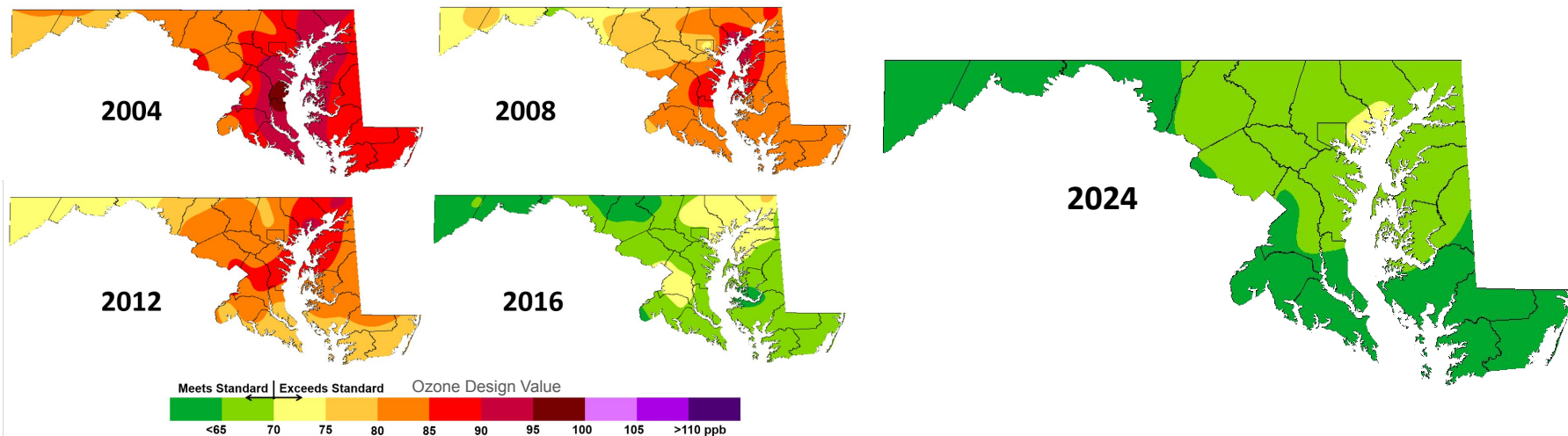




Maryland
Department of
the Environment

Air Quality Progress in 2024



June 16, 2025 Air Quality Control Advisory Council

Justin Smith and Kathryn Seaman

Natural Resources Planners, Air and Radiation Administration



MDE's Annual Clean Air Progress Report



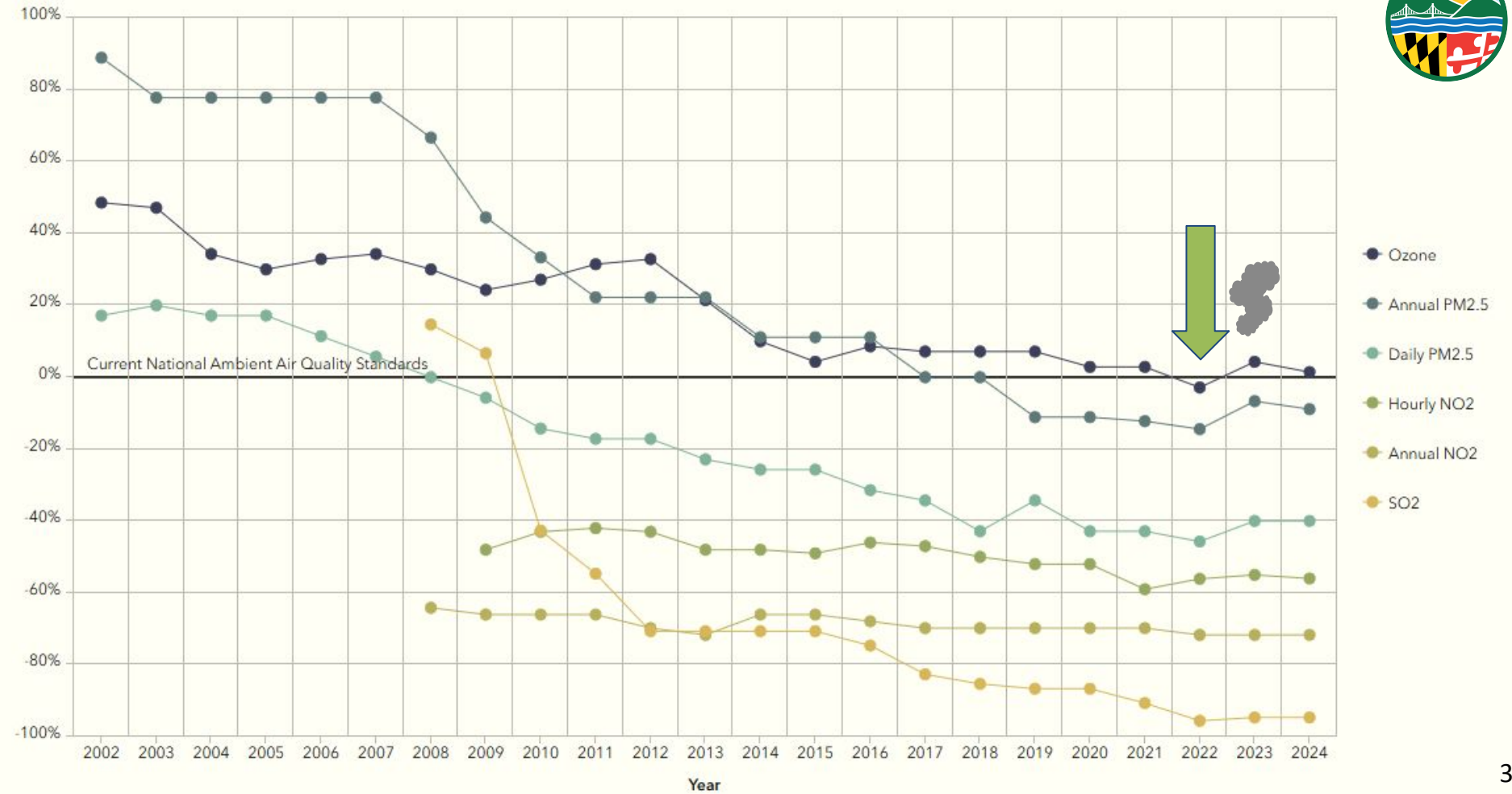
2025 Clean Air Progress Report

A review of Maryland's progress
towards clean air in 2024 and beyond.

Maryland Department of the Environment
April 22, 2025

- Provides a summary of Maryland's criteria pollutant levels and history
- Highlights departmental actions and priorities
- Makes Air Quality information accessible to the public
- Encourages action to contribute to cleaner air

Improving Air Quality

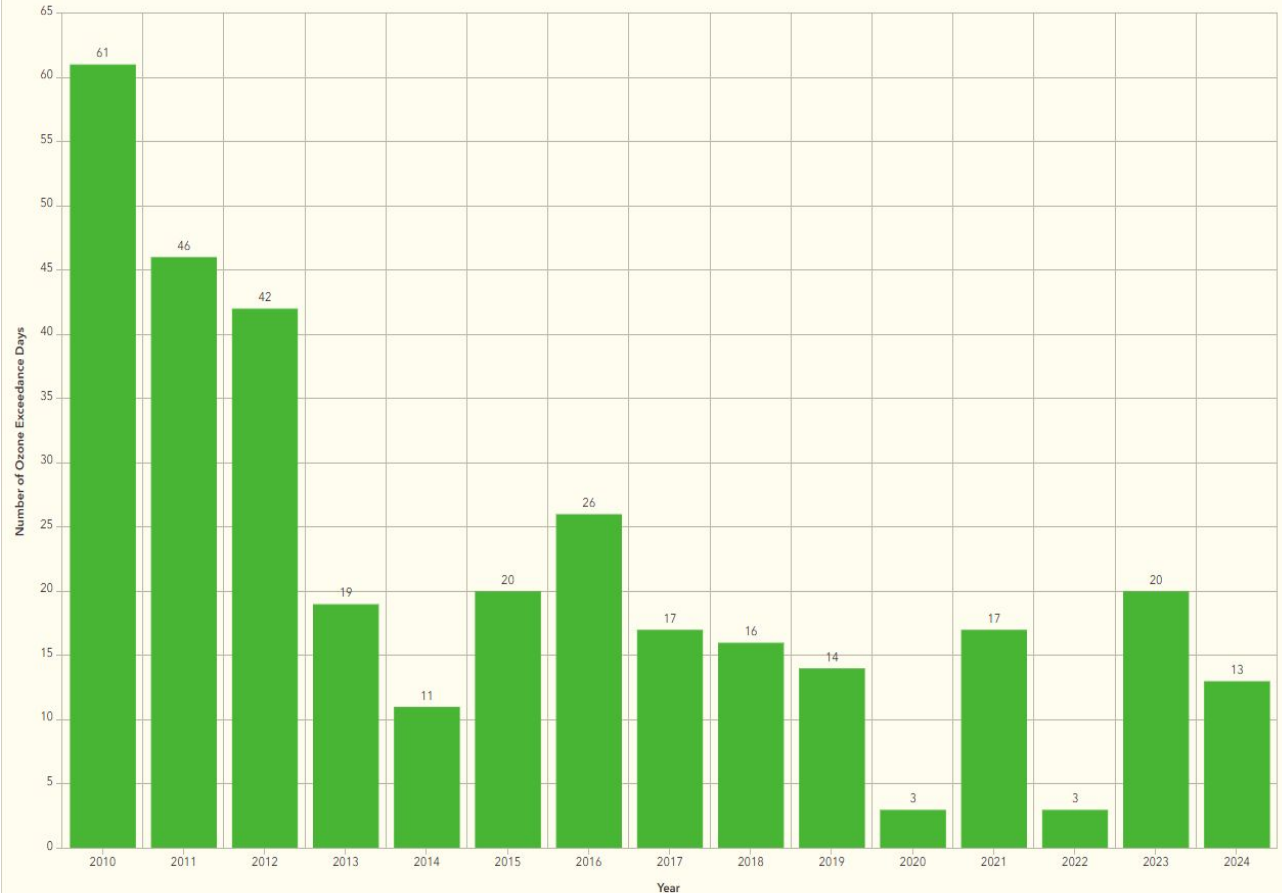




Despite record-breaking heat, 2024 had 13 ozone exceedance days - the 4th lowest number of annual exceedance days on record for Maryland.

These events were also typically just a single monitor measuring levels a few ppb above the standard.

Number of Ozone Exceedance Days per Year





Connecting Air Quality and Climate

- 2024 was the Earth's hottest year on record since 1880, with global temperatures more than 1.5°C above the baseline set by the Paris Climate Agreement.
- Policies to reduce Climate Change pollutants have corresponding reductions - called co-benefits - of air pollutants that contribute to poor air quality.
- Regulations for Building Energy Performance Standards (BEPS), came into effect at the end of 2024. BEPS aims to reduce greenhouse gas emissions from large buildings.

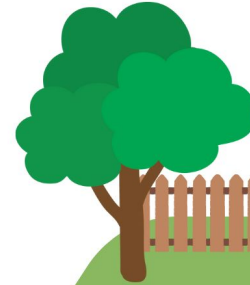


Empowering Action

Transportation

Home Life

- Use public trans
- Ride a bike, carpool
- Combine errands into
- Switch to an ele



Lawn & Garden



- Plant trees
- Switch to electric lawn care equipment
- Save mowing the lawn or blowing leaves for good air quality days
- Use a gas or electric grill instead of charcoal on poor air quality days
- Use environmentally friendly products for your lawn and garden



Community Involvement

- MDE has been building relationships with communities through outreach and ensuring residents are well informed.
- Recent initiatives include:
 - Enhanced inspection, monitoring, and enforcement projects in communities overburdened by air pollution.
 - The development of an Environmental Justice Screening Tool for Maryland.
 - Stakeholder forums and information sessions.
 - The Five Million Trees Initiative.



Five Million Trees

- The Five Million Trees Initiative began with legislation passed in 2021 by the Maryland General Assembly and solidified into a final plan to grow five million native trees in Maryland by 2031.
- It is a multi-agency effort that builds upon the state's existing investments in climate action, ecosystem restoration, and forest management.
- Maryland reached a major milestone in 2024 by planting its one millionth tree, ramping up the planting rate and getting on track to meet the goal of Five Million Trees.



Conclusion

As air quality in Maryland continues to improve, MDE remains committed to cleaning the air, protecting public health, and combating climate change. The 2025 Clean Air Progress Report reflects MDE's efforts to engage communities and make air quality information accessible for all Marylanders.

Questions?

Scan to view the full interactive report here:



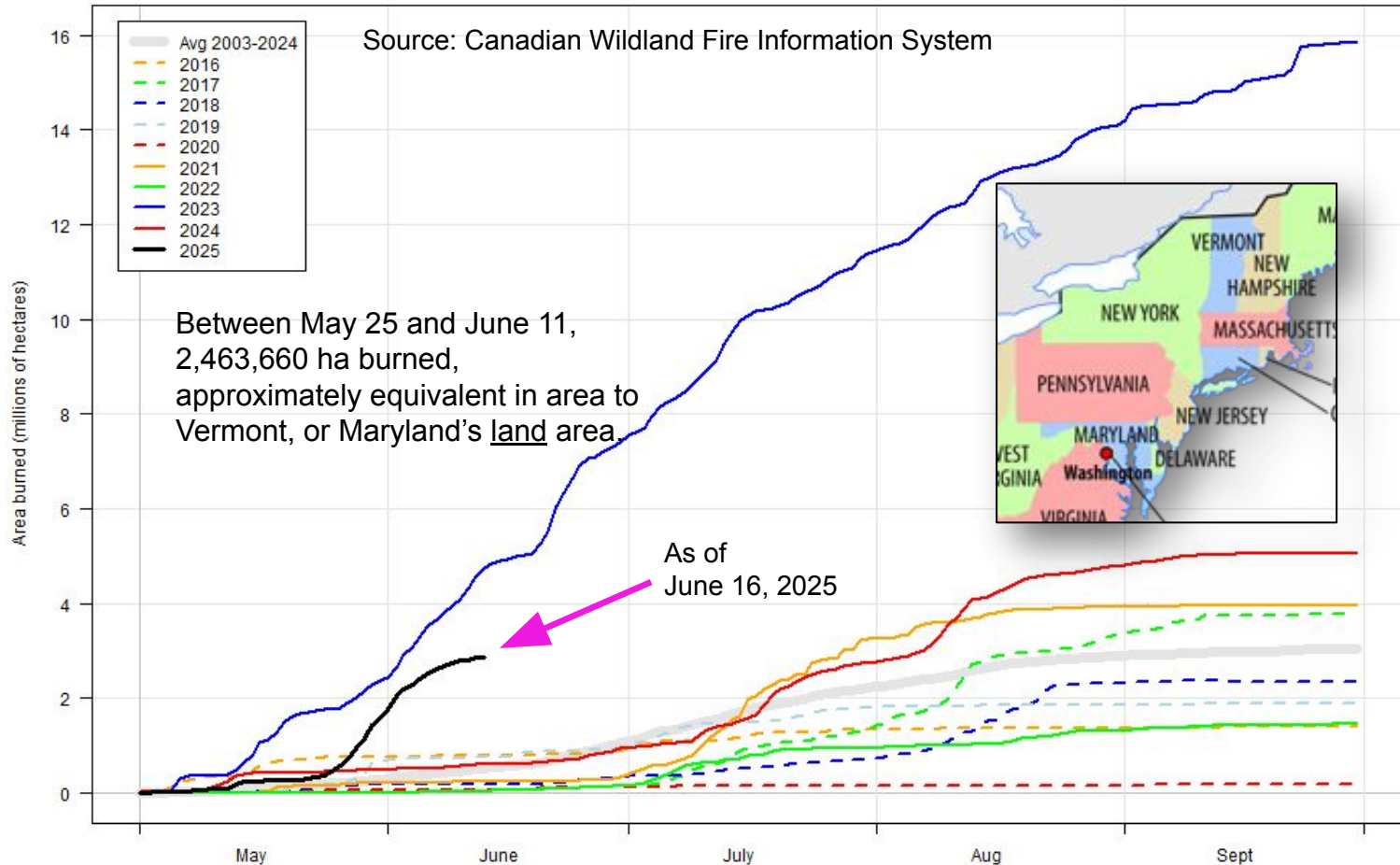
2025 Smoke Impacts

Joel Dreessen

Dep. Program Manager and Senior Meteorologist in the Air
Monitoring Program

Maryland Dept of the Environment

Cumulative area burned in Canada by year estimated from satellite hotspots

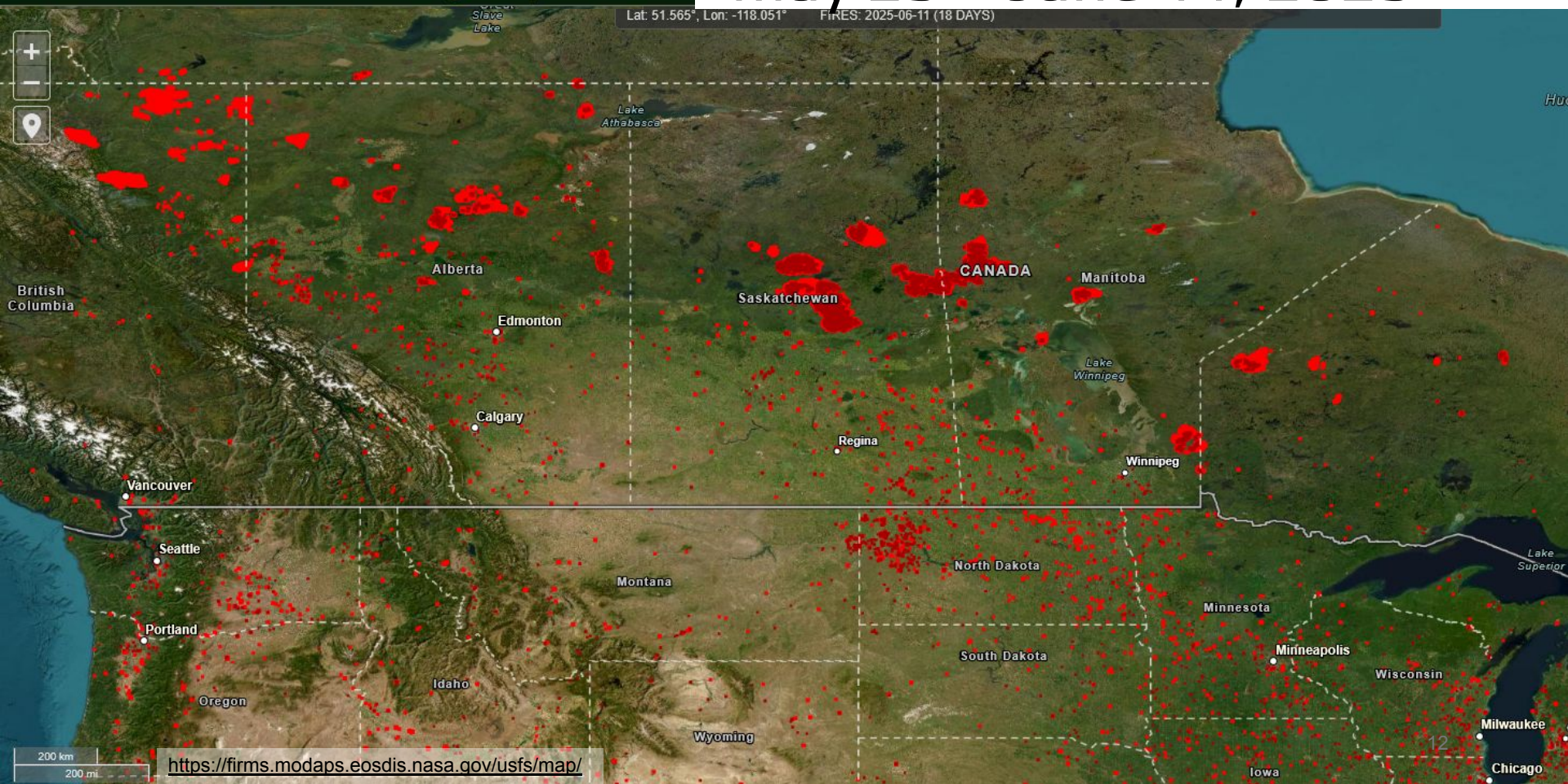


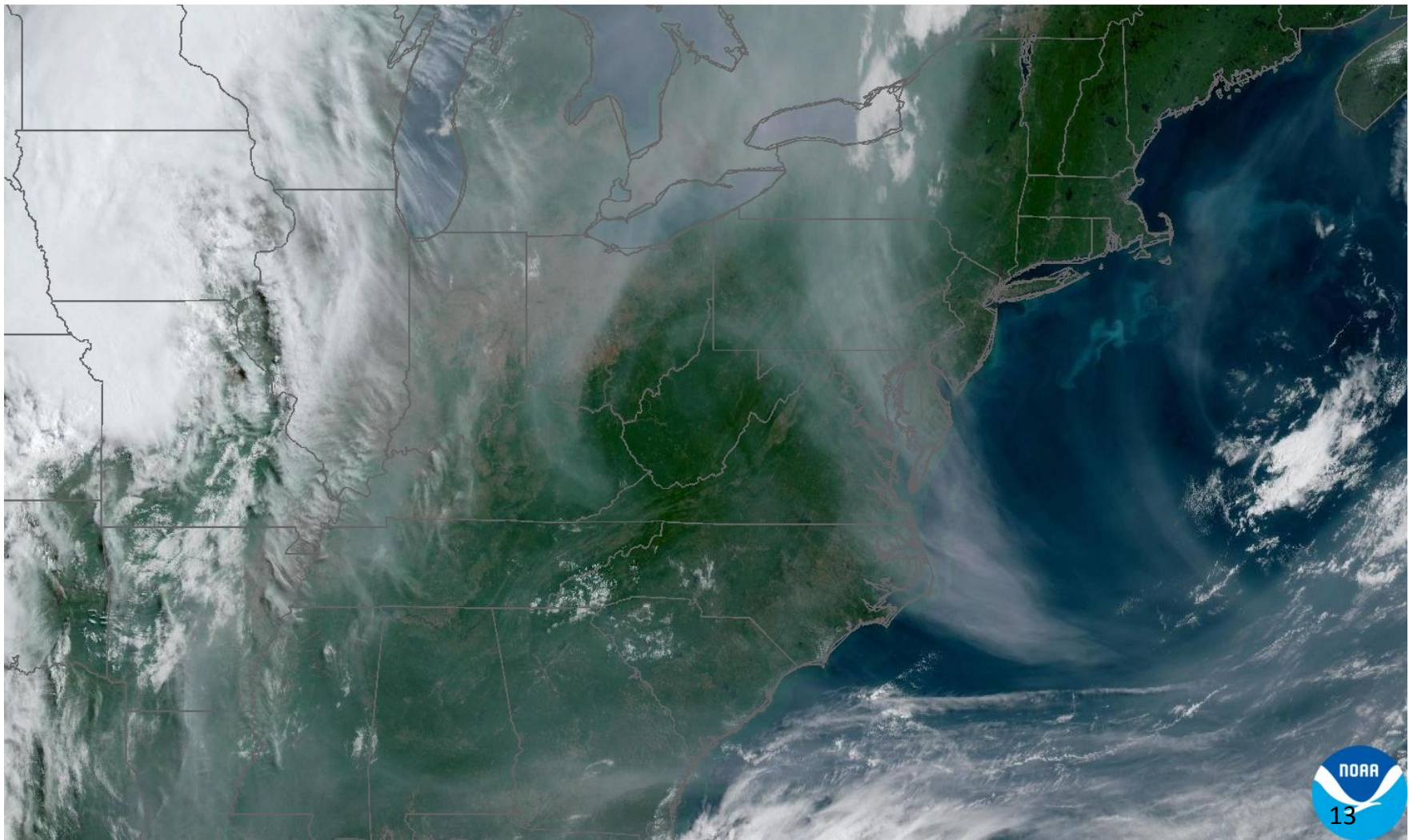


FIRMS US/CANADA

Fire Information for Resource Management System US/Canada

May 25 – June 11, 2025

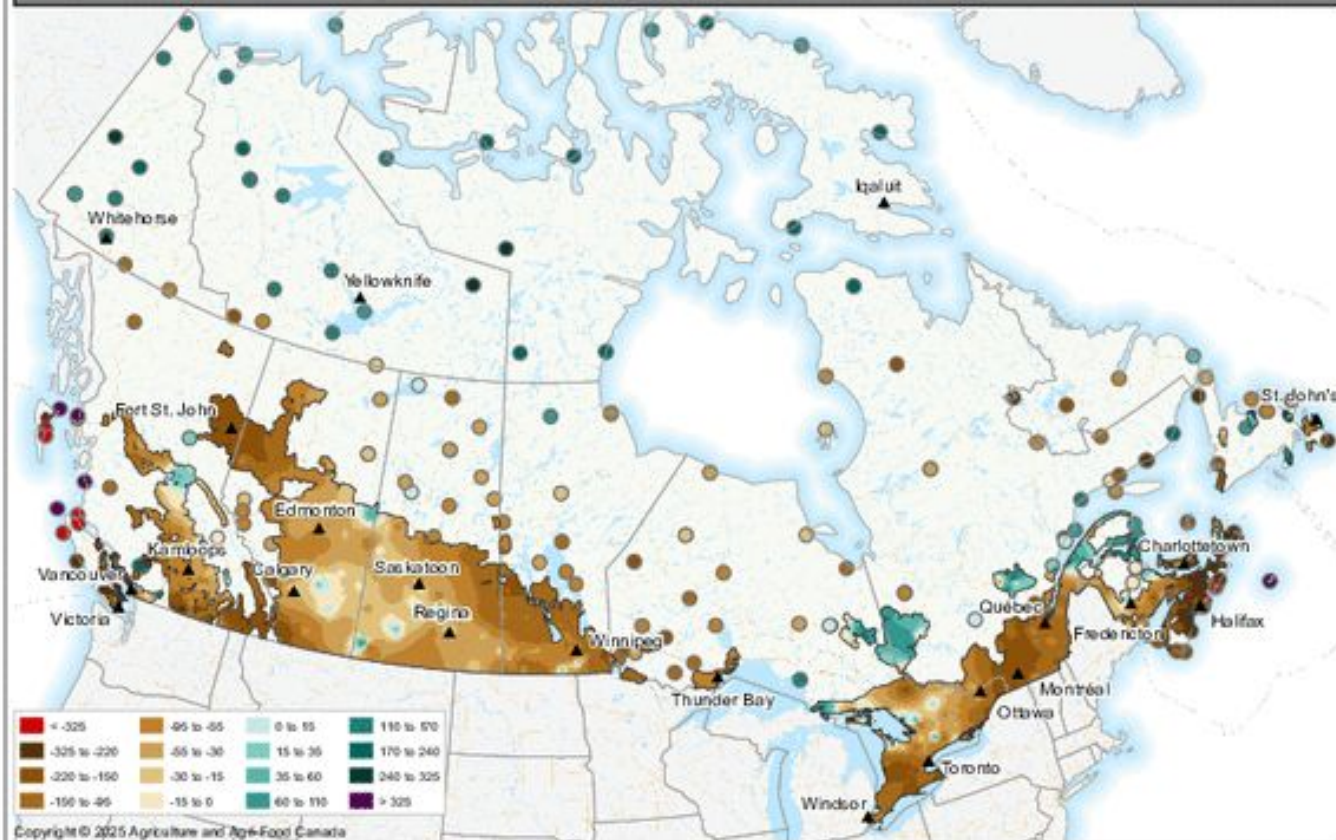






Departure From Average Precipitation (mm)

September 1, 2024 to June 7, 2025



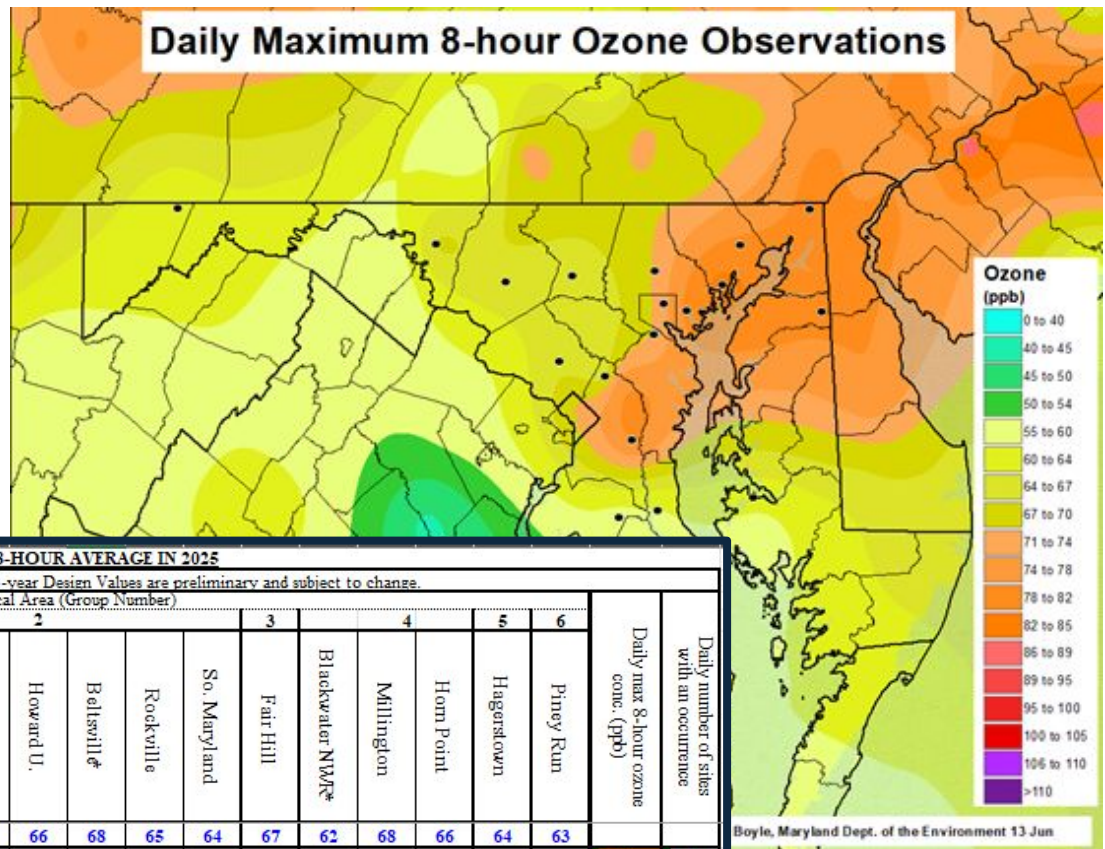
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Prepared by Agriculture and Agri-Food Canada's Science and Technology Branch. Data provided through partnership with Environment Canada, Natural Resources Canada, Provincial and private agencies.
Produced using near real-time data that has undergone some quality control. The accuracy of this map varies due to data availability and potential data errors.

Created: 2025-06-08
www.agr.gc.ca/drought

June 12, 2025
and other exceedances

Smoke seemed to
“Activate” from
Chicago, to MD, to NYC



MARYLAND'S OZONE MAX 8-HOUR AVERAGE IN 2025																						
Last updated:06/13/2025 Raw data, subject to change. 2024 3-year Design Values are preliminary and subject to change.																						
	Metropolitan Statistical Area (Group Number)																				Daily max 8-hour ozone conc. (ppb)	Daily number of sites with an occurrence
	1						2						3		4		5	6				
	Aldino	Edgewood	Essex	Lake Montebello	Brooklyn Park**	Padonia	South Carroll	Calvert	PG Equest. Ctr.	Frederick	Howard U.	Beltswill†	Rockville	So. Maryland	Fair Hill	Blackwater NWR*	Millington	Horn Point	Hagerstown	Piney Run		
2024 Design Value	70	71	71	70	68	69	67	63	68	67	66	68	65	64	67	62	68	66	64	63		
06/04/2025						72														72	1	
06/11/2025		75							72											75	2	
06/12/2025	79	83	79	73	71	71			78			75			79		79			83	10	

June 14, 2025

PM2.5 Exceedance

- Wharton State Forest in New Jersey caught fire on Friday
- ~5800 acres in 2 days .. about 3000 soccer fields, or just about 1/3 the size of Manhattan, NY

