



GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537
760-872-8211 Fax: 760-872-6109

NOTICE OF PUBLIC HEARING ADOPTION AND APPROVAL OF 2021 COSO JUNCTION PM10 PLANNING AREA SECOND 10-YEAR MAINTENANCE PLAN

The Governing Board of the Great Basin Unified Air Pollution Control District (GBUAPCD) will conduct a public hearing and consider for adoption the *2021 Coso Junction PM10 Planning Area Second 10-Year Maintenance Plan* (Coso Plan) in accordance with Title 42 of the United States Code, Chapter 85, Subchapter I, Part D, Subpart 1, Section 7505a. The public hearing, and the Governing Board's consideration for adoption will occur at the District Governing Board's regular meeting on **Thursday, July 1, 2021, at 10:00 a.m.**

The public hearing on the Coso PM10 Second 10-year Maintenance Plan is set for 10:15 a.m. The Coso Plan includes: a second maintenance plan that contains requirements to ensure the National Ambient Air Quality Standard (NAAQS) for PM10 (federal standard) will not be violated in the future. Other actions related to the adoption of the Coso Plan may also be taken at the meeting.

Copies of the Coso Plan and supporting documents may be obtained from the GBUAPCD by email from Chris Howard at choward@gbuapcd.org, or Chris Lanane, at clanane@gbuapcd.org, or by visiting the District's website, www.gbuapcd.org, under "What's New." Written comments should be sent via email to pkiddoo@gbuapcd.org. Written comments received by 12:00 noon on Thursday, June 3, 2021, will be included in an informational item and staff report provided to the Governing Board of the GBUAPCD at its regular Board meeting on Thursday, July 1, 2021, at 10:00 a.m. in the Alpine County Supervisors room in the Alpine County Administrative Center, 99 Water Street (State Hwy 89), Markleeville, California 96120. Oral comments will also be taken at this meeting. All written comments must be received by 10:00 a.m. on Thursday, July 1, 2021, to be included in the staff report presented to the U.S. EPA for their consideration and action. Comments on the Plan should be sent to Mr. Phillip Kiddoo, Air Pollution Control Officer, GBUAPCD, by e-mail to pkiddoo@gbuapcd.org. For further information, contact Mr. Chris Howard, Senior Systems Analyst, or Mr. Chris Lanane, Air Monitoring Specialist, at (760) 872-8211.

2021-05-21

Publication Dates

Inyo Register	May 29, 2021
The Sheet	May 29, 2021
Tahoe Daily Tribune	May 28, 2021

Mail List:	Public Notice
------------	---------------

TAHOE DAILY Tribune

Your News. Your Tahoe. • tahoedailytribune.com

580 Mallory Way, Carson City, NV 89701
P.O. Box 1888 Carson City, NV 89702
(775) 881-1201 FAX: (775) 887-2408

Customer Account #: 10038834

Legal Account

GREAT BASIN UNIFIED AIR POLLUTION,
157 SHORT ST. STE: 6
BISHOP, CA 93514
Attn: Tori

Bailee Liston says:

That (s)he is a legal clerk of the
Tahoe Daily Tribune,
a newspaper published Friday
at South Lake Tahoe, in the State of California.

Copy Line

Adoption of the 2021 Coso 2nd 10-yr Maintenance Plan

Email

PO#:

Ad #: 0000689697-01

of which a copy is hereto attached, was published
in said newspaper for the full required period of
1 time(s) commencing on **05/28/2021**,
and ending on **05/28/2021**, all days inclusive.

Bailee Liston

Signed: _____

Date: 05/28/2021 State of Nevada, Carson City

This is an Original Electronic Affidavit.

Price: \$ 181.52

Proof and Statement of Publication

Ad #: 0000689697-01

**NOTICE OF PUBLIC HEARING
ADOPTION AND APPROVAL OF 2021
COSO JUNCTION PM10 PLANNING AREA
SECOND 10-YEAR MAINTENANCE PLAN**

The Governing Board of the Great Basin Unified Air Pollution Control District (GBUAPCD) will conduct a public hearing and consider for adoption the *2021 Coso Junction PM10 Planning Area Second 10-Year Maintenance Plan* (Coso Plan) in accordance with Title 42 of the United States Code, Chapter 85, Subchapter I, Part D, Subpart 1, Section 7505a. The public hearing, and the Governing Board's consideration for adoption will occur at the District Governing Board's regular meeting on **Thursday, July 1, 2021, at 10:00 a.m.**

The public hearing on the Coso PM10 Second 10-year Maintenance Plan is set for 10:15 a.m. The Coso Plan includes: a second maintenance plan that contains requirements to ensure the National Ambient Air Quality Standard (NAAQS) for PM10 (federal standard) will not be violated in the future. Other actions related to the adoption of the Coso Plan may also be taken at the meeting.

Copies of the Coso Plan and supporting documents may be obtained from the GBUAPCD by email from Chris Howard at choward@gbuapcd.org, or Chris Lanane, at clanane@gbuapcd.org, or by visiting the District's website, www.gbuapcd.org, under "What's New." Written comments should be sent via email to pkiddoo@gbuapcd.org. Written comments received by 12:00 noon on Thursday, June 3, 2021, will be included in an informational item and staff report provided to the Governing Board of the GBUAPCD at its regular Board meeting on Thursday, July 1, 2021, at 10:00 a.m. in the Alpine County Supervisors room in the Alpine County Administrative Center, 99 Water Street (State Hwy 89), Markleeville, California 96120. Oral comments will also be taken at this meeting. All written comments must be received by 10:00 a.m. on Thursday, July 1, 2021, to be included in the staff report presented to the U.S. EPA for their consideration and action. Comments on the Plan should be sent to Mr. Phillip Kiddoo, Air Pollution Control Officer, GBUAPCD, by e-mail to pkiddoo@gbuapcd.org. For further information, contact Mr. Chris Howard, Senior Systems Analyst, or Mr. Chris Lanane, Air Monitoring Specialist, at (760) 872-8211.

Publication: May 28, 2021 Ad #0000689697

PROOF OF PUBLICATION

#2021-0085

This Space is for the County Clerk's Filing Stamp

STATE OF CALIFORNIA COUNTY OF MONO

RECEIVED

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the aboveentitled matter. I am the principal clerk of the printer of

Initials: *JS*
Great Basin Unified APCD

THE SHEET

a newspaper of general circulation, published in

Proof of Publication of

COUNTY OF MONO

Notice of Public Hearing

Notice of Public Hearing

**NOTICE OF PUBLIC HEARING
ADOPTION AND APPROVAL OF 2021
COSO JUNCTION PM10 PLANNING ARRA SECOND 10-
YEAR MAINTENANCE PLAN**

The Sheet was adjudicated on December 28, 2009, as a newspaper of general circulation for the Town of Mammoth Lakes and Mono County, CA.

The Governing Board of the Great Basin Unified Air Pollution Control District (GBUAPCD) will conduct a public hearing and consider for adoption the 2021 Coso Junction PM10 Planning Area Second 10-Year Maintenance Plan (Coso Plan) in accordance with Title 42 of the United States Code, Chapter 85, Subchapter I, Part D, Subpart 1, Section 7505a. The public hearing, and the Governing Board's consideration for adoption will occur at the District Governing Board's regular meeting on Thursday, July 1, 2021, at 10:00 a.m.

The notice, of which the annexed is a printed copy (set in the type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to with:

The public hearing on the Coso PM10 Second 10-year Maintenance Plan is set for 10:15 a.m. The Coso Plan includes: a second maintenance plan that contains requirements to ensure the National Ambient Air Quality Standard (NAAQS) for PM10 (federal standard) will not be violated in the future. Other actions related to the adoption of the Coso Plan may also be taken at the meeting.

May 29th.

Copies of the Coso Plan and supporting documents may be obtained from the GBUAPCD by email from Chris Howard at choward@gbuapcd.org, or Chris Lanane, at clanane@gbuapcd.org, or by visiting the District's website, www.gbuapcd.org, under "What's New." Written comments should be sent via email to pkiddoo@gbuapcd.org. Written comments received by 12:00 noon on Thursday, June 3, 2021, will be included in an informational item and staff report provided to the Governing Board of the GBUAPCD at its regular Board meeting on Thursday, July 1, 2021, at 10:00 a.m. in the Alpine County Supervisors room in the Alpine County Administrative Center, 99 Water Street (State Hwy 89), Markleeville, California 96120. Oral comments will also be taken at this meeting. All written comments must be received by 10:00 a.m. on Thursday, July 1, 2021, to be included in the staff report presented to the U.S. EPA for their consideration and action. Comments on the Plan should be sent to Mr. Phillip Kiddoo, Air Pollution Control Officer, GBUAPCD, by e-mail to pkiddoo@gbuapcd.org. For further information, contact Mr. Chris Howard, Senior Systems Analyst, or Mr. Chris Lanane, Air Monitoring Specialist, at (760) 872-8211.

all in the year **2021**

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Dated at Mammoth Lakes, California, the 5th day of June, 2021.

Signature

PROOF OF PUBLICATION

(2015.5 C.C.P.)

This space is for County Clerk's Filing Stamp

STATE OF CALIFORNIA,
COUNTY OF INYO

I am a citizen of the United States
and a resident of the County aforesaid.
I am over the age of eighteen years,
And not a party to or interested in the
above-entitled matter. I am the principal
clerk of the printer of the
The Inyo Register

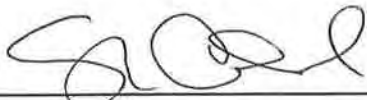
County of Inyo

The Inyo Register has been adjudged a newspaper of general circulation by the Superior Court of the County of Inyo, State of California, under date of Oct. 5, 1953, Case Number 5414; that the notice, of which the annexed is a printed copy (set in type not smaller than non-pareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof, on the following date, to with:

May 29th,
In the year of **2021**

I certify (or declare) under penalty of perjury
that the foregoing is true and correct.

Dated at Bishop, California, on this
29th Day of May, 2021



Signature

Proof of Publication of Public Notice

NOTICE OF PUBLIC HEARING ADOPTION AND APPROVAL OF 2021 COSO JUNCTION PM10 PLANNING AREA SECOND 10-YEAR MAINTENANCE PLAN

The Governing Board of the Great Basin Unified Air Pollution Control District (GBUAPCD) will conduct a public hearing and consider for adoption the *2021 Coso Junction PM10 Planning Area Second 10-Year Maintenance Plan* (Coso Plan) in accordance with Title 42 of the United States Code, Chapter 85, Subchapter I, Part D, Subpart 1, Section 7505a. The public hearing, and the Governing Board's consideration for adoption will occur at the District Governing Board's regular meeting on **Thursday, July 1, 2021, at 10:00 a.m.**

The public hearing on the Coso PM10 Second 10-year Maintenance Plan is set for 10:15 a.m. The Coso Plan includes: a second maintenance plan that contains requirements to ensure the National Ambient Air Quality Standard (NAAQS) for PM10 (federal standard) will not be violated in the future. Other actions related to the adoption of the Coso Plan may also be taken at the meeting. Copies of the Coso Plan and supporting documents may be obtained from the GBUAPCD by email from Chris Howard at choward@gbuapcd.org or Chris Lanane, at clanane@gbuapcd.org, or by visiting the District's website, www.gbuapcd.org, under "What's New." Written comments should be sent via email to pkiddoo@gbuapcd.org. Written comments received by 12:00 noon on Thursday, June 3, 2021, will be included in an informational item and staff report provided to the Governing Board of the GBUAPCD at its regular Board meeting on Thursday, July 1, 2021, at 10:00 a.m. in the Alpine County Supervisors room in the Alpine

County Administrative Center, 99 Water Street (State Hwy 89), Markleeville, California 96120. Oral comments will also be taken at this meeting. All written comments must be received by 10:00 a.m. on Thursday, July 1, 2021, to be included in the staff report presented to the U.S. EPA for their consideration and action. Comments on the Plan should be sent to Mr. Phillip Kiddoo, Air Pollution Control Officer, GBUAPCD, by e-mail to pkiddoo@gbuapcd.org. For further information, contact Mr. Chris Howard, Senior Systems Analyst, or Mr. Chris Lanane, Air Monitoring Specialist, at (760) 872-8211 (IR 05.29, 2021 #20665).

June 30, 2021

Mr. Phillip Kiddoo
Air Pollution Control Officer
Great Basin Unified Air Pollution Control District
157 Short Street
Bishop, California 93514-3537

Dear Mr. Kiddoo:

Subject: Review Comments, Draft 2021 Coso Junction PM₁₀ Planning Area Second
10-Year Maintenance Plan

This letter provides written comments from the Los Angeles Department of Water and Power (LADWP) on the Great Basin Unified Air Pollution Control District (GBUAPCD)'s draft 2021 Coso Junction PM₁₀ Planning Area Second 10-Year Maintenance Plan (Coso Plan), submitted for public review on May 28, 2021

The LADWP's comments on the Coso Plan are described below.

Comment 1: Page 12, Paragraph 2, Penultimate Sentence

In the Coso Plan, Chapter 3, Air Quality, the GBUAPCD states that it is "*submitting a demonstration analysis and documentation and initial notification to request exclusion of data for the September 7, 2020 monitored federal PM₁₀ exceedance due to wildfire smoke impacts (GBUAPCD, 2021).*"

The LADWP has carefully reviewed the GBUAPCD's Exceptional Event Demonstration for September 7, 2020 (EE Demonstration).¹ We generally concur with the approach and findings, insofar as recommending that September 7, 2020, be considered an exceptional event day at the Coso Junction monitor. LADWP does not agree, however, with other statements suggesting that September 8, 2020 (also a wildfire smoke day) was not considered for exceptional-event status because "... 1) the source was

¹ Exceptional Event Demonstration for Wildfire Smoke Impacts to the Coso Junction PM₁₀ Monitor on September 7, 2020. Prepared by Great Basin Unified Air Pollution Control District. Posted for public comment on May 28, 2021.

Mr. Phillip Kiddoo

Page 2

June 30, 2021

confounded by a mixture of continuing wildfire smoke and regional wind-driven dust, and 2) only one concurred exceptional event is required to attain a satisfactory design value. With regard to point 1: the Exceptional Event Rule does not require the regulatory agency to identify and separate the various source contributions leading to monitored exceedances. If a day meets the definition of “exceptional” due to wildfire smoke impacts, then the agency is free to request exclusion of data for that source alone. The GBUAPCD’s EE Demonstration provides ample evidence that the air quality within Mono Basin, the Owens Valley Planning Area (OVPA), and Coso Junction Maintenance Area (CJMA) was seriously affected by wildfire smoke on both September 7, 2020, and September 8, 2020. It should not matter that windblown dust is present within the September 8, 2020, dust plume, even if (hypothetically speaking) the windblown-dust contribution was greater than the wildfire-smoke contribution. It only matters that the event occurred and that all criteria for Exceptional Event status have been met for either source.

On the point about regional dust contributions: the GBUAPCD’s EE Demonstration brings forth substantial evidence that the September 8, 2020, “regional dust” event, to the extent that it might have contributed to high PM₁₀ concentrations on that day, was not *reasonably controllable* or *preventable*. The high-wind event was caused by a powerful cold front that passed through the region in the early morning hours of September 8, 2020, producing substantial dust emissions that were transported from the north into Owens Valley. It was not caused by anthropogenic sources within the GBUAPCD’s jurisdiction that were not reasonably controlled at the time of the event.

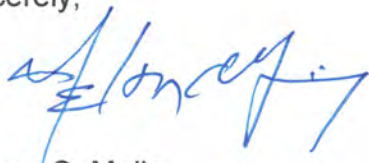
With regard to point 2: it is true that only a single Exceptional Event exclusion is required to attain a satisfactory design value at the Coso Junction monitor. However, the wildfire smoke and regional dust that occurred on September 8, 2020, affected two serious PM₁₀ non-attainment areas: Mono Basin, and the OVPA. Requesting exclusion of data from September 8, 2020, would be important for both areas, at least in terms of lowering the number of exceedances attributed to local sources. If the data are not excluded, then the exceedance-day will remain on the record and count negatively against airshed attainment.

Although there have been many occurrences of wildfire smoke and regional dust impacts within the OVPA in the past, the GBUAPCD has not submitted any requests to exclude data pursuant to the Exceptional Event Rule. Application of the Rule might not have been important prior to December 31, 2017 (the date on which all ordered dust control areas on the Owens playa became operational), but with the Owens playa now 99.3 percent controlled using the GBUAPCD’s own figures, the use of the Exceptional Event Rule should be considered as a path toward attainment within the OVPA.

Mr. Phillip Kiddoo
Page 3
June 30, 2021

The LADWP requests that the GBUAPCD submit an Exceptional Event Demonstration to the U.S. Environmental Protection Agency for portions of the OVPA affected by wildfire smoke on September 8, 2020. A supplemental analysis of the September 8, 2020, PM₁₀ exceedances in the OVPA is enclosed with this letter.

Sincerely,



Nelson O. Mejia
Manager of Owens Lake Dust Mitigation Program

AA:jm
Enclosure
c/enc: Mr. Arrash Agahi

SUPPLEMENTAL ANALYSIS OF EXCEEDANCES OF THE 24-HOUR PM₁₀ NAAQS ON SEPTEMBER 8, 2020, IN THE OVPA

PREPARED FOR: Arrash Agahi, Los Angeles Department of Water and Power
PREPARED BY: Matthew Mavko, Air Sciences Inc.
PROJECT NO.: 600-L1
DATE: June 29, 2021

The Great Basin Unified Air Pollution Control District (GBUAPCD) recently released a report, "DRAFT Exceptional Event Demonstration for Coso Junction PM₁₀ on September 7, 2020" (Demonstration) that identifies exceedances of the National Ambient Air Quality Standard (NAAQS) for PM₁₀ that occurred at the Coso Junction monitoring station in Inyo County, California, on September 7th and 8th, 2020. As described in the report, both exceedances occurred during a period of significant wildfire activity that reduced visibility in the Owens Valley to less than a quarter mile for over two days. The report requests an exclusion under the Exceptional Event Rule for September 7th only, concluding (reasonably) that only one exceedance required exclusion to meet design day criteria for the recently released "Coso Junction PM₁₀ Planning Area Second 10-Year Maintenance Plan" (Maintenance Plan). However, an additional analysis is included in the Demonstration that seeks to disqualify September 8th under the Exceptional Events Rule due to potential contributions from a "regional dust event." This memorandum summarizes additional regulatory and technical analysis that demonstrates September 8th as qualifying as an Exceptional Event for all monitored exceedances within the three planning areas under the jurisdiction of GBUAPCD.

GBUAPCD provided a thorough and cogent analysis of the September 7th exceedance for Coso Junction and for brevity this information will be referenced instead of repeated here. Clarifications and additional analysis and context are presented for issues where the Demonstration had a different focus.

1.0 Exception Event Rule Applicability and Criteria

The Demonstration summarizes applicability and criteria for requesting a data exclusion under the Exceptional Event Rule, and specific accommodations in 40 CFR 50.14(b)(4) for events affected by wildfires. Relevant to the analysis in this memorandum is 40 CFR 50.14(b)(5), which identifies qualifying events caused by windblown dust:

- 40 CFR 50.14(b)(5)(ii) – events in cases where windblown dust is entirely from natural or undisturbed lands *or* anthropogenic sources that are reasonably controlled
- 40 CFR 50.14(b)(5)(iii) – a high wind threshold of 25 mph is acceptable in California, Nevada, and other Western States
- 40 CFR 50.14(b)(5)(iv) – to demonstrate the event as not reasonably preventable, a case-specific justification is not required
- 40 CFR 50.14(b)(5)(v) – dust controls on an anthropogenic source are considered reasonable if the controls render the source as resistant to high winds as natural, undisturbed lands

Despite having a different set of accommodations from wildfire, exceedance events caused by windblown dust that fit the above criteria qualify as exceptional. The Exceptional Event Rule is silent on apportioning contributions from different qualifying sources.

2.0 Analysis of September 8th, 2020 Exceedance Event

2.1 Summary of GBUAPCD Analysis

The Demonstration provides analysis and commentary on the September 8th exceedance at Coso Junction in several places throughout the document, in some cases pulling in monitoring data from sites in the Owens Valley Planning Area (OVPA) and Mono Basin Planning Area (MBPA). The key distinction between the exceedances on the two days is the September 8th experienced a powerful frontal system that moved generally north-to-south from the MBPA to Coso Junction, as evidenced by a distinct “pulse” of elevated wind speeds throughout the morning (pp. 18 and 52). GBUAPCD attempts to further distinguish the two days with two pieces of evidence:

- The proportion of PM_{2.5} to PM₁₀ drops significantly on September 8th at sites that monitor both pollutants (pp. 49-50)
- NWS Reno posted a briefing at 08:30 PDT on September 8th, followed by a Twitter post, that described “thick dust across much of the region.” (Appendices A and B)

This analysis points to a contribution of dust—originating from outside the OVPA, and MBPA, and Coso Junction—to the monitored PM₁₀ concentrations in addition to the thick smoke that was already present throughout much of the OVPA. Indeed, the station log from Coso Junction on September 8th at 11:44am PDT mentions the day is “hot and smoky.” Based the timing of elevated PM₁₀ concentrations throughout the three planning areas, there is substantial evidence from the Demonstration that any dust contributions to the exceedances on September 8th did

not originate from uncontrolled anthropogenic sources within GBUAPCD’s jurisdiction, and that smoke from nearby wildfire were continuing to affect PM₁₀ concentrations. The following sections below expand on GBUAPCD’s analysis.

2.2 Summary of Affected Monitors on September 8th, 2020

Table 1 below shows the monitors exceeding the 24-Hour PM₁₀ NAAQS on 9/8/2020. The only monitors that did not record exceedances had instrument malfunctions that day. Impacts were consistent in magnitude and widespread throughout the entire air district.

Table 1. Monitoring Stations Exceeding the 24-Hour PM₁₀ NAAQS on 9/8/2020

Monitoring Station	County	24-hour Average PM ₁₀ Concentration (µg/m ³)*
Mammoth	Mono	597
Mono Shore	Mono	511
White Mtn. Research Center - Owens Valley Lab	Inyo	788
Lone Pine PM	Inyo	439
North Beach	Inyo	374
Lizard Tail	Inyo	520
Keeler	Inyo	529
Mill Site	Inyo	501
Shell Cut	Inyo	500
Bill Stanley	Inyo	357
Dirty Socks	Inyo	526
Olancha-Well 404	Inyo	282
Coso Junction	Inyo	553

* From the U.S. EPA Air Data database, "Daily Download Data" summaries:
<https://www.epa.gov/outdoor-air-quality-data/download-daily-data>

2.3 Meteorological Analysis

2.3.1 General Weather Summary

On September 7, 2020, the western United States, including the broad regions surrounding the Owens Valley (e.g., Northern California and Nevada), generally experienced light and variable winds ahead of a strong and dry cold front located in western Montana and eastern British Columbia (Figure 1). As the cold front moved southward through the Pacific Northwest, Nevada, and northern California during September 7 and the morning of September 8, winds speeds increased sharply with the passage of the cold front. Given the tight pressure gradients behind the cold front, regional wind speeds generally remained elevated throughout the end of

the day on September 8, 2020. Figure 2 provides a synoptic weather map showing the cold front in located in northern California on the morning of September 8, 2020.

Figure 1. Weather Map - September 7, 2020 04:00 PDT

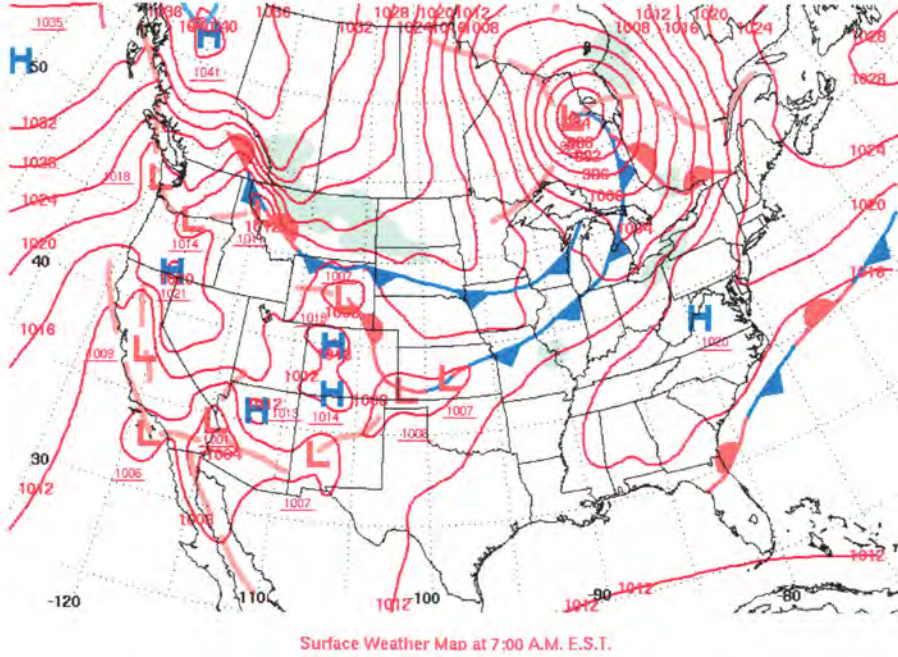
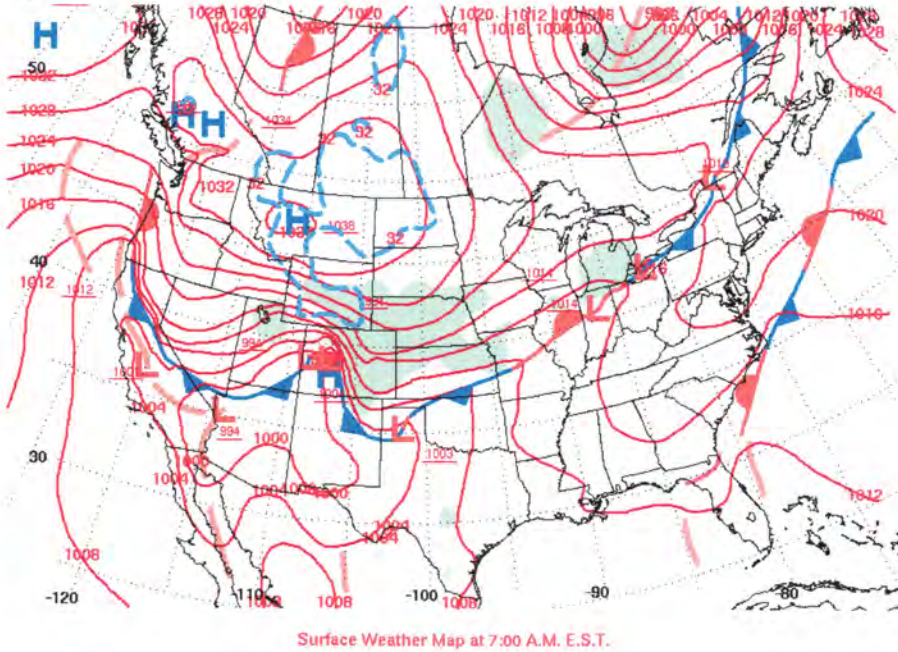


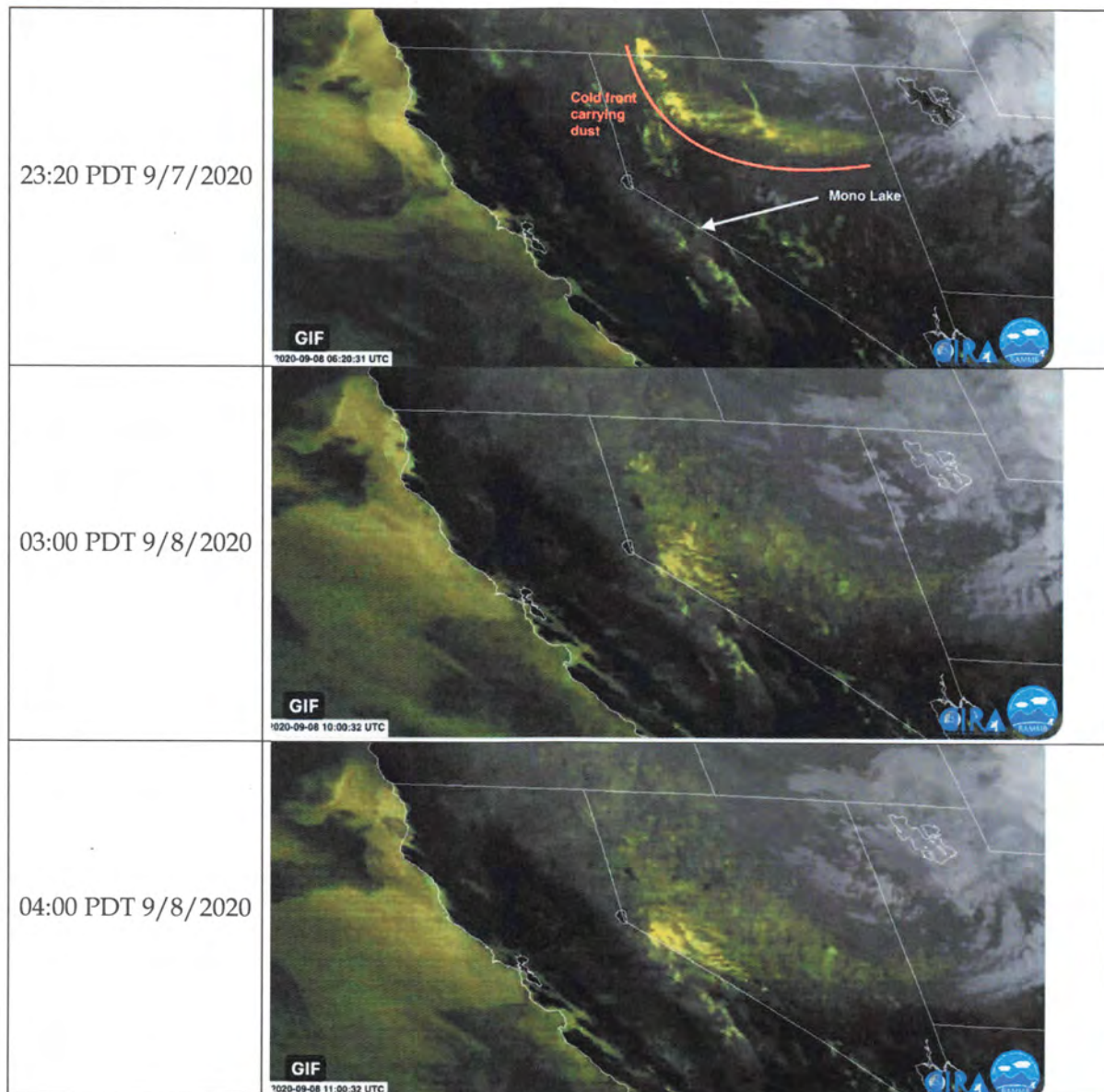
Figure 2. Weather Map - September 8, 2020 04:00 PDT



2.3.2 Timing of Frontal System Hitting the Great Basin

As discussed in Section 2.2.1, a powerful cold front swept southwest across southeast Oregon and central Nevada around 23:00 PDT on 9/7. Figure 2 shows a sequence of images from GOES West that identify the path of the front and widespread windblown dust. The dust reaches the border of California and Nevada near Mono Lake between 03:00 and 04:00 PDT on 9/8. This timing corresponds to significant increases in hourly PM₁₀ concentrations beginning in Reno and following at the Mono Shore monitor.

Figure 3. Satellite Images Showing Path and Timing of Windblown Dust over Nevada



SUPPLEMENTAL ANALYSIS OF EXCEEDANCES OF THE 24-HOUR PM₁₀ NAAQS ON SEPTEMBER 8, 2020, IN
THE OVPA

Table 1 shows hourly PM₁₀ concentrations at monitoring sites in Washoe, Mono, and Inyo counties (ordered north to south) for the period leading up to and through the frontal system passage. Concentrations increase for the Reno monitor as the dust carried by the frontal system moved in. Simultaneously, concentrations markedly increase at Mono Shore. This initial increase at Mono Shore, prior to the arrival of the front, is attributed to wildfire smoke from the Slink fire to the northwest of Mono Lake. Then, beginning at 3am, concentrations further increase at Mono Shore as the dust carried by the front moved in. Both of these sources of impacts (smoke followed by dust) may be traced north-to-south at PM₁₀ monitors throughout Mono and Inyo counties, shown as gray (smoke) and orange (dust) highlights in Table 1.

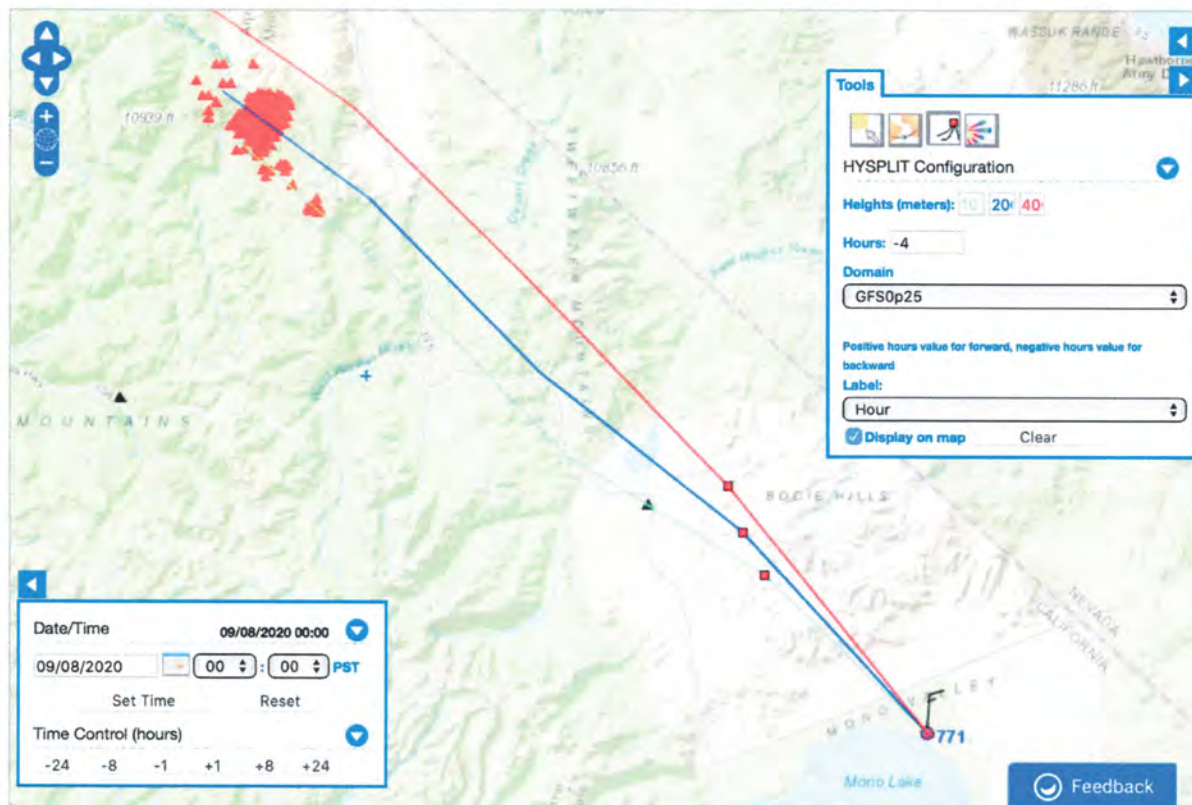
Table 2. Hourly PM₁₀ Concentrations at Monitoring Sites Throughout the Great Basin

Timestamp	Washoe Co.	Mono County			Inyo County		
	Reno	Mono Shore	Mammoth Lakes	Bishop core	Lone Pine	Olancha	Co-so Junction
9/7/20 16:00	116	64	221	66	110	252	81
9/7/20 17:00	119	124	222	516	131	346	330
9/7/20 18:00	133	92	359	769	161	501	362
9/7/20 19:00	115	83	318	416	207	746	386
9/7/20 20:00	75	68	302	187	205	895	602
9/7/20 21:00	69	71	203	159	217	861	625
9/7/20 22:00	190	74	167	144	467	720	627
9/7/20 23:00	359	78	121	130	465	684	574
9/8/20 00:00	641	771	146	127	257	570	550
9/8/20 01:00	694	1402	300	564	244	296	490
9/8/20 02:00	437	1544	512	1150	247	324	536
9/8/20 03:00	456	1612	777	1823	470	239	457
9/8/20 04:00	622	1644	1559	2062	1168	164	396
9/8/20 05:00	530	1486	2091	2350	1459	508	952
9/8/20 06:00	252	737	2256	2390	1569		1072
9/8/20 07:00	216	462	1846	2445	1718		1503
9/8/20 08:00	179	458	1325	1628	1562		1857
9/8/20 09:00	154	351	1062	1182	1255		1574
9/8/20 10:00	73	156	622	706	934	884	1036
9/8/20 11:00	39	126	384	454	627	634	746
9/8/20 12:00	47	103	212	395	523	473	532
9/8/20 13:00	36	88	187	292	407	372	404
9/8/20 14:00	37	86	128	242	407	254	277
9/8/20 15:00	30	62	99	243	0	193	201
9/8/20 16:00	30	83	86	212	0	150	145

2.3.3 Trajectory Analysis

To further explore the timing of the frontal system and sources of monitored PM₁₀ concentrations, the AirNow Tech¹ Navigator tool was used to perform HYSPLIT² trajectories for two times during the events of 9/7 and 9/8 at 10 meters (green), 200 meters (blue), and 400 meters (red). Figure 4 depicts a back trajectory before the arrival of the front at the Mono Shore PM₁₀ monitor. The flow is northwest to southeast from the direction of the Slink and Claremont fires, which were both active overnight (see Section 2.3). Figure 5 depicts trajectories four hours later at the same monitoring site, around the estimated time of the arrival of the front based on the discussion in Section 2.2.2. The flow has now shifted northward toward Washoe County Nevada and the direction of the incoming windblown dust.

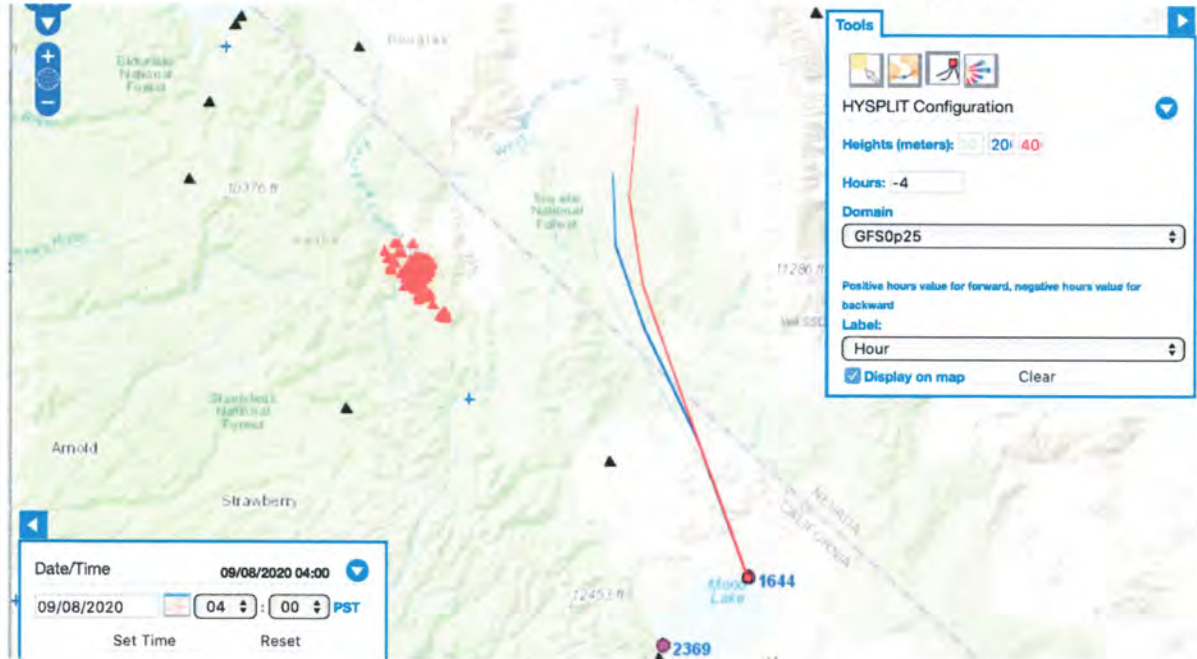
Figure 4. HYSPLIT Back Trajectory from Mono Shore, 9/8 00:00 back to 9/7 20:00



¹ <https://www.airnowtech.org/navigator/>

² <https://www.ready.noaa.gov/HYSPLIT.php>

Figure 5. HYSPLIT Back Trajectory from Mono Shore, 9/8 04:00 back to 9/8 00:00

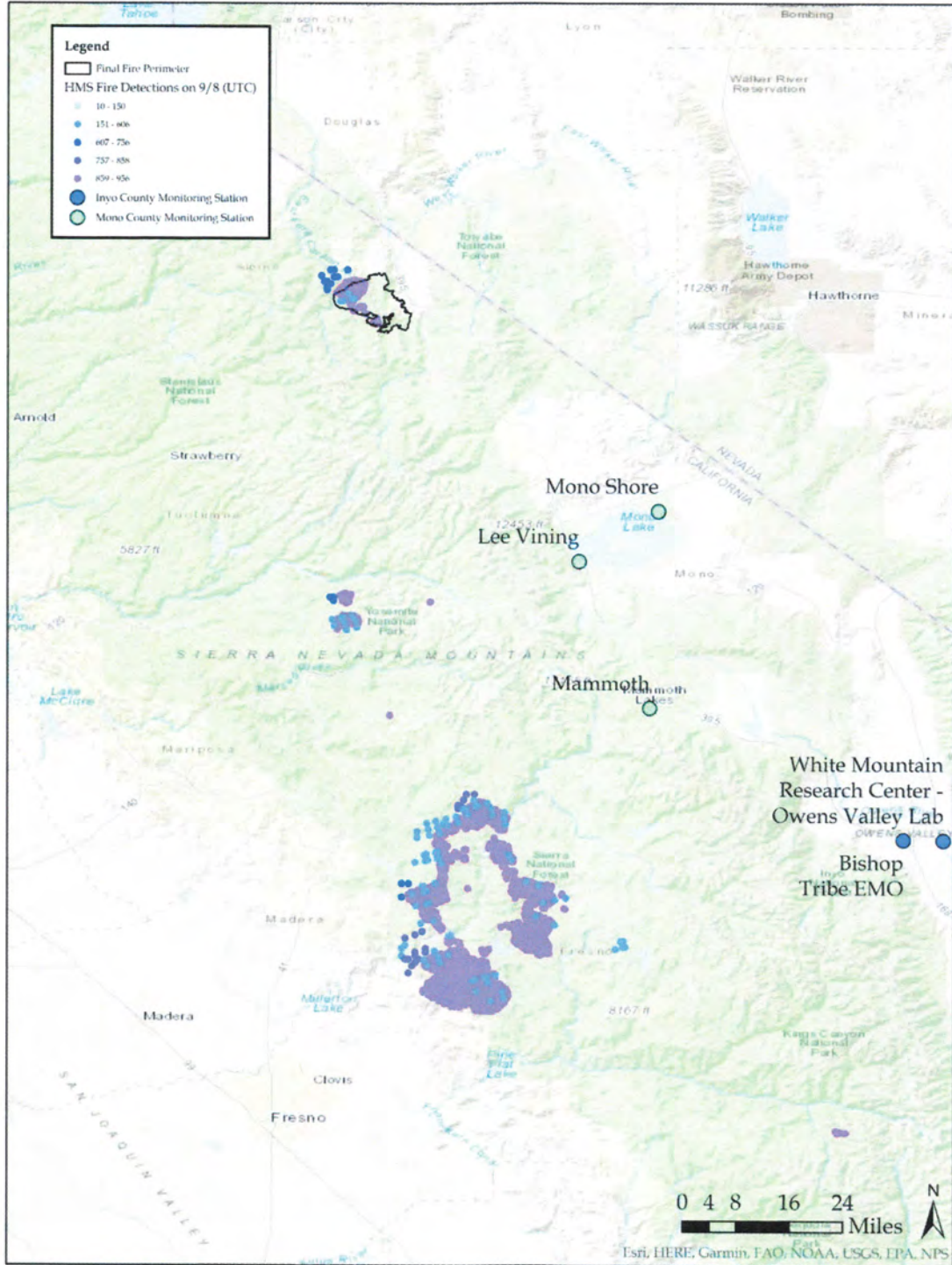


2.4 Overnight Wildfire Activity

The GBUAPCD Demonstration provides great detail about the significant wildfire activity that occurred during the day on September 7th, using visible satellite imagery, incident reports, and satellite hotspot detections. An important consideration for understanding the sources of the PM₁₀ impacts throughout the OVPA, MBPA, and Coso Junction on September 8th, given the timing of the front, is the extent of overnight fire activity. Thankfully, hotspot detections from multiple satellite platforms are operable at night and provide some insight into activity levels.

The fires most likely impacting MBPA and OVPA monitors, based on the trajectories in Section 2.2.3, were to the north and west of the region. Figure 6 shows satellite hotspot detections between 10pm on 9/7 and 2am on 9/8 for the Slink and Creek fires, with significant overnight activity. There is uncertainty with these given that the satellite overpasses are distinct snapshots in time, many of which occurred after the frontal system moved in. However, the Demonstration noted significant fire growth and smoke impacts reported for the Slink fire (pp. 72-73) for the 9/7-9/8 timeframe, so it is reasonable to conclude that the fire activity was persistent throughout the evening of 9/7 and early morning of 9/8.

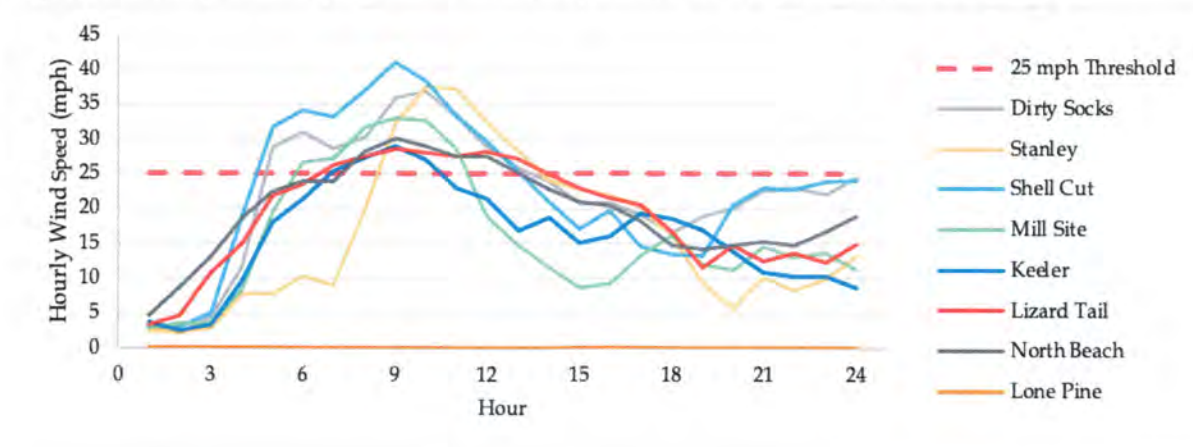
Figure 6. Fire Activity 22:00-02:00 PDT Overnight on 9/8/2020 for Slink and Creek Fires



2.5 High Wind Event Analysis

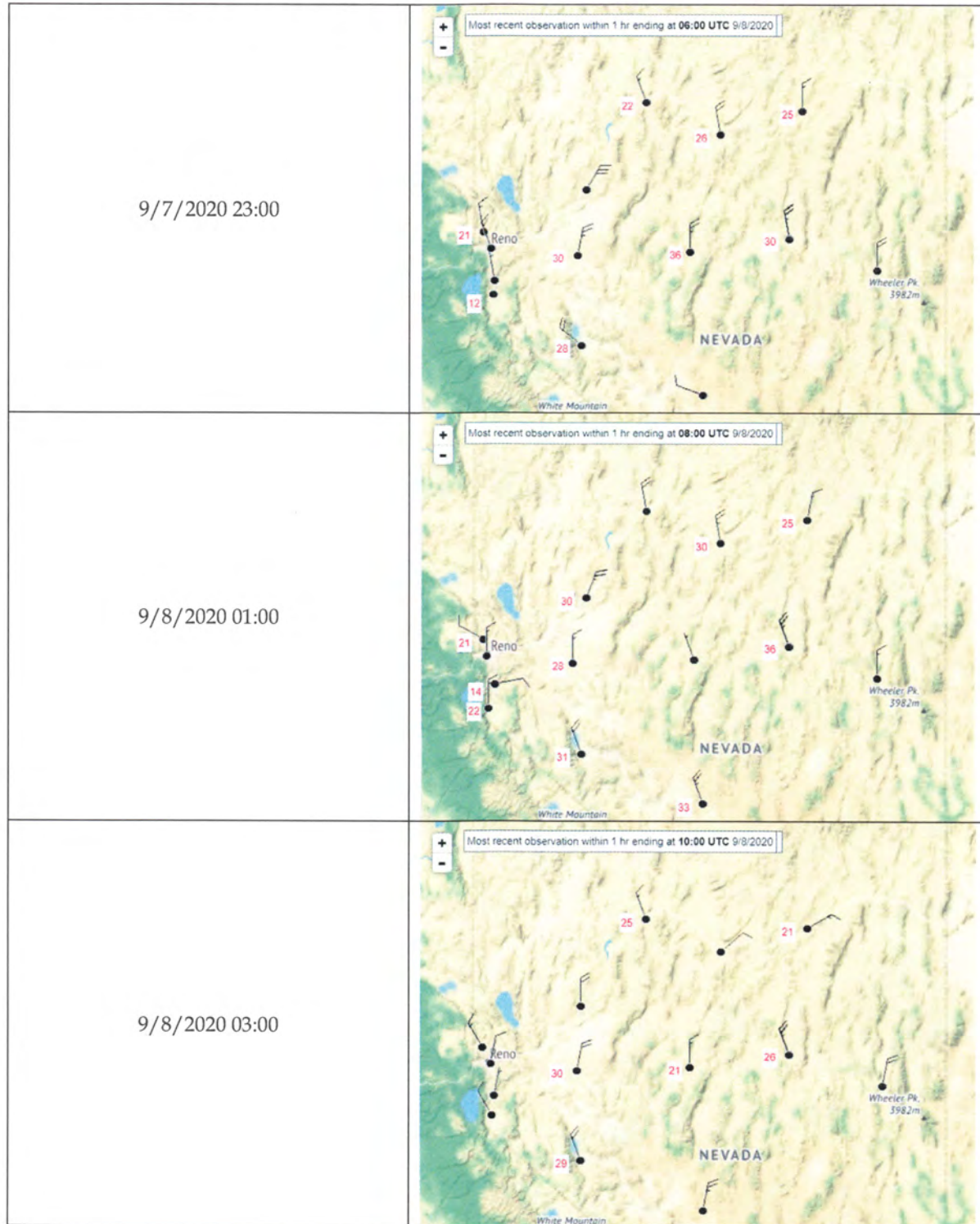
The frontal system that swept through Nevada late on 9/7 picked up significant dust from playas and desert land throughout the state (Section 2.2.2). As noted in Section 1.0, winds above 25mph are considered high enough to overwhelm natural armoring on undisturbed desert surfaces. Figure 8 below depicts a sequence of hourly peak wind data from National Weather Service (NWS) sites throughout Nevada beginning at 23:00 on 9/7 from the Mesowest system³. Elevated winds above 25mph were as the front moved through. These elevated wind speeds persisted as the front swept down from the Mono Basin into the Owens Valley. Figure 7 shows that sustained wind speeds were above 25mph for several hours for monitoring sites surrounding Owens Lake.

Figure 7. Hourly Wind Speeds for Monitoring Sites Near Owens Lake in the OVPA



³ <https://mesowest.utah.edu>

Figure 8. Peak Hourly Wind Speeds for NWS Sites in Nevada from Mesowest



3.0 Conclusion

The Exceptional Event Demonstration for Coso Junction drafted by GBUAPCD lays out the extraordinary wildfire and meteorological events that occurred on September 7th and 8th, 2020 that affected nearly every monitoring station within its jurisdiction. The additional analysis and information provided here provides further evidence that the events on September 8th, while distinct from the previous day, were

- Overwhelming caused by sources of PM₁₀ pollution from outside the air district;
- A combination of wildfire smoke and windblown desert dust, both natural sources;
- Not controllable by GBUAPCD nor the responsibility to control by a regulated party;
and
- Not preventable due to fires occurring on wildlands and high winds overwhelming surfaces.

All of this together demonstrates the exceedances of the 24-hour PM₁₀ standard measured on September 8th, 2020 meet the criteria for exclusion under the Exceptional Event Rule.



GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537

Tel: 760-872-8211 Fax: 760-872-6109

July 8, 2021

Via Electronic and U.S. Mail

Mr. Nelson Mejia
Manager of Owens Lake Dust Mitigation Program
Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, California 90012-2607

RE: District Response to LADWP's June 30, 2021, Comments on the Draft 2021 Coso Junction PM10 Planning Area Second 10-year Maintenance Plan

Dear Mr. Mejia:

The Great Basin Unified Air Pollution Control District (District and GBUAPCD) appreciates the Los Angeles Department of Water and Power (LADWP) interest and input on the Draft 2021 Coso Junction PM10 Planning Area Second 10-year Maintenance Plan during the review process. The District addresses LADWP's comment below. No further action will be taken on the part of the District at this time.

1) LADWP Comment:

"If a day meets the definition of 'exceptional' due to wildfire smoke impacts, then the agency is free to request exclusion of data for that source alone. The GBUAPCD's EE Demonstration provides ample evidence that the air quality within Mono Basin, the Owens Valley Planning Area (OVPA), and Coso Junction Maintenance Area (CJMA) was seriously affected by wildfire smoke on both September 7, 2020, and September 8, 2020. It should not matter that windblown dust is present within the September 8, 2020, dust plume, even if (hypothetically speaking) the windblown-dust contribution was greater than the wildfire-smoke contribution. It only matters that the event occurred and that all criteria for Exceptional Event status have been met for either source."

District Response:

EPA will not make any determination on any Exceptional Event (EE) analysis that is not considered of “regulatory significance,” that is, that will move an area into nonattainment or will not move the area into attainment. See the guidance from Dr. Meredith Kurpius, EPA IX (E-mail of April 26, 2016):

The U.S. Environmental Protection Agency (EPA), Region 9 has developed a process for the initial notification of potential exceptional events (hereafter referred to as the “initial notification process”) to support implementation of the Exceptional Events Rule (EER). Consideration of the potential impact of exceptional events (EEs) on data being used for EPA regulatory decisions (“regulatory significance”) continues to be a key determinant in whether EPA reviews submitted EE demonstrations. Due to limited resources, EPA historically has not acted on demonstrations that lack direct regulatory significance for a current EPA action.

To exclude an exceptional event from regulatory consideration requires the concurrence of the EPA Regional Administrator. If there is no concurrence, then the event is not excluded from the National Ambient Air Quality Standard (NAAQS) design value calculation. District staff will not expend resources to develop EE demonstration documents for any Exceptional Events that are determined to be of no regulatory significance, however, District staff will follow the EPA’s EER procedures to submit Initial Notification Information forms for events that the District considers exceptional.

Sincerely,



Phillip L. Kiddoo
Air Pollution Control Officer

Cc: (via email)

Arrash Agahi, LADWP
Ann Logan, GBUAPCD
Chris Lanane, GBUAPCD
Chris Howard, GBUAPCD



GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537
760-872-8211 Fax: 760-872-6109

B/O #210701-05

July 1, 2021

I HEREBY CERTIFY that at a regular meeting of the Great Basin Unified Air Pollution Control District Governing Board held in the Alpine County Supervisors Chamber, Alpine County Administrative Center, 99 Water Street (State Hwy 89), Markleeville, California 96120, on July 1, 2021 an order was duly made and entered as follows:

**AGENDA ITEM #5: ADOPTION AND APPROVAL OF THE 2021 COSO JUNCTION PM10 PLANNING AREA
SECOND 10-YEAR MAINTENANCE PLAN**

Following a public hearing and after considering all testimony and comments received, a motion was made by Griffith and seconded by Hames approving Resolution #2021-04, which adopts the second PM10 maintenance plan to ensure that compliance with the federal PM10 standard is maintained in the Coso Junction Planning Area. The Board further directed the Air Pollution Control Officer to submit the revised draft (with highlighted changes) as presented by staff, to the State of California Air Resources Board.

Motion by Roll Call

Ayes: Board Members – Totherorh, Roeser, Duggan, Wentworth, Hames, Griffith, Corless

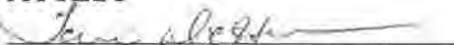
Noes: Ø

Abstain: Ø

Absent: Board Member - Kingsley

Motion carried 7/0 and so ordered.

ATTEST



Tori DeHaven, Clerk of the Board

RESOLUTION 2021-04

RESOLUTION OF THE GOVERNING BOARD OF THE GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT ADOPTING THE 2021 COSO JUNCTION PM10 PLANNING AREA SECOND 10-YEAR MAINTENANCE PLAN AND MAKING FINDINGS OF FACT

WHEREAS, on August 6, 2002, the United States Environmental Protection Agency (USEPA) designated the Coso Junction Planning Area as a nonattainment area for the National Ambient Air Quality Standard for particulate matter of ten (10) microns or less in diameter (PM10); and

WHEREAS, the Coso Junction Planning Area for PM10 includes Rose Valley, the Coso Geothermal Known Resource Area, and a portion of the China Lake Naval Air Weapons Station in southern Inyo County; and

WHEREAS, the Great Basin Unified Air Pollution Control District, in accordance with the designation by USEPA of the Coso Junction Planning Area as a nonattainment area adopted the 2004 State Implementation Plan for the Coso Junction Planning Area; and

WHEREAS, since adoption of the 2004 State Implementation Plan PM10 air quality has improved significantly in the Coso Junction Planning Area as a result of implementing dust control measures for windblown dust at Owens Lake, California, which is the major contributing source of PM10 to the Coso Junction Planning Area; and

WHEREAS, PM10 concentrations measured in the Coso Junction Planning Area demonstrated compliance with the National Ambient Air Quality Standard for PM10 from 2018 through 2020; and

WHEREAS, future compliance in the Coso Junction Planning Area will be ensured as a result of the implementation of dust control measures at Owens Lake, California through requirements contained in the PM10 State Implementation Plan for the Owens Valley Planning Area, approved by the USEPA in 1998 and as revised by the Great Basin Unified Air Pollution Control District and California Air Resources Board in 2003, 2008, 2014, and 2016; and

WHEREAS, the 1990 federal Clean Air Act provides for the State of California, after reasonable notice and public hearings, to request that the USEPA redesignate the Coso Junction Planning Area to attainment with the National Ambient Air Quality Standard for PM10; and

WHEREAS, a redesignation of the Coso Junction Planning Area to attainment with the National Ambient Air Quality Standard for PM10 requires a revision of the State Implementation Plan, which provides for the maintenance and enforcement of the PM10 standard in the Coso Junction Planning Area (also known as a maintenance plan); and

WHEREAS, under California law, the Great Basin Unified Air Pollution Control District is the governmental entity charged with the responsibility of developing and adopting such a maintenance plan for the Coso Junction PM10 Planning Area, and with the timely submittal of such adopted plan to the California Air Resources Board; and

WHEREAS, pursuant to the California Environmental Quality Act (CEQA), the 2010 PM10 Maintenance Plan and Redesignation Request for the Coso Junction Planning Area is exempt under §15061(b)(3) of the CEQA Guidelines; and

WHEREAS, the Great Basin Unified Air Pollution Control District developed and approved the 2010 PM10 Maintenance Plan and Redesignation Request for the Coso Junction Planning Area; and

WHEREAS, the Great Basin Unified Air Pollution Control District has developed a 2nd 10-year Maintenance Plan, circulated said plan for public review, and received and considered public comment upon the revised 2021 PM10 2nd 10-year Maintenance Plan; and

WHEREAS, the 2021 PM10 2nd 10-year Maintenance Plan for the Coso Junction Planning Area is now before this Governing Board for consideration of final adoption.

NOW, THEREFORE, BE IT RESOLVED that following review by this Governing Board of the revised 2021 PM10 2nd 10-year Maintenance Plan for the Coso Junction Planning Area, after consideration of written and oral public comments received on the proposed 2021 PM10 Maintenance Plan, this Governing Board hereby finds as follows:

1. The major source contributing to the PM10 nonattainment problem in the Coso Junction Planning Area is windblown dust from the Owens Lake bed;
2. PM10 monitoring demonstrated that the Coso Junction Planning Area has attained the National Ambient Air Quality Standard for PM10 as a result of control measures implemented at Owens Lake.

3. The 1998 Owens Valley State Implementation Plan and revisions in 2003, 2008, the stipulated judgment of 2014, and 2016 SIP, as well as District Rule 433, will ensure that compliance with National Ambient Air Quality Standard for PM10 is maintained in the Coso Junction Planning Area;

BE IT FURTHER RESOLVED, that in consideration of each of the foregoing findings, statements and legal requirements, this Governing Board hereby approves and adopts the proposed 2021 PM10 2nd 10-year Maintenance Plan for the Coso Junction Planning Area; and

BE IT FURTHER RESOLVED, that the adopted State Implementation Plan for the Coso Junction Planning Area be forwarded for appropriate review to the State of California Air Resources Board in order to maintain attainment with the National Ambient Air Quality Standard for PM10.

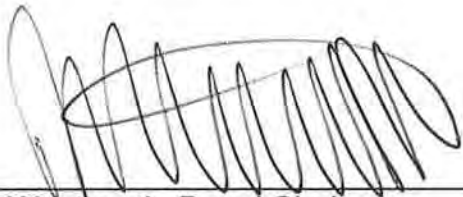
APPROVED AND ADOPTED by the Governing Board of the Great Basin Unified Air Pollution Control District this 1st day of July, 2021, by the following vote:

AYES: Board Members - Totheroh, Roeser, Duggan, Wentworth, Hames, Griffith, Corless

NOES: 0

ABSTAIN: 0

ABSENT: 0



John Wentworth, Board Chair

ATTEST:



Tori DeHaven, Clerk of the Board