

Phillip L. Kiddoo
Air Pollution Control Officer



GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

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April 24, 2018

Nolan Bobroff
Assistant Planner
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546

RE: 2017-2018 Mammoth Lakes PM10 and Meteorological Summary

Dear Mr. Bobroff:

The Great Basin Unified Air Pollution Control District (GBUAPCD) has monitored air quality in the Town of Mammoth Lakes (Town) since 1984. We recently finalized the data completing the 2017-2018 air monitoring year ending March 15, 2018. We are pleased to provide you this summary of air quality measurements recorded by GBUAPCD between March 16, 2017 and March 15, 2018.

During this period, the federal PM10 standard ($150 \mu\text{g}/\text{m}^3$ for a 24-hour average) was never exceeded. State PM10 standards ($50 \mu\text{g}/\text{m}^3$ for a 24-hour average) were exceeded on six (6) days. Three (3) of these State exceedances were due to wildfire smoke impacts from several Yosemite-area lightning-strike fires in August and September 2017. There were three (3) exceedances of the State standard during the winter months. Exceedance days and PM10 levels are listed in the Table 1 for the 2017-2018 air monitoring year. An exceedance summary comparing the 2017-2018 monitoring year with the past eight (8) years is shown in Table 2.

Of the multiple wildfires contributing to elevated PM10 levels in Mammoth during the summer months of 2017, the Empire Fire was the most significant. The fire was ignited by lightning on August 1, 2017 and continued through November. The fire was located due west of Mammoth in the Illouette drainage and grew to 6,370 acres. Figure 1 shows the Empire Fire was still active in mid-October.

Figure 2 shows the daily average PM10 values between July and September 2017, highlighting the wildfire smoke elevated PM10 impacts in early August and early September. Figure 3 shows the daily average PM10 values for the entire monitoring year, superimposed on the prior three monitoring years for comparative purposes.

Figure 4 shows that historically, large-scale wildfires in the Mammoth Lakes area have been relatively infrequent events, though the past five summers have been impacted by wildfire smoke. The figure shows the daily average PM10 during July-September for years since 1992. Prior to

the Empire Fire and other Yosemite-area fires in 2017, the Town was impacted by significant smoke from the Owens River Fire in 2016, the Rough Fire in 2015, the French and King Fires in 2014, and the Aspen and Rim Fires in 2013. The figure indicates wildfire smoke has impacted the Town in eleven (11) summers since 1992 and each of the past five (5) summers.

Please contact me with any questions you may have.

Thank you,

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

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Table 1. Town of Mammoth Lakes State PM10 exceedances: March 16, 2017 - March 15, 2018. Daily average PM10 concentrations derived from EPA's Air Quality System Daily Summary Report.

Date	PM10 Average ($\mu\text{g}/\text{m}^3$)
**8/9/2017	86
**9/2/2017	57
**9/3/2017	72
12/14/2017	57
2/10/2018	61
3/5/2018	50
**Denotes wildfire smoke.	

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

Air Monitoring Year	Federal PM10 Exceedances (>150 $\mu\text{g}/\text{m}^3$)	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



Figure 1. Empire Fire burning in the Illilouette Basin, October 18, 2017.
Photo courtesy InciWeb, <https://inciweb.nwcg.gov/incident/5475/>

Summer 2017 Wildfire Smoke impacts on the Town of Mammoth Lakes

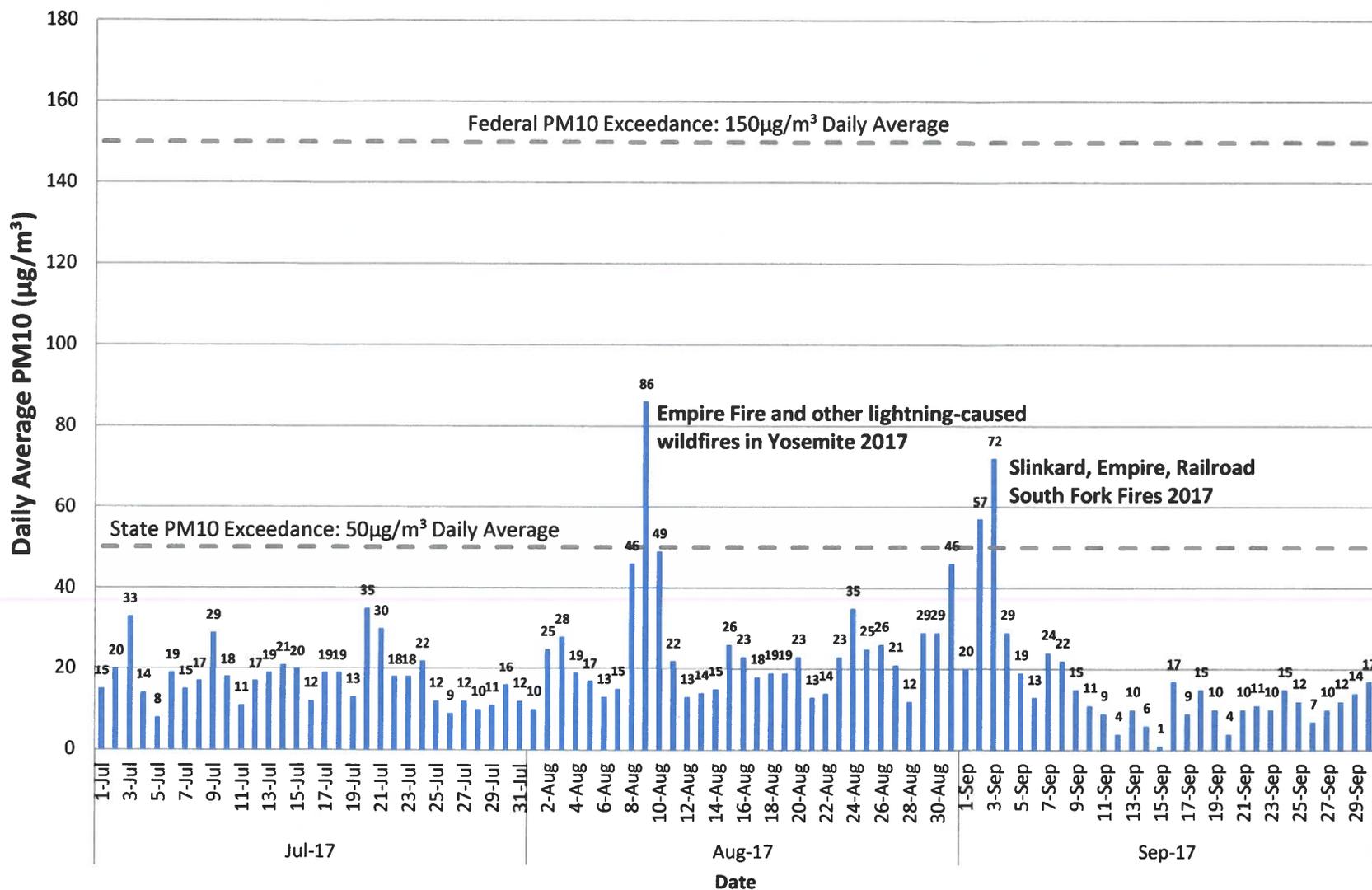


Figure 2: Summer 2017 Wildfire Smoke Impacts on the Town of Mammoth Lakes.



Town of Mammoth Lakes - PM10 March 16, 2017 - March 15, 2018

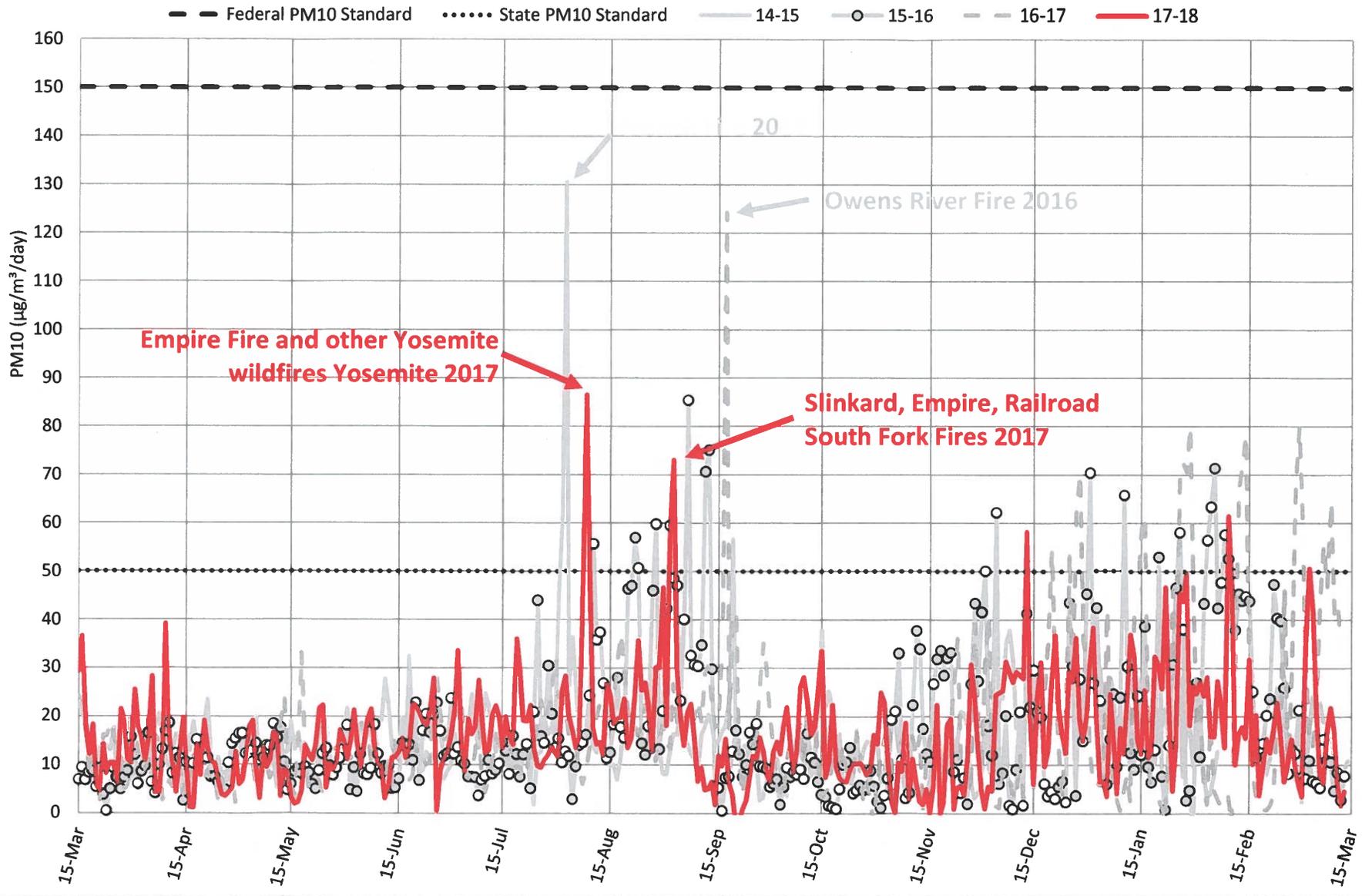


Figure 3: Town of Mammoth Lakes - PM10, March 16, 2017 - March 15, 2018.

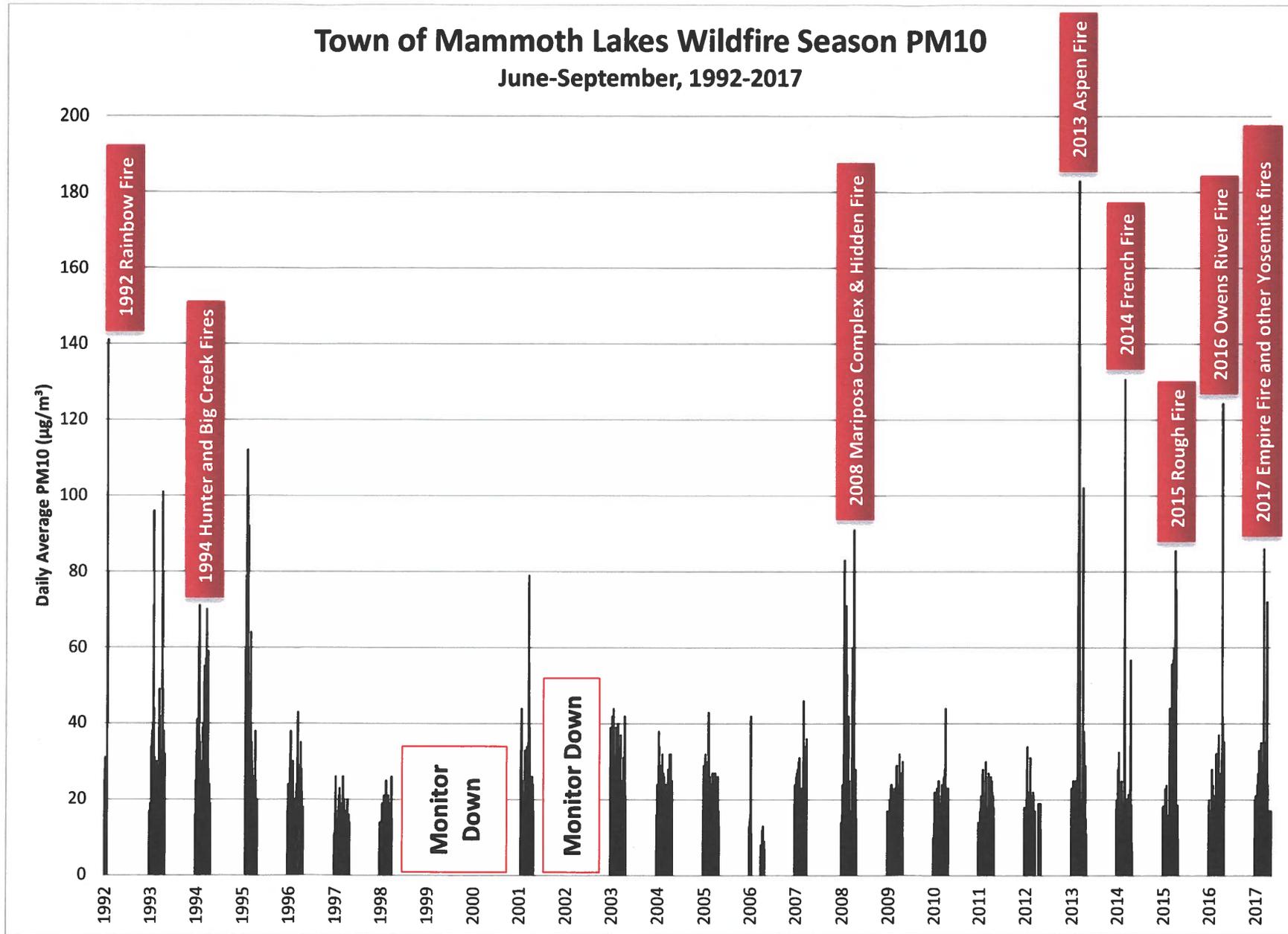


Figure 4: Town of Mammoth Lakes Wildfire Season PM10, June-September, 1992-2017.