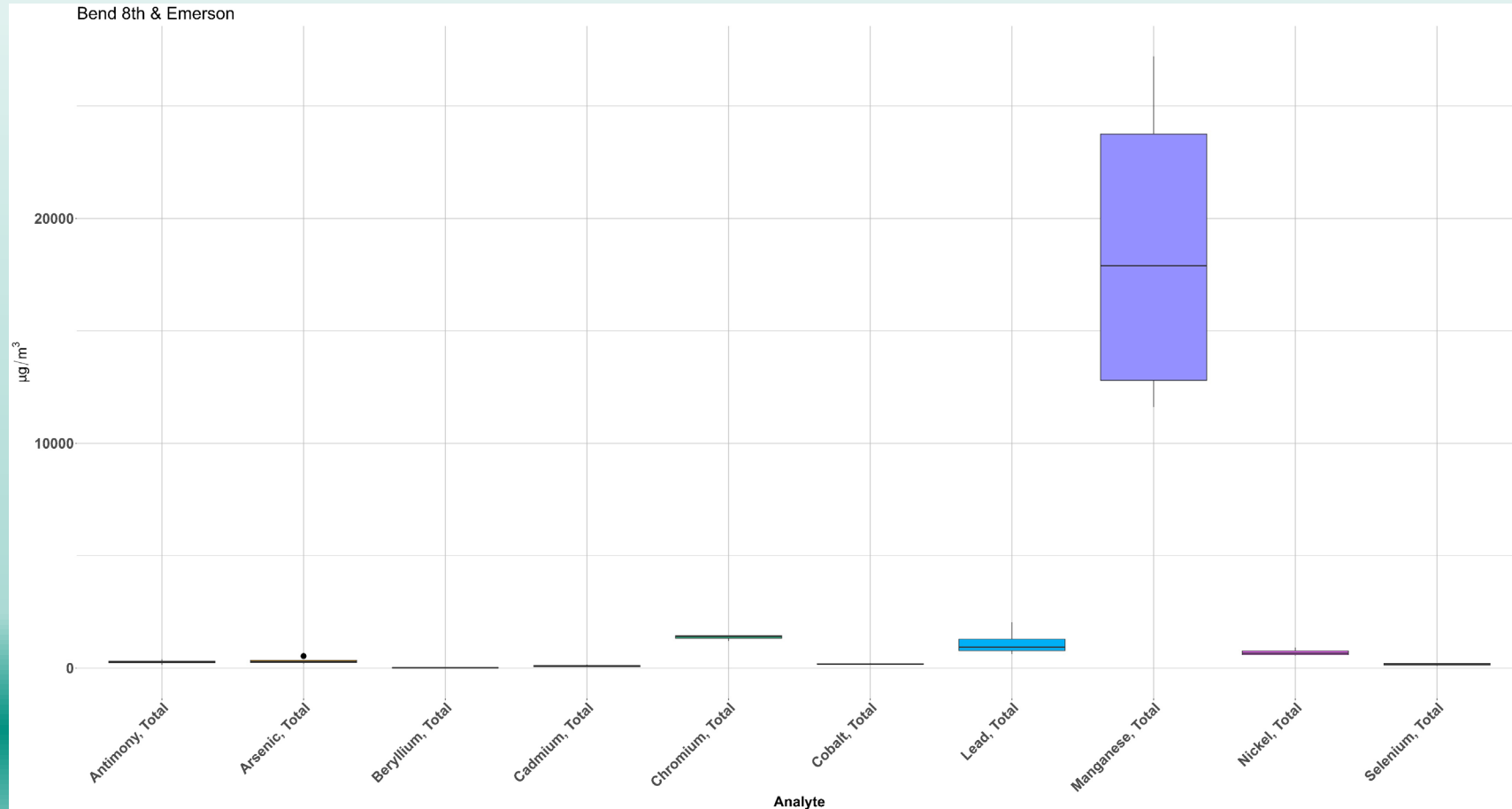
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Bend AT 2023 Metals



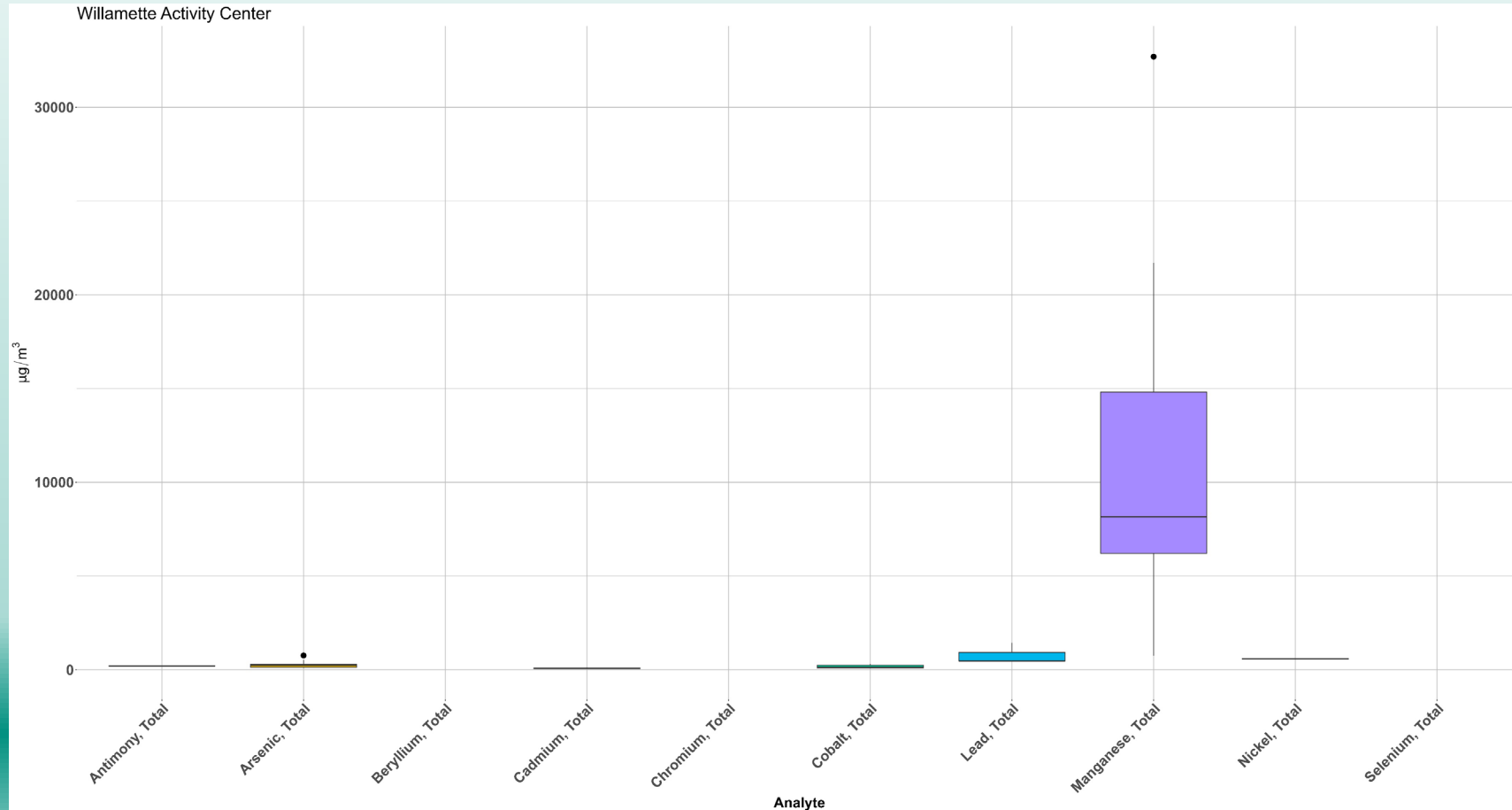
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Oakridge AT 2023 Metals



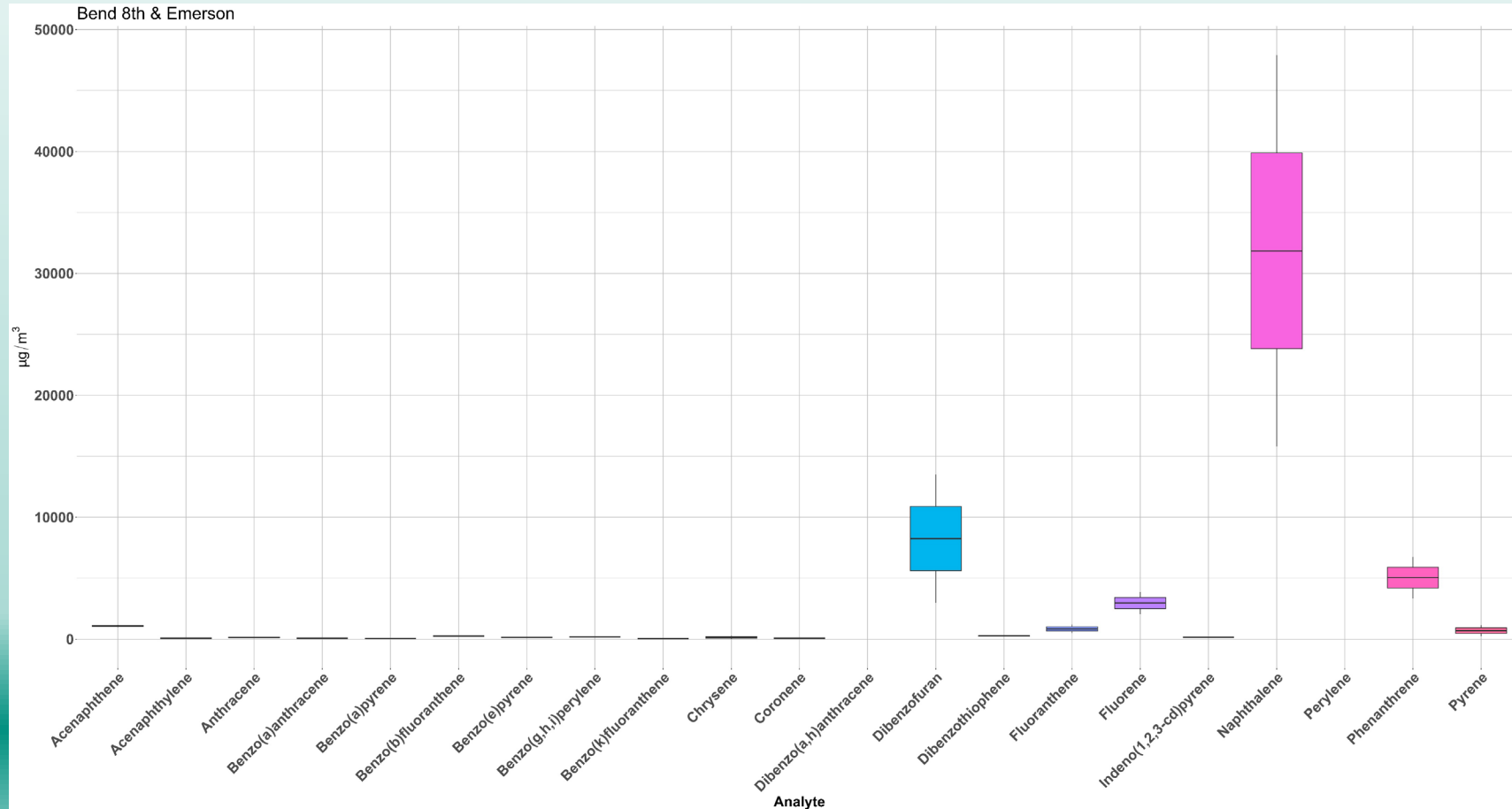
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Bend AT 2023 PAH



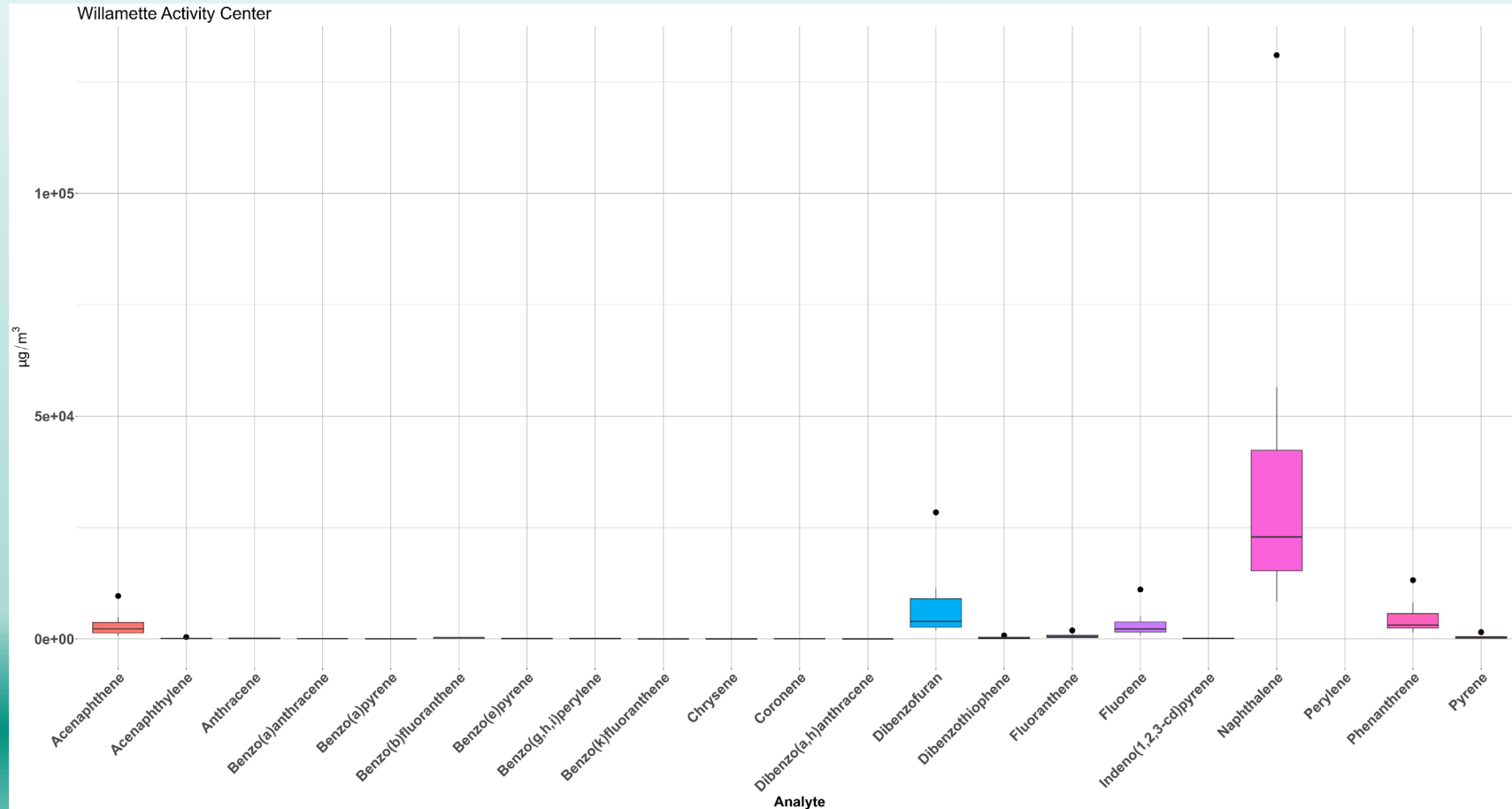
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Oakridge AT 2023 PAH



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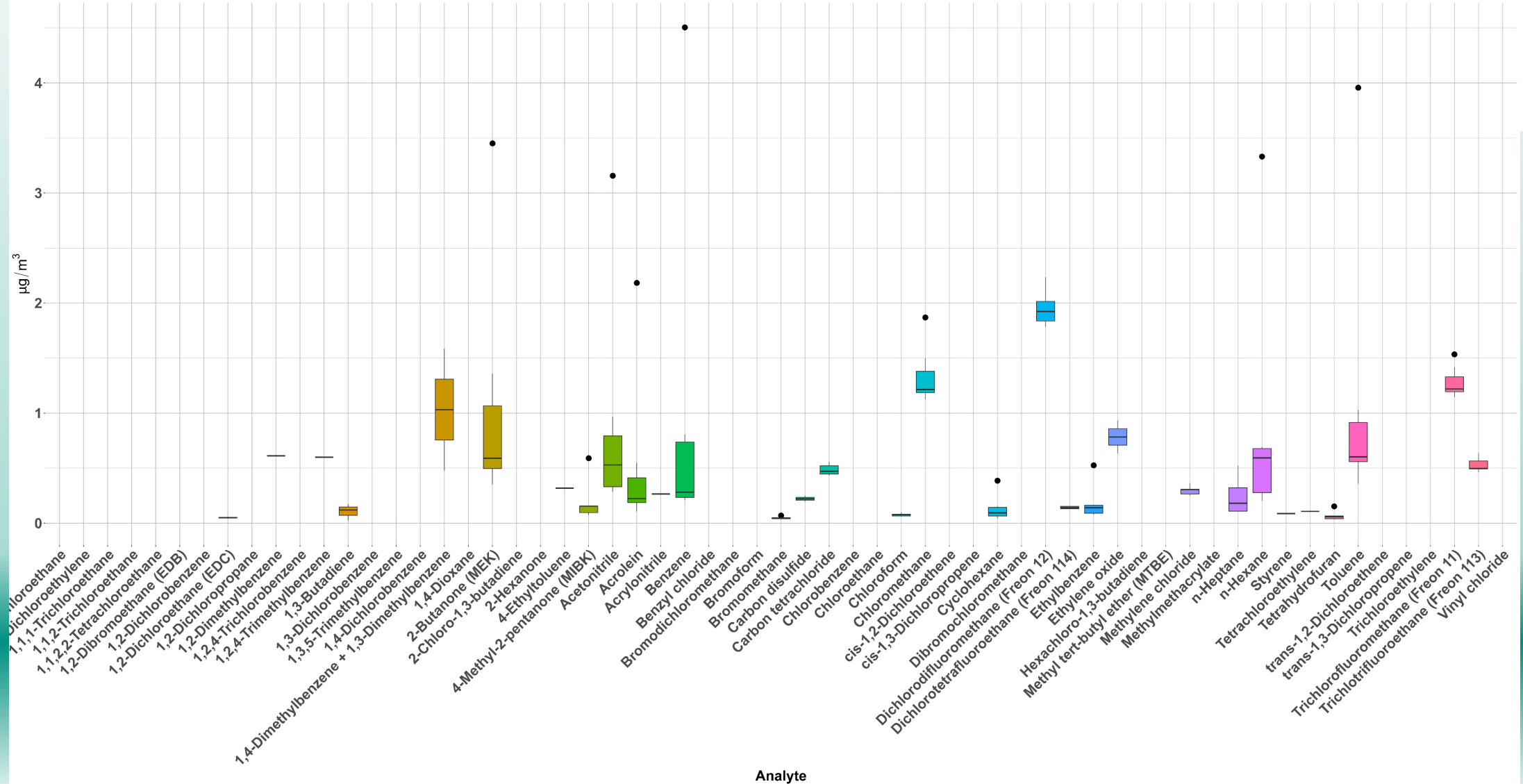


Oakridge AT 2023 VOC

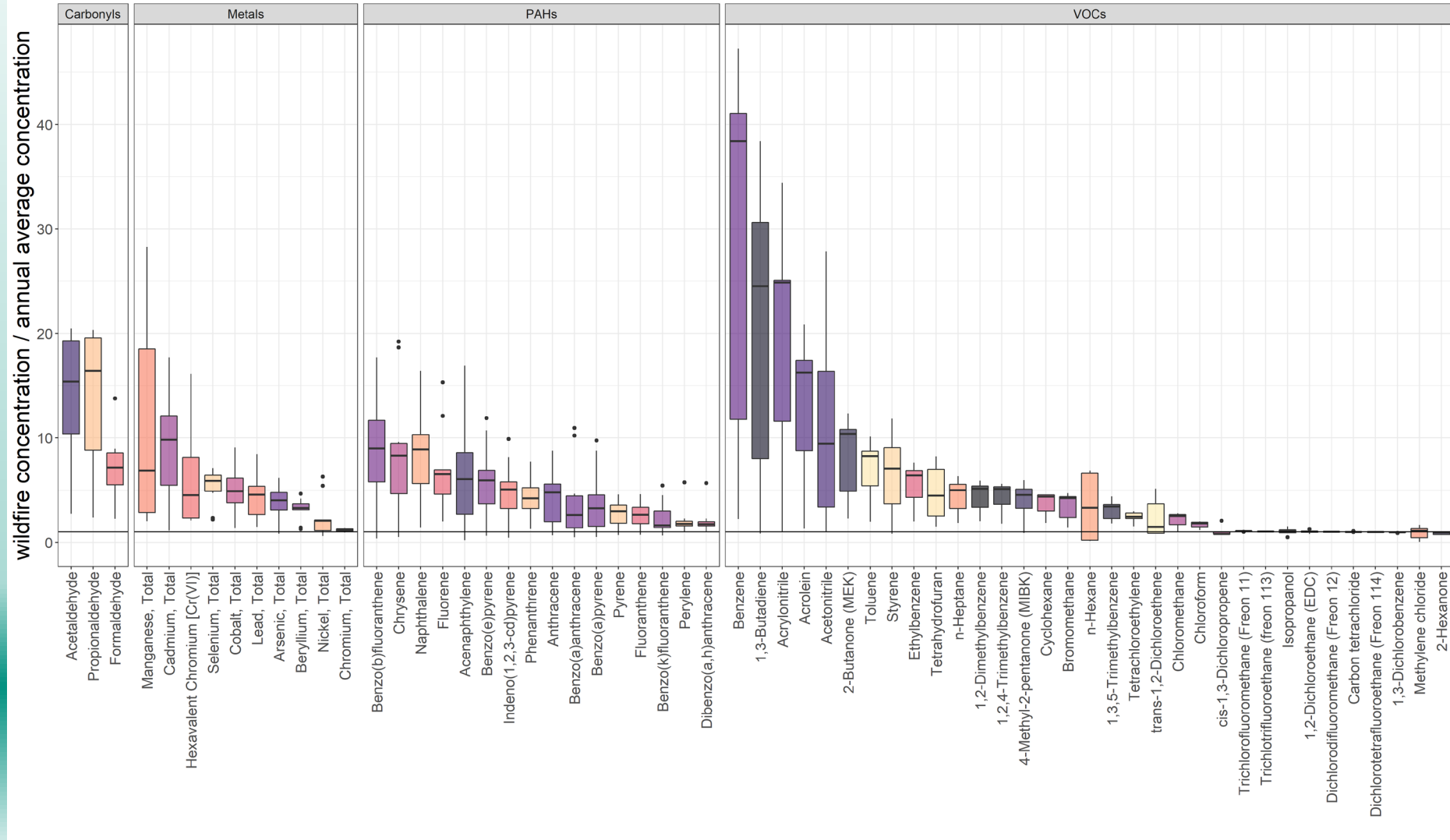
Willamette Activity Center



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Poster Figure from 2020



Questions?



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Thanks to:
David Broderick
Scott Peerman
Clara Funk
LRAPA

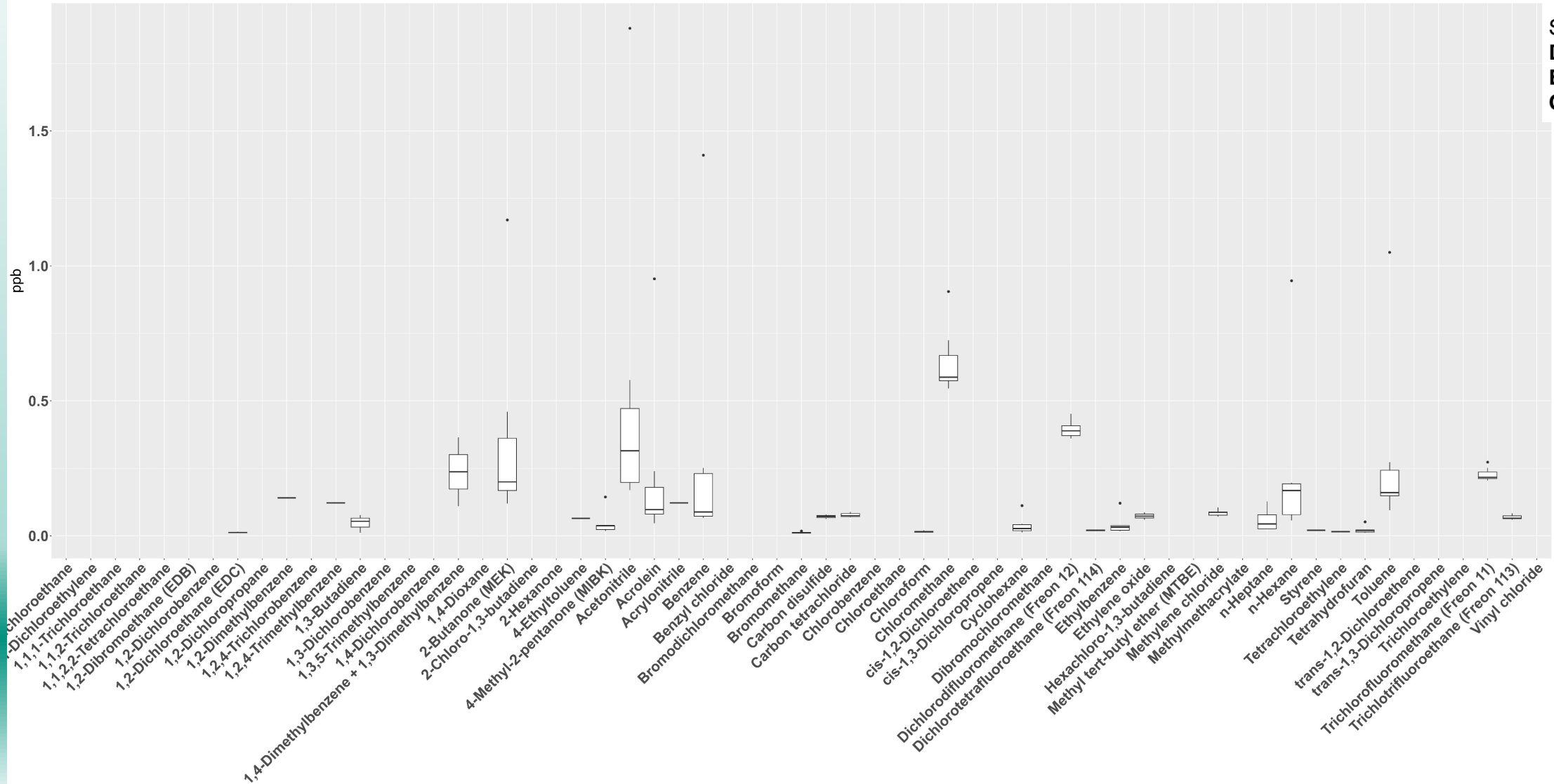
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Oakridge AT 2023 VOC

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Analyte