



GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537

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June 20, 2024

Nolan Bobroff
Community and Economic Development Director, Planning Division
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546

RE: 2023-2024 Mammoth Lakes PM10 and Meteorological Summary

Dear Mr. Bobroff:

The Great Basin Unified Air Pollution Control District (District) has monitored air quality in the Town of Mammoth Lakes since 1984. The District recently finalized the data completing the 2023-2024 air monitoring year ending March 15, 2024. District staff is pleased to provide the Town with this summary of air quality measurements recorded by the District between March 16, 2023 and March 15, 2024. The PM10 data presented are the regulatory data of record from the District's continuous Thermo 1405 TEOM. Data from this monitor are publicly available in real time on the District website: <https://www.gbuapcd.org/>.

During the March 16, 2023 to March 15, 2024 monitoring period, the Federal PM10 Standard (150 $\mu\text{g}/\text{m}^3$ for a 24-hour average) was exceeded on zero (0) days. The California State PM10 Standard (50 $\mu\text{g}/\text{m}^3$ for a 24-hour average) was exceeded on nine (9) days during the monitoring period.

All nine (9) of the monitored State exceedances in 2023-2024 were due to local sources. There were no wildfire smoke events in 2023-2024 which resulted in a State exceedance. The local sources causing State exceedances were determined to be construction related dust emissions on 8/30/2023 (count = 1), and by residential woodburning smoke emissions between January and April (count = 8).

The exceedance days and PM10 levels are listed in Table 1 for the 2023-2024 air monitoring year. An exceedance summary comparing the 2023-2024 monitoring year with past monitoring years is presented in Table 2. Both tables include exceedances in previous monitoring periods caused by wildfire smoke events that have been excluded from regulatory determinations under the US Environmental Protection Agency Exceptional Event Rule.

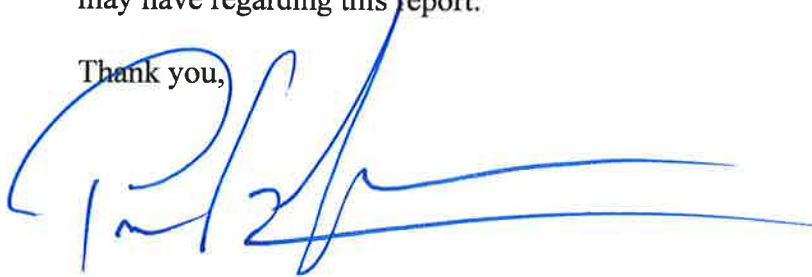
Figure 1 shows the daily average PM10 values during the wildfire smoke season between August and October 2023. Note the daily PM10 averages are well below the Federal PM10 Standard and only reaches the State standard once, though this isolated spike was determined to be construction-related, not wildfire smoke.

Figure 2 shows the 2023-2024 monitoring year daily average PM10 as red squares, superimposed on the prior two monitoring years for comparative purposes.

Figure 3 shows the daily average PM10 concentration during the wildfire smoke season since 1992. The figure shows that during seven of the past ten summers smoke from large-scale wildfires has impacted the Town of Mammoth Lakes, though 2022 and 2023 were relatively smoke-free.

Please contact Chris Howard, Senior Research and Systems Analyst, at 760-872-8211 with any questions you may have regarding this report.

Thank you,

A handwritten signature in blue ink, appearing to read 'P. Kiddoo', with a long horizontal flourish extending to the right.

Phillip L. Kiddoo
Air Pollution Control Officer

Table 1. Town of Mammoth Lakes Federal and State PM10 exceedances: March 16, 2023 - March 15, 2024.

Date	24-Hour PM10 Concentration ($\mu\text{g}/\text{m}^3$)	Federal PM10 Exceedance	State PM10 Exceedance
3/17/2023	53.3	No	Yes
3/18/2023	55.2	No	Yes
3/27/2023	56.5	No	Yes
4/6/2023	51.3	No	Yes
8/30/2023	50.4	No	Yes
1/26/2024	64.8	No	Yes
2/22/2024	69.4	No	Yes
2/23/2024	59.7	No	Yes
2/24/2024	53.3	No	Yes

Table 2. Comparison of Federal and State PM10 exceedances with prior monitoring years.

Air Monitoring Year	Number of Federal PM10 Exceedances ($>150 \mu\text{g}/\text{m}^3$)	Number of State PM10 Exceedances ($>50 \mu\text{g}/\text{m}^3$)
09-10	0	25
10-11	0	36
11-12	0	5
12-13	0	19
13-14	2	17
14-15	0	3
15-16	0	20
16-17	0	21
17-18	0	6
18-19*	4	18
19-20*	0	9
20-21*	24	39
21-22*	0	15
22-23	0	11
23-24	0	9

* calculated number of exceedances due to less than 1:1 daily capture rate

Summer 2023 PM10 Impacts on the Town of Mammoth Lakes

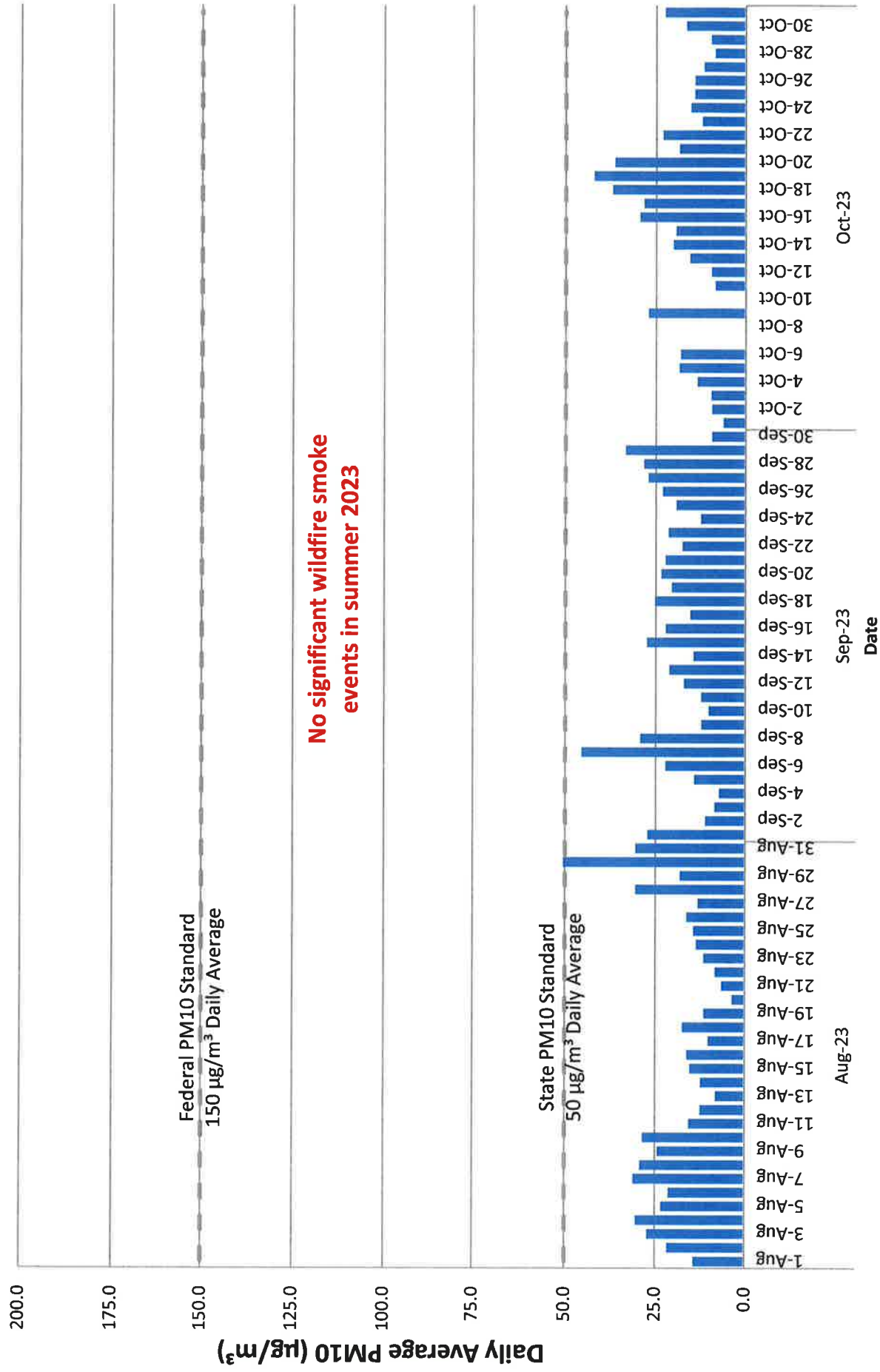


Figure 1: Summer 2023 Wildfire Smoke Impacts on the Town of Mammoth Lakes.



Town of Mammoth Lakes - Daily Average PM10

- Federal PM10 Standard
- State PM10 Standard
- 2021-2022
- ◆ 2022-2023
- 2023-2024

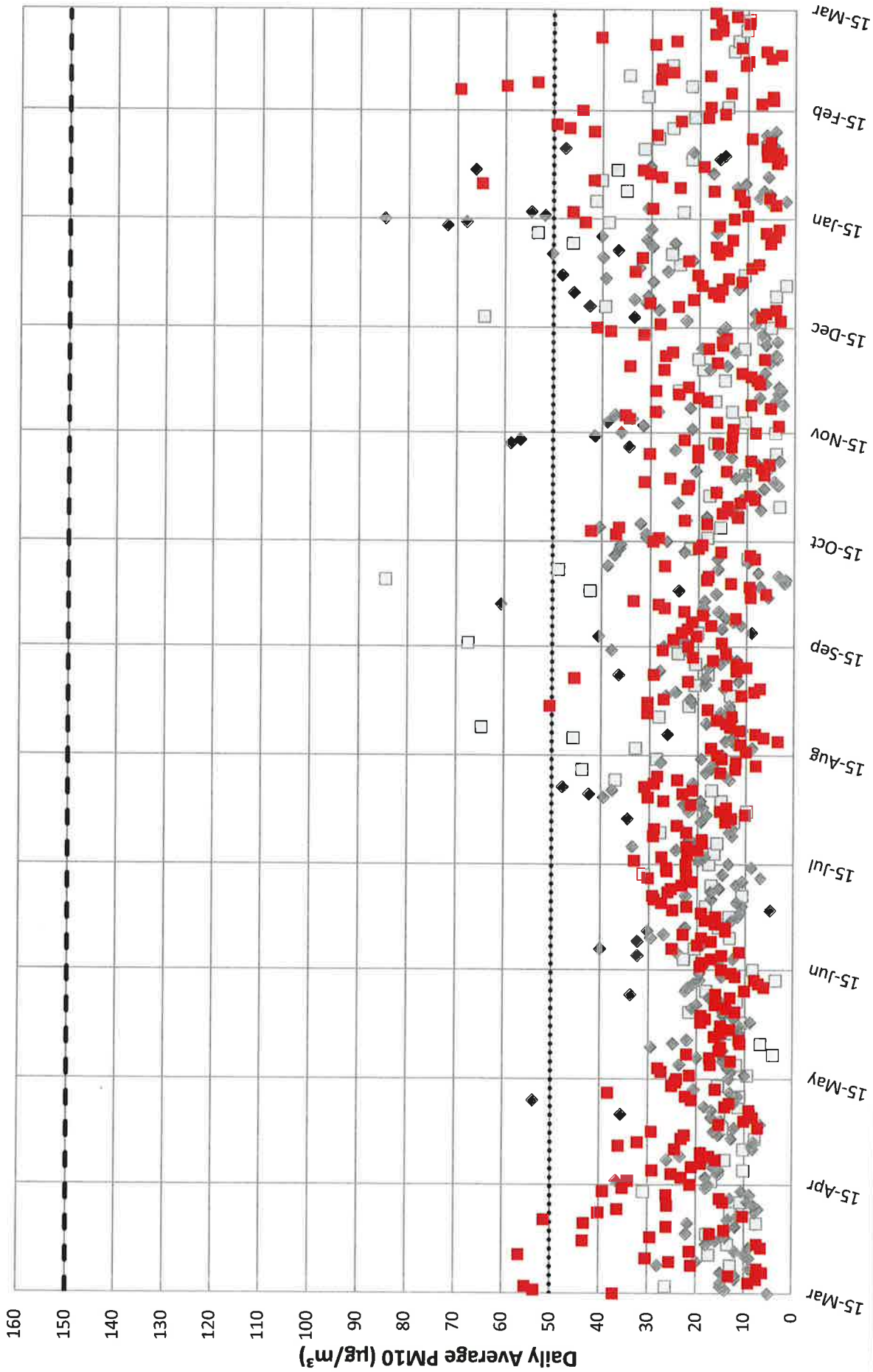


Figure 2: Town of Mammoth Lakes PM10, March 16, 2023 - March 15, 2024. Note 1-in-3-day schedule from 8/18/2018-3/15/2022.

Town of Mammoth Lakes Wildfire Season PM10 June-September, 1992-2023

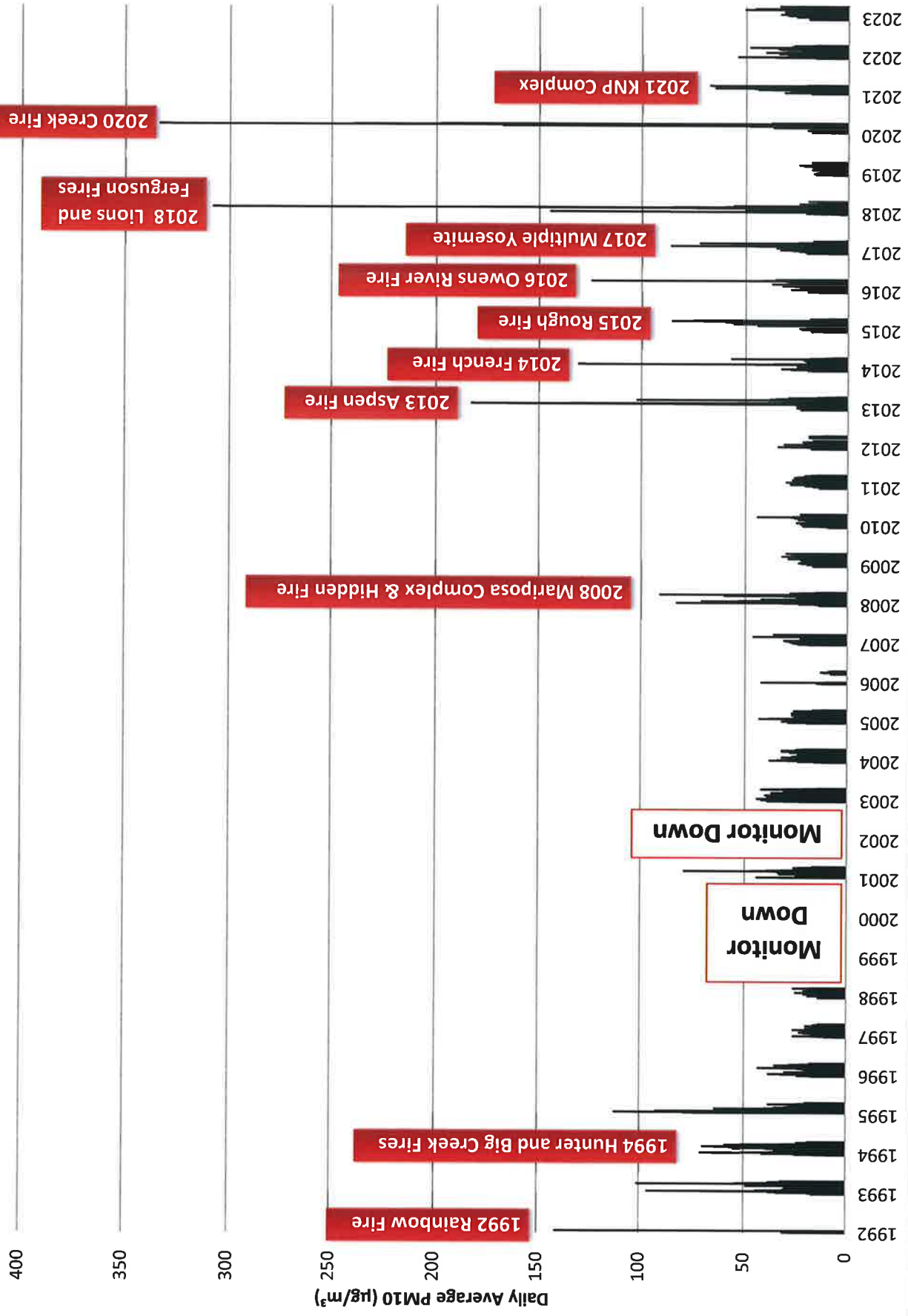


Figure 3: Town of Mammoth Lakes Wildfire Season PM10, June-September, 1992-2023, except 2020-2021, whose fire seasons were July-October.