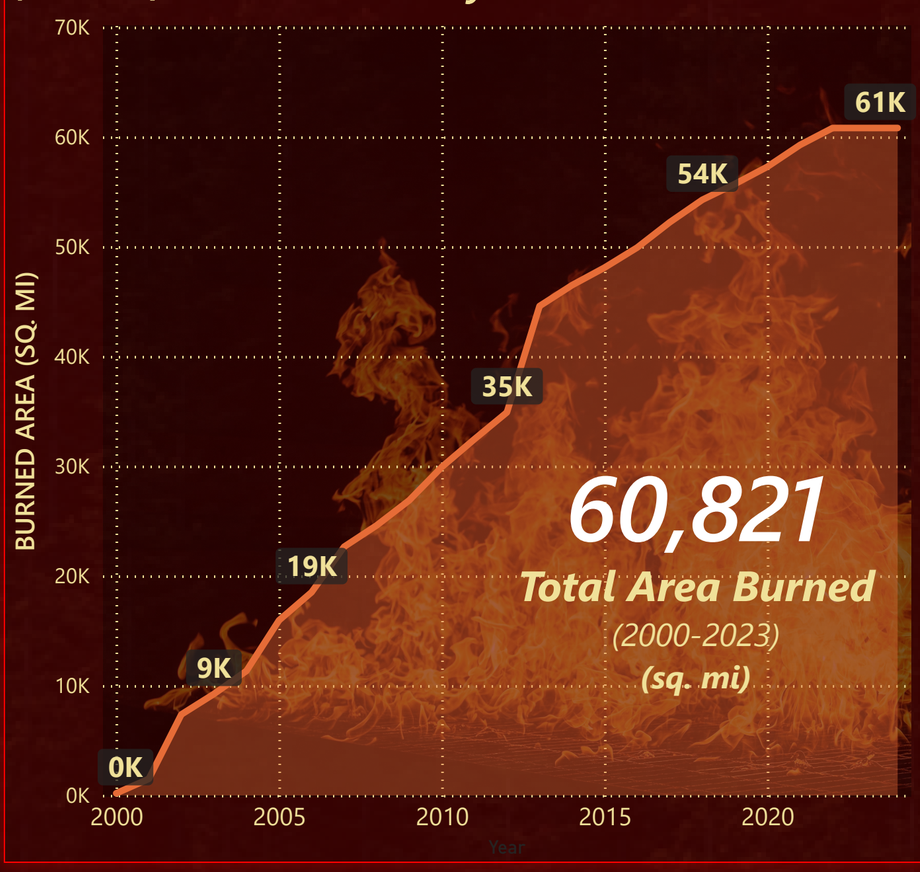
UP IN FLAMES *Wildfire Impacts in Eastern North America 2000 - 2023*

Wildfires are an increasing threat to our survival and are often understudied on the east coast compared to their western counterparts. These blazes, now more common and more severe due to climate change, affect populations far removed from the blaze itself

(Not So) Little Fires Everywhere



Releasing...

25,953,927

Total Megawatts

of Fire Radiative Power (FRP)

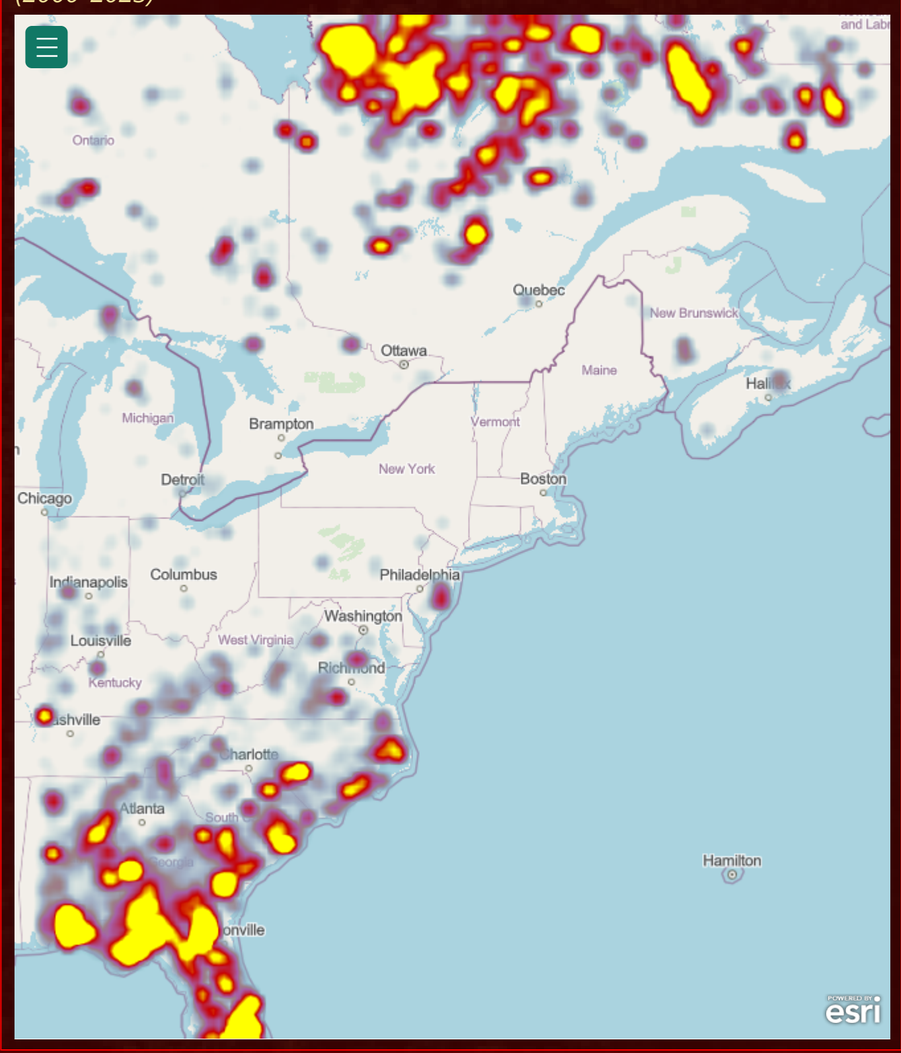
...and burning an area

larger than Georgia

The loss of biomass, the high density of smoke, the increase of small particulate matter and deadly carbon monoxide in the air all negatively impact the Air Quality Index (AQI)

Total Area Burned

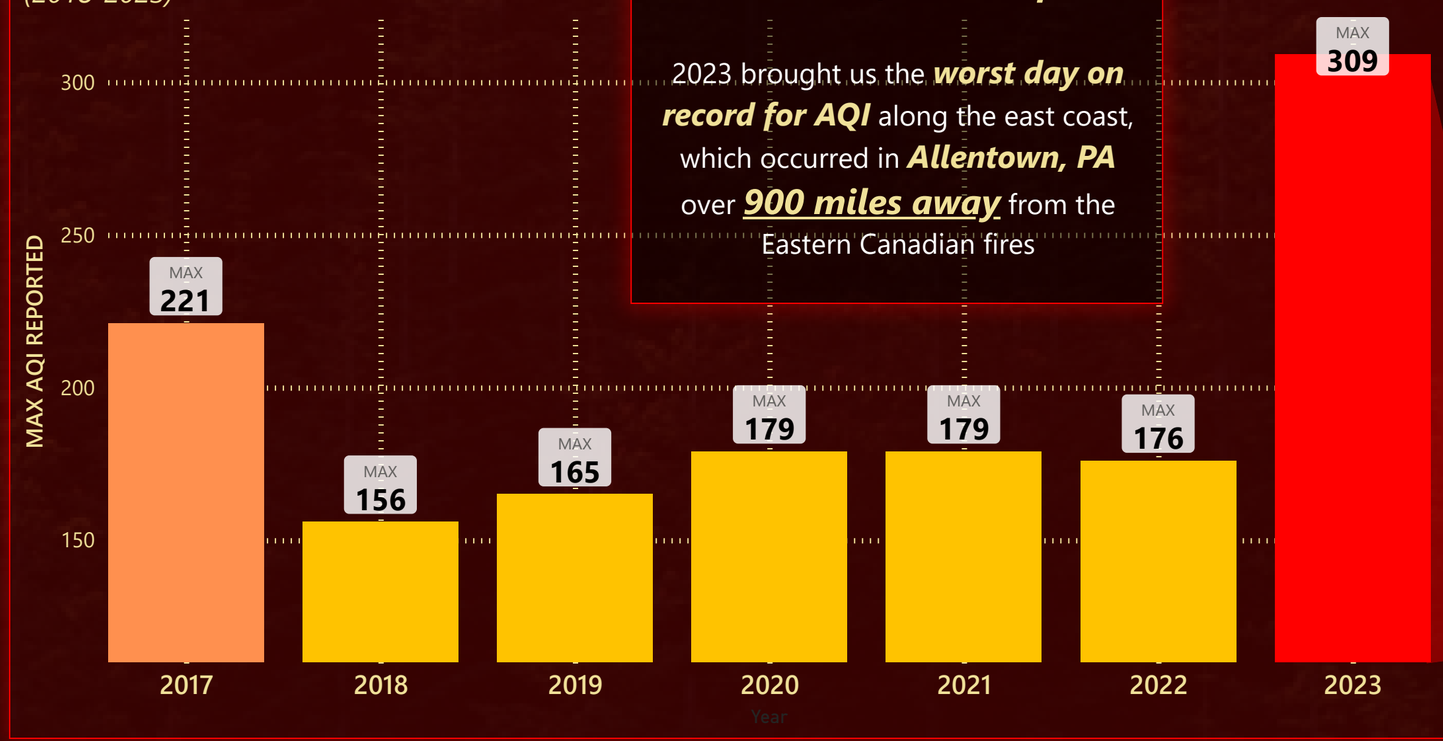
(2000-2023)



AS FIRES SPREAD, SMOKE RISES

5 YEAR FOCUS: AQI TRENDS

(2018-2023)



Distant Fires, Local Impacts

2023 brought us the ***worst day on record for AQI*** along the east coast, which occurred in ***Allentown, PA*** over ***900 miles away*** from the Eastern Canadian fires

Category & Range	Meaning
Good 0-50	Satisfactory, poses little to no risk
Moderate 51-100	Acceptable, moderate health concern for small number of people unusually sensitive to air pollution.
Unhealthy for Sensitive Groups 101-150	Members of sensitive groups may experience health effects
Unhealthy 151-200	Everyone may experience health effects, with members of sensitive groups experiencing more serious effects.
Very Unhealthy 201-300	HEALTH ALERT: Everyone may experience more serious health effects.
Hazardous 301-500	EMERGENCY: The entire population is more likely to be affected by more serious health conditions.

HITTING HOME

Four of the top six worst measurements of AQI in Washington D.C. occurred as a ***direct result of wildfires***

The February 19th, 2011 D.C. AQI spike was the result of a close-range fire in Maryland and several ongoing brush fires in Virginia; but in June of 2023, mere days after fires ravaged east Canada, Washington D.C. was covered in smog from more than ***1,000 miles away***

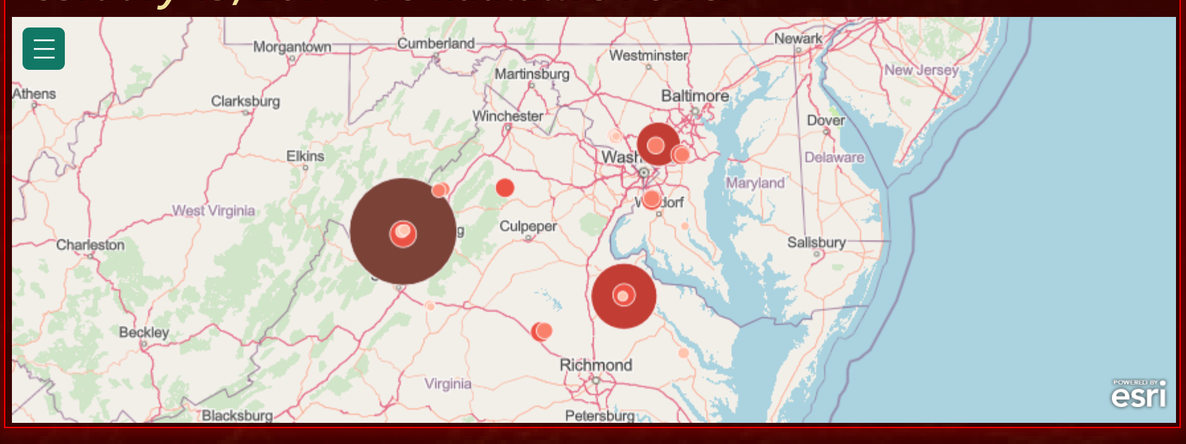
10 Worst Days for Air Quality

Washington D.C. (2000-2023)

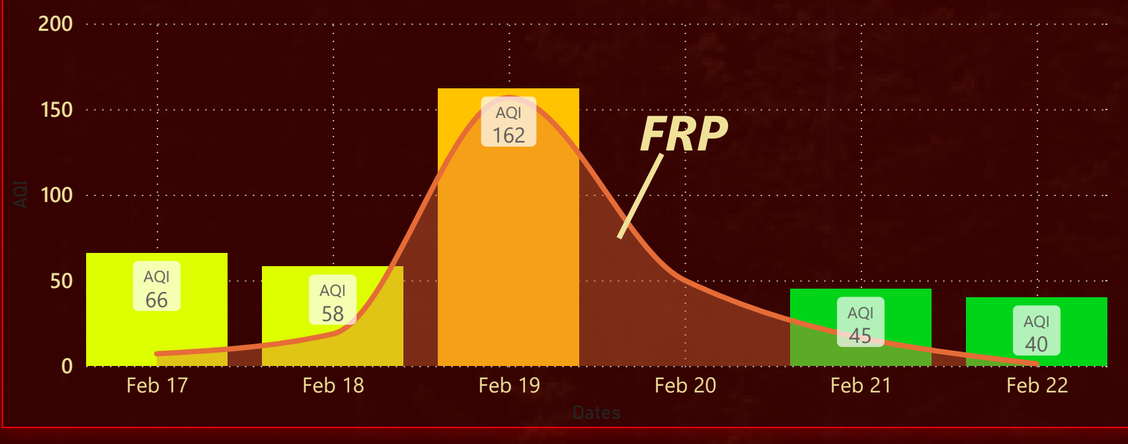
	Date	AQI		Date	AQI
1	June 8, 2023	198	6	February 19, 2011	162
2	June 7, 2023	176	7	July 4, 2006	161
3	July 4, 2000	174	8	July 4, 2019	157
4	June 29, 2023	170	9	July 4, 2003	155
5	July 4, 2020	166	10	July 4, 2010	154

Highlighted cells show days where the AQI was impacted by wildfire, note that all other AQI spikes are correlated with Independence Day fireworks

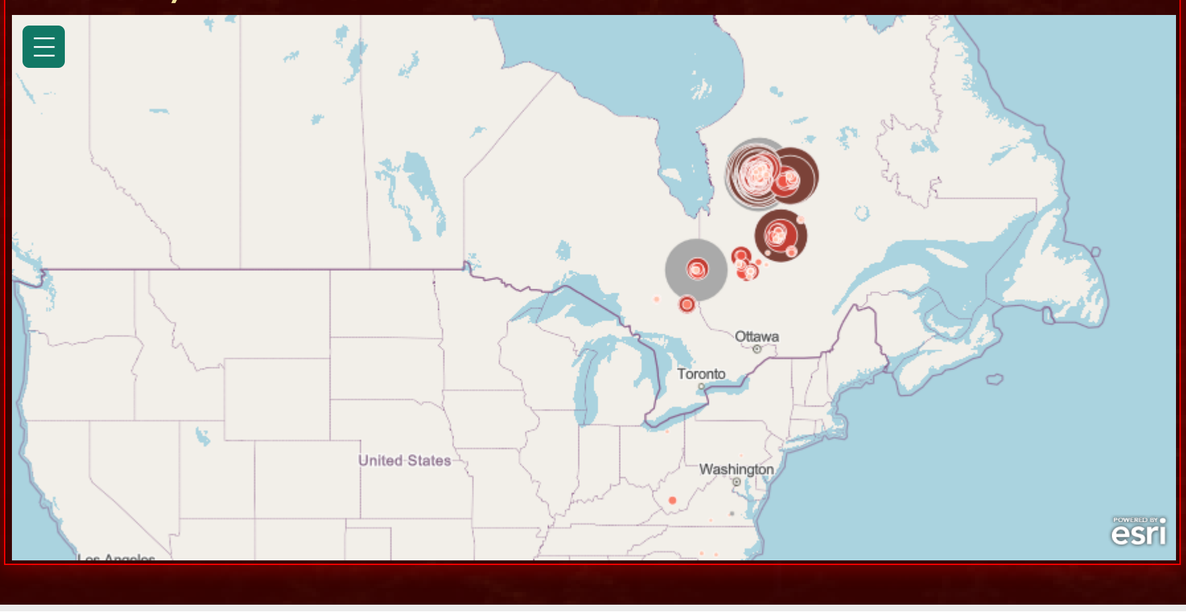
February 19, 2011 Fire Radiative Power



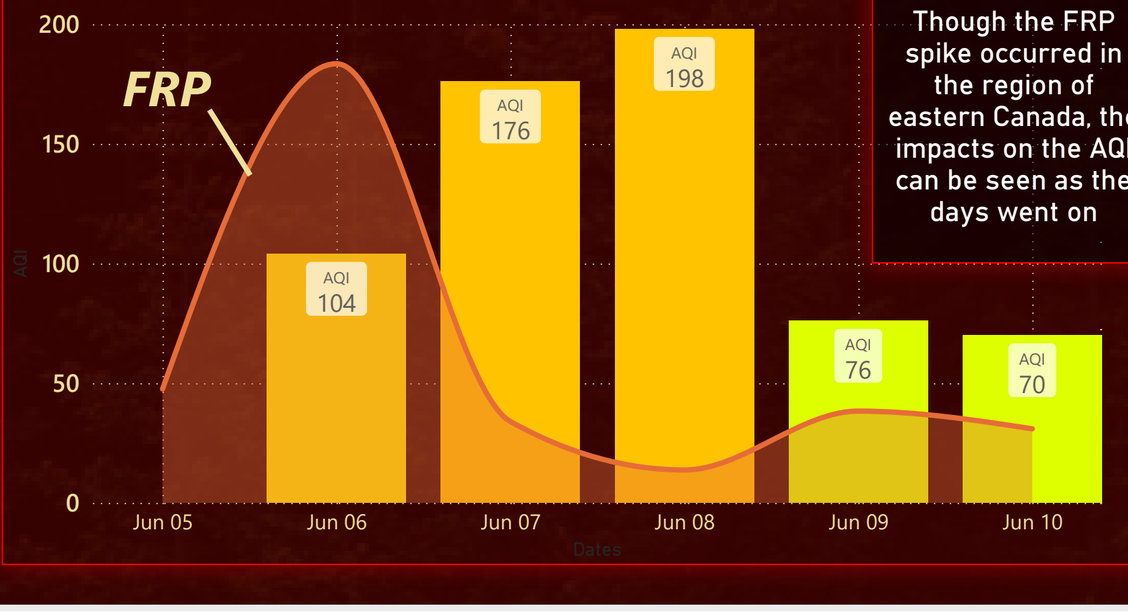
Feb. 17th - 22nd 2011 AQI and FRP (MW) for D.C.



June 8th, 2023 Fire Radiative Power



June 6th-10th 2023 AQI and FRP (MW) for D.C.



Though the FRP spike occurred in the region of eastern Canada, the impacts on the AQI can be seen as the days went on