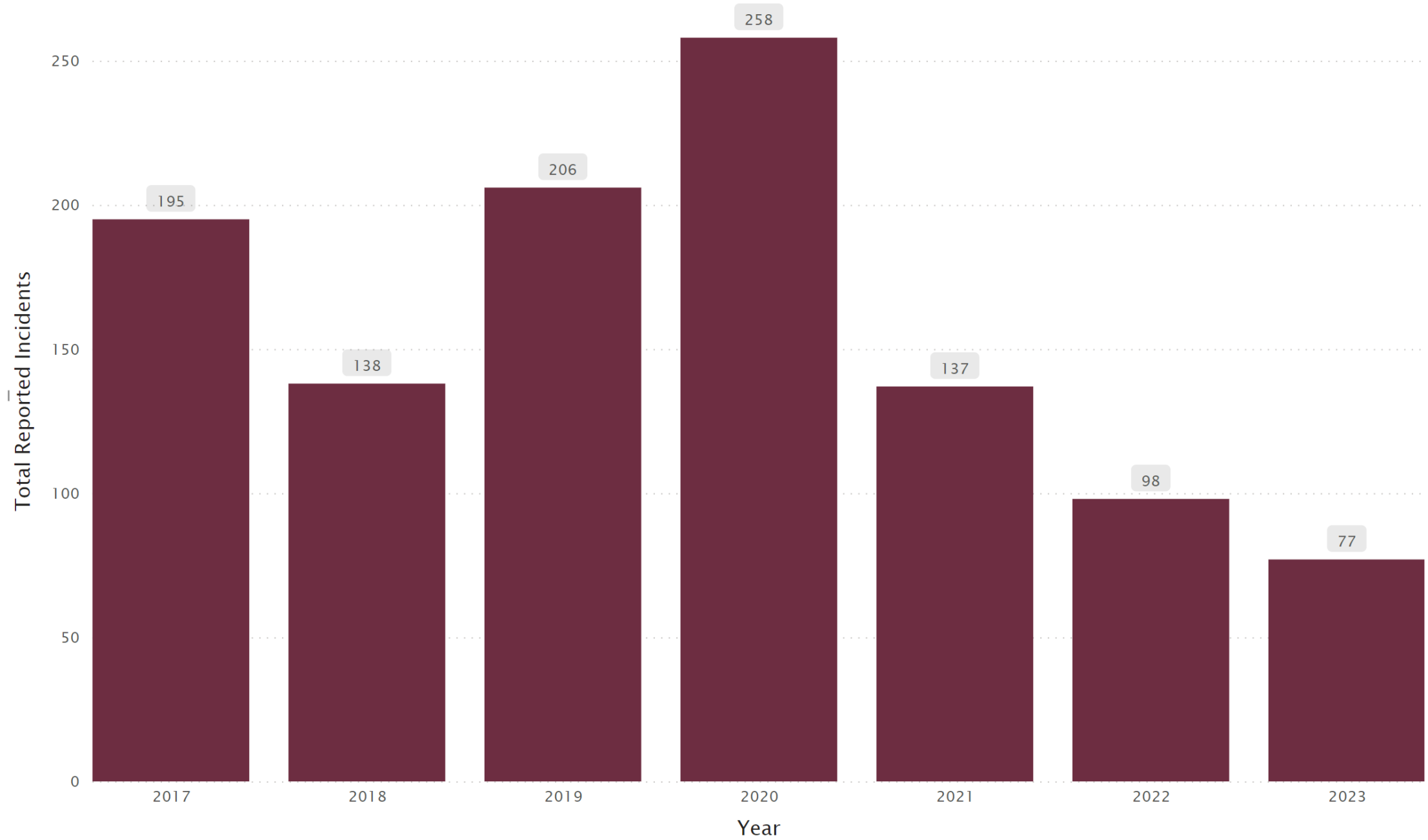# Wildfire Data Analysis Update
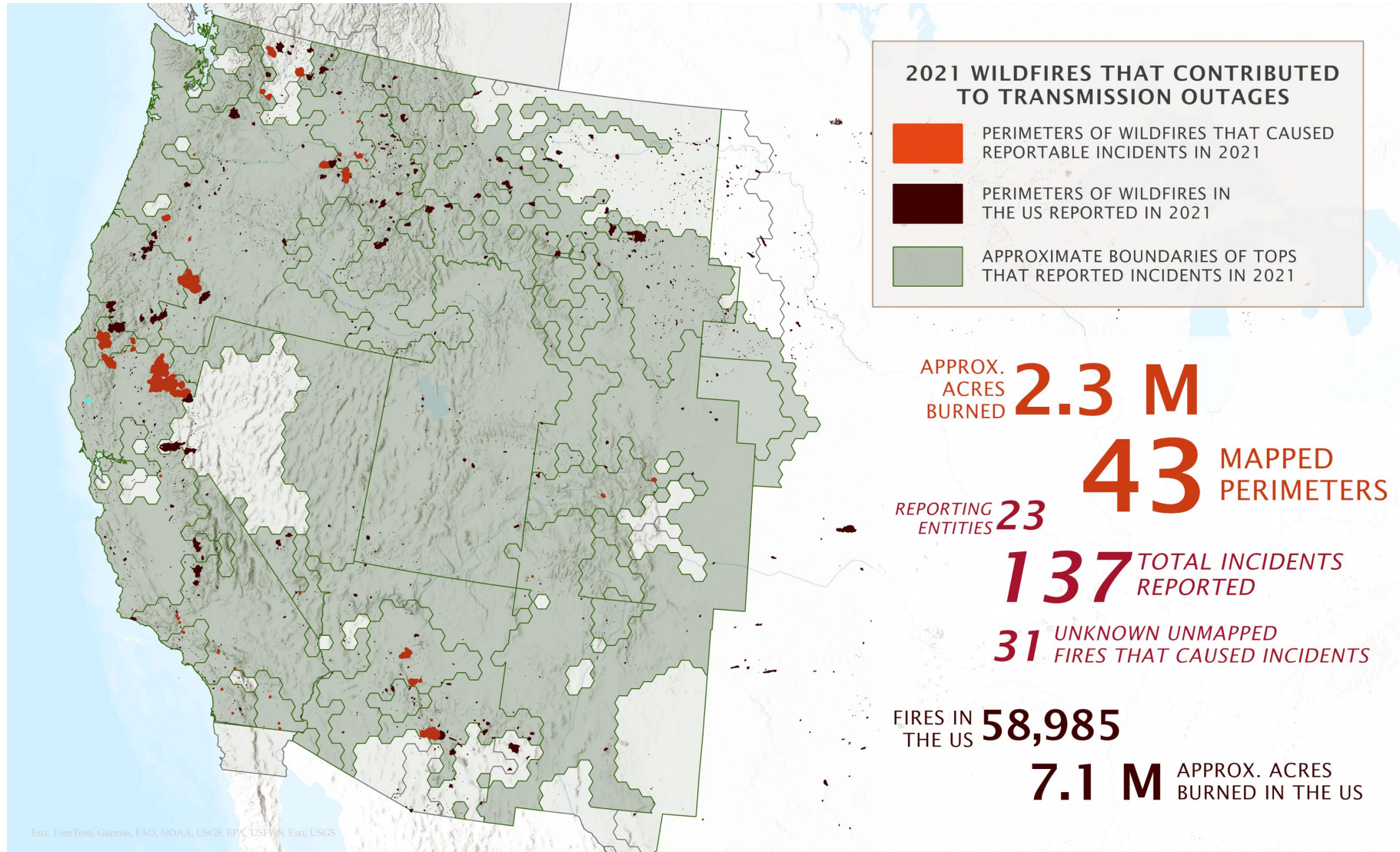
October 16 RRC Meeting

Steve Ashbaker

Reliability Initiatives Director
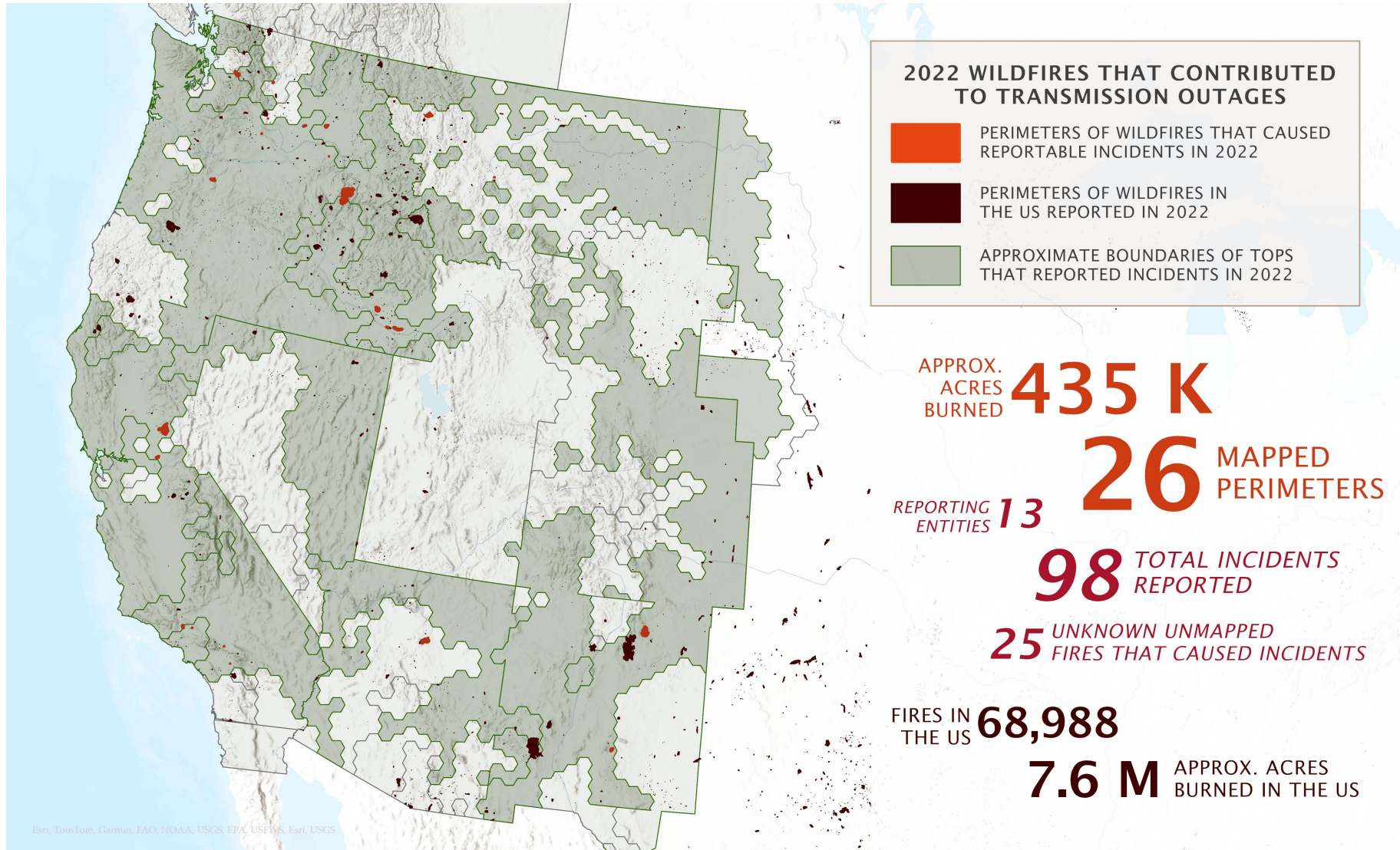
# Total Reported Incidents 2017 – 2023



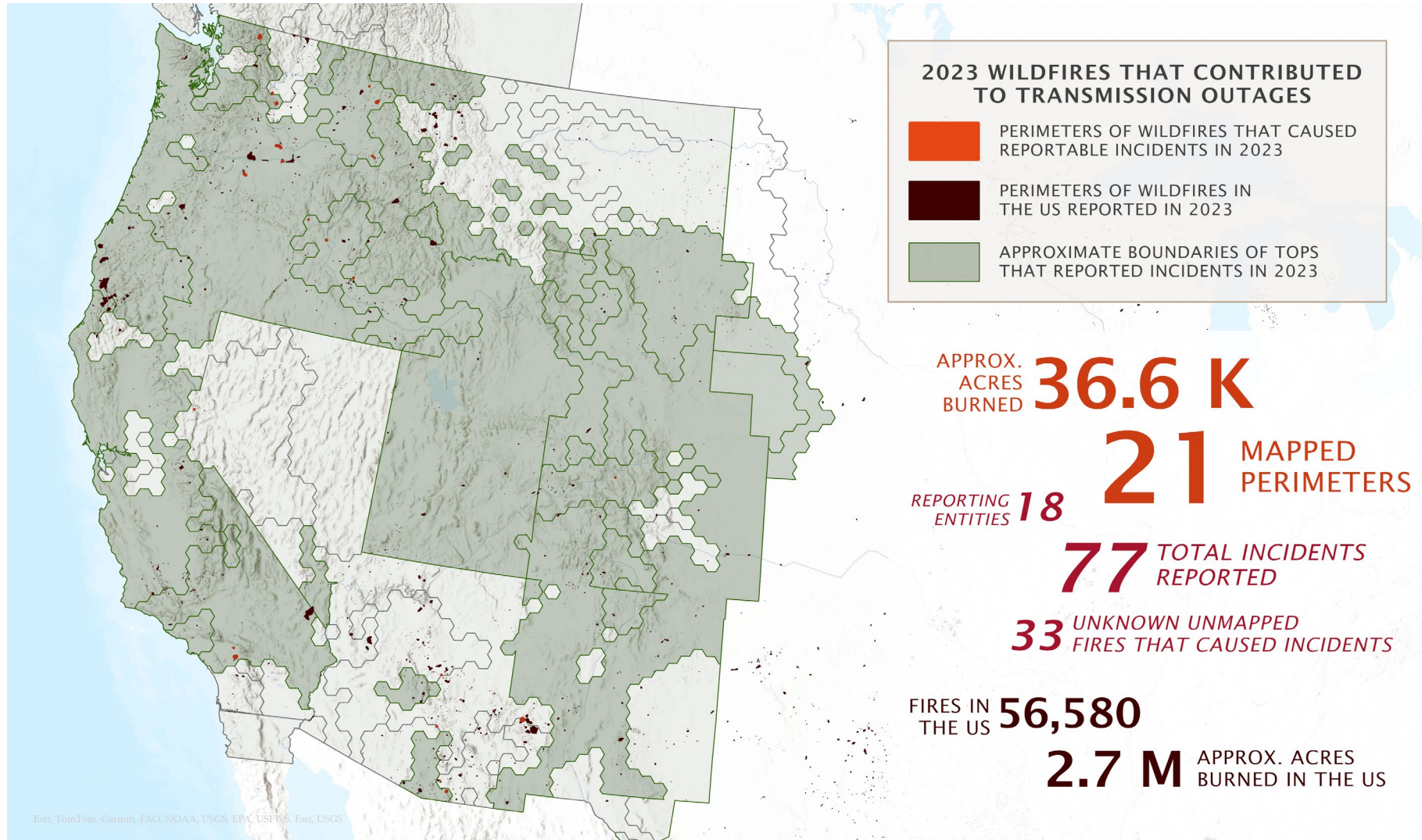| Year | Total Reported Incidents |
|------|--------------------------|
| 2017 | 195 |
| 2018 | 138 |
| 2019 | 206 |
| 2020 | 258 |
| 2021 | 137 |
| 2022 | 98 |
| 2023 | 77 |

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# 2021 WF Map



**2021 WILDFIRES THAT CONTRIBUTED TO TRANSMISSION OUTAGES**

- PERIMETERS OF WILDFIRES THAT CAUSED REPORTABLE INCIDENTS IN 2021
- PERIMETERS OF WILDFIRES IN THE US REPORTED IN 2021
- APPROXIMATE BOUNDARIES OF TOPS THAT REPORTED INCIDENTS IN 2021

APPROX. ACRES BURNED **2.3 M**

**43** MAPPED PERIMETERS

REPORTING ENTITIES **23**

**137** TOTAL INCIDENTS REPORTED

**31** UNKNOWN UNMAPPED FIRES THAT CAUSED INCIDENTS

FIRES IN THE US **58,985**

**7.1 M** APPROX. ACRES BURNED IN THE US

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS, Esri, USGS

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# 2022 Wildfire Map



**2022 WILDFIRES THAT CONTRIBUTED TO TRANSMISSION OUTAGES**

PERIMETERS OF WILDFIRES THAT CAUSED REPORTABLE INCIDENTS IN 2022

PERIMETERS OF WILDFIRES IN THE US REPORTED IN 2022

APPROXIMATE BOUNDARIES OF TOPS THAT REPORTED INCIDENTS IN 2022

APPROX. ACRES BURNED **435 K**

**26** MAPPED PERIMETERS

REPORTING ENTITIES **13**

**98** TOTAL INCIDENTS REPORTED

**25** UNKNOWN UNMAPPED FIRES THAT CAUSED INCIDENTS

FIRES IN THE US **68,988**

**7.6 M** APPROX. ACRES BURNED IN THE US

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS, Esri, USGS

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# 2023 Wildfire Map



**2023 WILDFIRES THAT CONTRIBUTED TO TRANSMISSION OUTAGES**

PERIMETERS OF WILDFIRES THAT CAUSED REPORTABLE INCIDENTS IN 2023

PERIMETERS OF WILDFIRES IN THE US REPORTED IN 2023

APPROXIMATE BOUNDARIES OF TOPS THAT REPORTED INCIDENTS IN 2023

APPROX. ACRES BURNED **36.6 K**

**21** MAPPED PERIMETERS

REPORTING ENTITIES *18*

**77** TOTAL INCIDENTS REPORTED

*33* UNKNOWN UNMAPPED FIRES THAT CAUSED INCIDENTS

FIRES IN THE US **56,580**

**2.7 M** APPROX. ACRES BURNED IN THE US

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS, Esri, USGS

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# Fire Statistics



## FIRES REPORTED WITH A LINE OUTAGE IN WECC

Acreage of Mapped Fires Involved in Line Outages

| Year | Acreage |
|------|---------|
| 2017 | 1.0M |
| 2018 | 1.6M |
| 2019 | 0.3M |
| 2020 | 3.7M |
| 2021 | 2.4M |
| 2022 | 0.4M |
| 2023 | 0.0M |
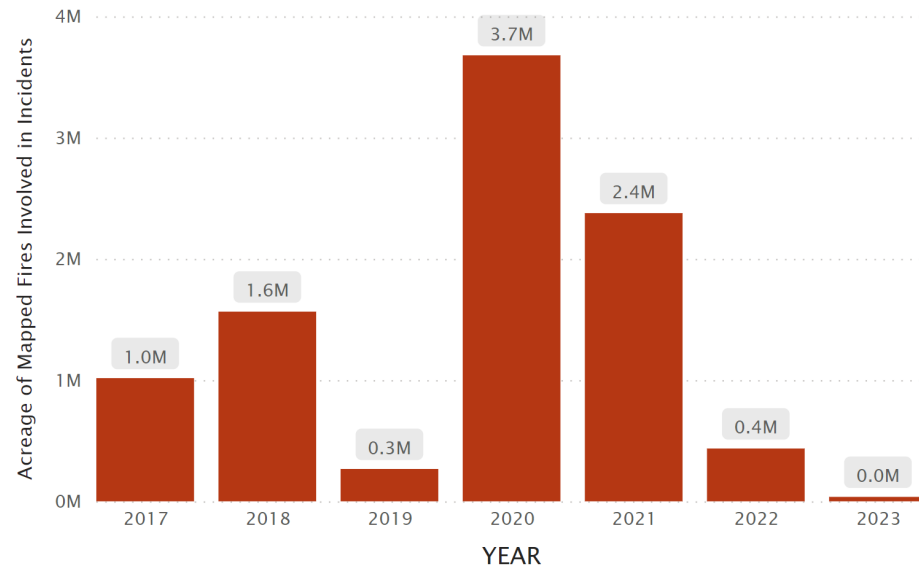
Number of Mapped Fires Involved in Line Outages

| Year | Number |
|------|--------|
| 2017 | 37 |
| 2018 | 32 |
| 2019 | 15 |
| 2020 | 45 |
| 2021 | 43 |
| 2022 | 26 |
| 2023 | 21 |
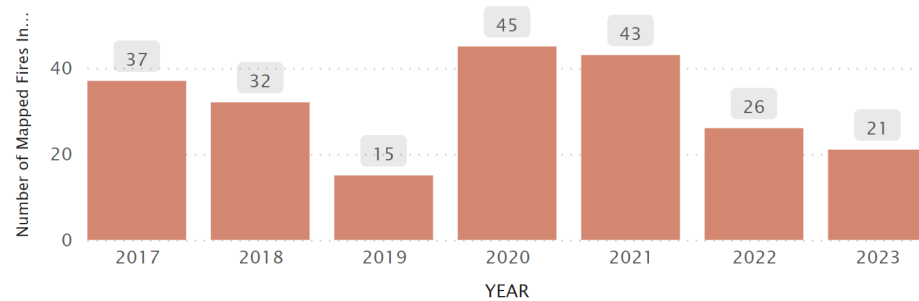
## FIRES REPORTED IN ALL US BY YEAR

Acreage of all Fire Perimeters Mapped in the US

| Year | Acreage |
|------|---------|
| 2017 | 7.1M |
| 2018 | 10.1M |
| 2019 | 4.7M |
| 2020 | 10.1M |
| 2021 | 7.1M |
| 2022 | 7.6M |
| 2023 | 2.7M |
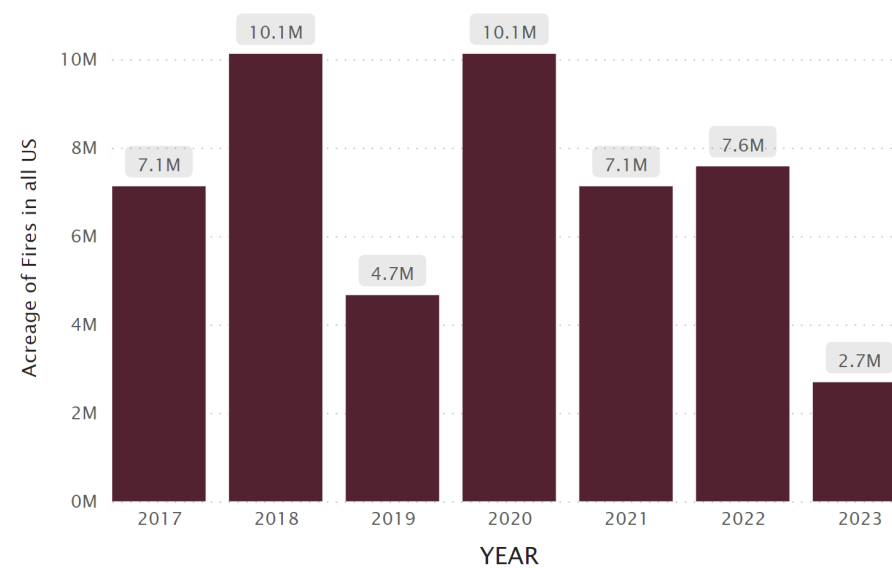
Number of Fires Reported and Mapped in the US

| Year | Number |
|------|--------|
| 2017 | 59K |
| 2018 | 59K |
| 2019 | 50K |
| 2020 | 58K |
| 2021 | 59K |
| 2022 | 69K |
| 2023 | 57K |

<Public>
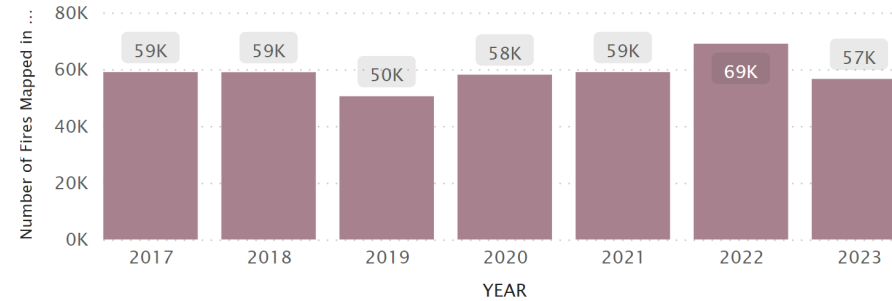
# 2024 Year-date Wildfires

<Public>
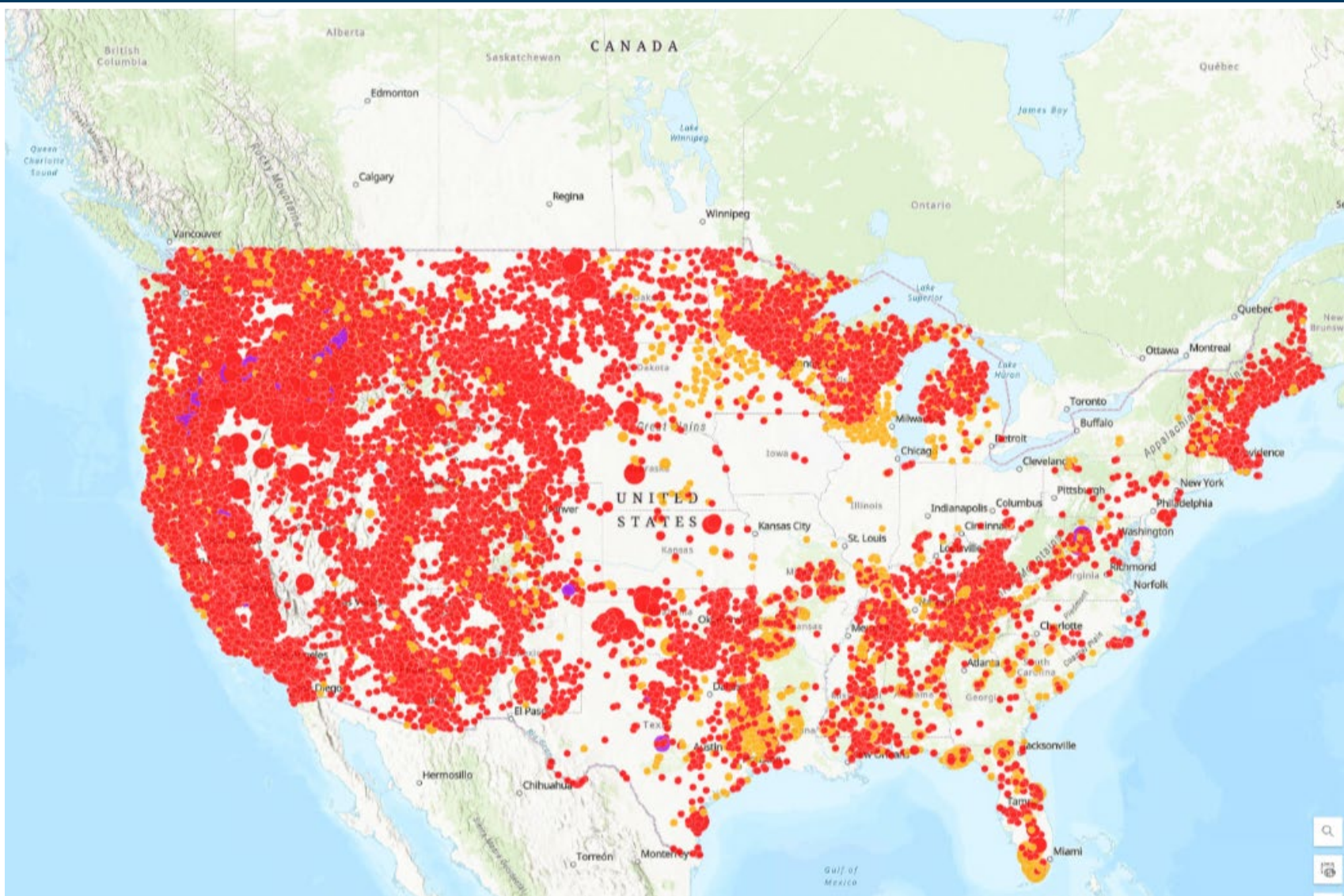
# 2025 Wildfire DR Timeline

- Data relevant reporting period—January 1 – December 31, 2024

- 2025 Wildfire DR Sent to WECC TOPs—Week of January 6–10, 2025

- Data due—Week of February 10–14, 2025

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# 2024 Wildfire DR

- Total reported incidents by years

- Total incidents by voltage class

- Average duration in hours of line's removed from service by voltage and year

- Percentage of lines effected by voltage class

- Number outages caused by wildfires on lines part of the Major WECC Transfer Paths

- Number of incidents on BES lines by voltage class

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# 2024 Wildfire DR

- Total Incidents per line section

- Average duration in hours of total reported incidents by voltage class

- Number of transmission line outages by reason for line removal

- Average amount of load dropped (in megawatts) per incident

- Average number of customers losing service per incident

- Do you have a PSPS or similar wildfire pre-emptive program

- Number of outages associated with PSPS or state programs

- Wildfire location (latitude and longitude)

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