

Application No.:  
Exhibit No.:

A.25-06-017  
~~LIB-33~~ LIB-47



(U 933-E)

## Mountain View Fire Cost Recovery Application

Exhibit ~~LIB-33~~ LIB-47

~~WALC1\_2020-11-17.xls~~

~~(Excel File)~~



Outlook

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**Re: [EXTERNAL] Re: Red Flag Warning historic data for NVZ421 zone - privileged and confidential**

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**From** Dawn Johnson - NOAA Federal <Dawn.Johnson@noaa.gov>

**Date** Thu 1/29/2026 2:49 PM

**To** Tang, Benjamin <Benjamin.Tang@cpuc.ca.gov>

**Cc** Colin McKellar - NOAA Federal <colin.mckellar@noaa.gov>; Tony.Fuentes@noaa.gov <Tony.Fuentes@noaa.gov>

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Ben,

We will adjust fire weather zones to better match forecast characteristics within the zones, in partnership with collaborating with our key partners who we work with in the area. Forecast zones can be quite large and geographically diverse, so the goal is to better match up local areas so that the forecast can be more specific and warnings more precise. In addition, the change we made in 2020 also better aligned with the area of responsibility covered by local land management agencies and dispatch centers, which helps with resource allocation for those critical partners. The fire weather zones and public forecast zones also differ due to differing partners who utilize the products and ultimately the needs. A zone change is a complicated process and not something that is done lightly.

Hope this helps,

Dawn

**Dawn Johnson**

**Warning Coordination Meteorologist (WCM)**

Decision Support, Public Information and Outreach

NOAA/National Weather Service | Reno, NV

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On Wed, Jan 28, 2026 at 9:18 PM Tang, Benjamin <[Benjamin.Tang@cpuc.ca.gov](mailto:Benjamin.Tang@cpuc.ca.gov)> wrote:

Hi Dawn and Colin,

Happy New Year! I have a follow-up question to our discussion below. Regarding the reorganization of the fire weather zones back in 2020:

"The Sierra Front (now NV420) used to be NV450; while Topaz Lake and Walker used to be located in CA273."

What was the reasoning behind this specific rezoning change? For example, did the reorganization have anything to do with forecast characteristics of the terrain/climate of the new zones? Is there a general principle behind any NWS forecast rezoning?

Thanks!

Ben

**Benjamin Tang (he/him)**

Regulatory Analyst • Public Advocates Office  
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**From:** Dawn Johnson - NOAA Federal <[Dawn.Johnson@noaa.gov](mailto:Dawn.Johnson@noaa.gov)>  
**Sent:** Wednesday, December 3, 2025 9:12 AM  
**To:** Tang, Benjamin <[Benjamin.Tang@cpuc.ca.gov](mailto:Benjamin.Tang@cpuc.ca.gov)>  
**Cc:** Colin McKellar - NOAA Federal <[colin.mckellar@noaa.gov](mailto:colin.mckellar@noaa.gov)>; [Tony.Fuentes@noaa.gov](mailto:Tony.Fuentes@noaa.gov)  
<[Tony.Fuentes@noaa.gov](mailto:Tony.Fuentes@noaa.gov)>; Huber, Patrick <[Patrick.Huber@cpuc.ca.gov](mailto:Patrick.Huber@cpuc.ca.gov)>; Karle, Matthew  
<[matthew.karle@cpuc.ca.gov](mailto:matthew.karle@cpuc.ca.gov)>  
**Subject:** Re: [EXTERNAL] Re: Red Flag Warning historic data for NVZ421 zone - privileged and confidential

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Hi Ben,

There are no specific thresholds when it comes to precipitation. We're typically looking for near to above normal precip (relative to climatology) with widespread wetting rains (0.10"+) from multiple weather systems. The first storm of the season isn't going to cut it, unless it's something abnormally wet, such as the atmospheric river we had in Oct 2021, where ~1/3 of our annual rainfall fell in 2 days. The biggest factor in deciding high to low season is fuels and the intel we are receiving from partners in the field regarding the fuels status, which honestly we could use more of. We also then take the fuels status and compare the ERCs to what is typical for that time of the year, ideally having it below normal, which indicates a reduced potential for fire intensity.

We do not separate forecast zones when deciding on high vs low season operations and look at the area as a whole. We will, however, call out localized areas of concern ahead of weather events, such as the southern Sierra Front (Mono Co outside of the Sierra, Chalfant Valley, etc) if those particular areas are at a higher risk. Earlier this fall that was the case as those locations hadn't received as much rain as the rest of the region, and we know that the Pack Fire occurred. Again, we can still issue Fire Weather Watches and Red Flag Warnings year-round, even during low season if the conditions warrant.

The "freakout briefing" is our standard partner email, which is meant at a 30,000 foot overview across our entire forecast area. We'll dive into details for specific areas if there is weather of significance. We do not send separate messaging to the various forecast zones, but will send out targeted messaging to specific partners in localized areas if there is something major to communicate outside of the standard correspondence.

If you have additional questions, perhaps we can set up a call to answer them.

Best,

Dawn

**Dawn Johnson**

**Warning Coordination Meteorologist (WCM)**

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On Mon, Dec 1, 2025 at 3:24 PM Tang, Benjamin <[Benjamin.Tang@cpuc.ca.gov](mailto:Benjamin.Tang@cpuc.ca.gov)> wrote:

Thanks, Dawn.

I am curious about how precipitation levels factor into the transition decision - I understand there are multiple factors at play, but is there some sort of minimum threshold or rule-of-thumb for rain/snowfall over a certain time period, at least for CA273 and NV421?

Do different NWS offices use different formulas, and for different NWS forecast zones? The forecast zones can be so different: in other words, does each zone have different season transition dates? Are different "Freakout Briefings" sent to different zones?

Sorry, I guess my "last question" is a multi-part one!

Happy Cyber Monday,

Ben

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**From:** Dawn Johnson - NOAA Federal <[Dawn.Johnson@noaa.gov](mailto:Dawn.Johnson@noaa.gov)>

**Sent:** Monday, December 1, 2025 11:00 AM

**To:** Tang, Benjamin <[Benjamin.Tang@cpuc.ca.gov](mailto:Benjamin.Tang@cpuc.ca.gov)>

**Cc:** Colin McKellar - NOAA Federal <[colin.mckellar@noaa.gov](mailto:colin.mckellar@noaa.gov)>;

[Tony.Fuentes@noaa.gov](mailto:Tony.Fuentes@noaa.gov) <[Tony.Fuentes@noaa.gov](mailto:Tony.Fuentes@noaa.gov)>; Huber, Patrick <[Patrick.Huber@cpuc.ca.gov](mailto:Patrick.Huber@cpuc.ca.gov)>

**Subject:** Re: [EXTERNAL] Re: Red Flag Warning historic data for NVZ421 zone - privileged and confidential

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Hi Ben,

We never consider fire season "over" or "ending", but do switch to low-season vs peak-season for operational purposes. Even in low-season operations, we can still issue watches and warnings, the main difference is that we only update the fire weather planning forecast 1x/day vs 2x/day. We also tend to have less (or no) fire-weather planning calls during low-season operations, where they may be daily with multiple Geographic Area Coordination Centers (GACCs) during "high/peak" season.

The dates for the transition will vary each year, with the antecedent weather conditions the main driver. We will look at the amount of rain/snow that has fallen, temperature trends, the ERCs (energy release components) and the trends in the coming weeks, the Significant Wildland Fire Potential Outlook (issued by NIFC), drought status, and fuel moisture status.

Average peak season length is 181 days, with the longest season in 2021 with 203 days and the shortest 152 in 2010 (thanks Tony for the stats!).

Tony and Colin may have additional information to share, but this can at least get you started.

Take care,

Dawn

**Dawn Johnson**

**Warning Coordination Meteorologist (WCM)**

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On Sun, Nov 30, 2025 at 3:37 AM Tang, Benjamin <[Benjamin.Tang@cpuc.ca.gov](mailto:Benjamin.Tang@cpuc.ca.gov)> wrote:

**Privileged and confidential**

Thanks again, Colin. I have one last question: what determines the end of fire season for NWS Reno? Are there specific signs or technical measurements, or are the determinants more traditional?

For example, I've attached a "freakout briefing" from the NWS Reno office that went out in November 15, 2020, and in the Situation Awareness freakout slide (Slide 3) for "Fire Weather", the notice is that fire off-season had technically started (freakout slides earlier that week don't mention off-season). What does the end of fire season even mean for NWS or NWS Reno, operationally or advisory (advisorily)?

Hope you had a great Thanksgiving,

Ben

**From:** Colin McKellar - NOAA Federal <[colin.mckellar@noaa.gov](mailto:colin.mckellar@noaa.gov)>  
**Sent:** Wednesday, November 19, 2025 4:03 AM  
**To:** Tang, Benjamin <[Benjamin.Tang@cpuc.ca.gov](mailto:Benjamin.Tang@cpuc.ca.gov)>  
**Cc:** [Tony.Fuentes@noaa.gov](mailto:Tony.Fuentes@noaa.gov) <[Tony.Fuentes@noaa.gov](mailto:Tony.Fuentes@noaa.gov)>;  
[Dawn.Johnson@noaa.gov](mailto:Dawn.Johnson@noaa.gov) <[Dawn.Johnson@noaa.gov](mailto:Dawn.Johnson@noaa.gov)>; Huber, Patrick  
<[Patrick.Huber@cpuc.ca.gov](mailto:Patrick.Huber@cpuc.ca.gov)>  
**Subject:** Re: [EXTERNAL] Re: Red Flag Warning historic data for NVZ421 zone - privileged and confidential

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Ben,

Typically, a cancelled RFW means that the warning ended earlier than the forecasted ending time. The RFW was still issued and was in effect for that zone. In the 7 years I've been in the NWS I've only seen one Fire Weather Watch get cancelled.

I'm happy to help with any other questions.

On Tue, Nov 18, 2025 at 10:29 PM Tang, Benjamin <[Benjamin.Tang@cpuc.ca.gov](mailto:Benjamin.Tang@cpuc.ca.gov)> wrote:  
**Privileged and confidential**

Thanks, Colin! I appreciate the fast, and comprehensive, response. Does the RFW count data you've attached include cancelled RFWs? I don't quite understand what cancelled RFWs are (are they cancelled before some RFW starting deadline?) If I were to assess how "risky" an NWS zone for wildfire, relative to other NWS zones, should one include cancelled RFWs (as if they were "yellow" alerts instead of "red" alerts)?

Ben

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**From:** Colin McKellar - NOAA Federal <[colin.mckellar@noaa.gov](mailto:colin.mckellar@noaa.gov)>  
**Sent:** Tuesday, November 18, 2025 9:30 PM  
**To:** Tang, Benjamin <[Benjamin.Tang@cpuc.ca.gov](mailto:Benjamin.Tang@cpuc.ca.gov)>  
**Cc:** [Tony.Fuentes@noaa.gov](mailto:Tony.Fuentes@noaa.gov) <[Tony.Fuentes@noaa.gov](mailto:Tony.Fuentes@noaa.gov)>;  
[Dawn.Johnson@noaa.gov](mailto:Dawn.Johnson@noaa.gov) <[Dawn.Johnson@noaa.gov](mailto:Dawn.Johnson@noaa.gov)>; Huber, Patrick  
<[Patrick.Huber@cpuc.ca.gov](mailto:Patrick.Huber@cpuc.ca.gov)>  
**Subject:** [EXTERNAL] Re: Red Flag Warning historic data for NVZ421 zone - privileged and confidential

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Hi Benjamin,

Yes, there was a reorganization of the fire weather zones back in 2020. The Sierra Front (now NV420) used to be NV450; while Topaz Lake and Walker used to be located in CA273. I

attached a map of the old zones for reference. I also attached the RFW data for those two zones dating back to 2006. Any time before 2006 you'll need to search IEM using NV450 and CA273. You can also use those two zones to find the text product in IEM. Here is a [link](#) for historical data for the Walker RAWS dating back to 2001. This [link](#) will give you surrounding RAWS datasets.

Let me know if you have any questions,

Colin

On Tue, Nov 18, 2025 at 11:55 AM Tang, Benjamin <[Benjamin.Tang@cpuc.ca.gov](mailto:Benjamin.Tang@cpuc.ca.gov)> wrote:  
**Privileged and confidential**

Hi Tony and Colin,

I'm a wildfire safety analyst for the California state government. I'm trying to find historic data for Red Flag Warning days before the year 2020 for the NWS zone NV421/NVZ421 around Reno (specifically interested in meteorological data around City of Walker and Topaz Lake), but I'm having a difficult time.

I have searched Iowa State University's Iowa Environmental Mesonet ([IEM :: NWS Watches Warnings Advisories Download](#)), and for NVZ421, there have been no(!) RFWs at all issued since 1986 to 2019. I find that very difficult to believe.

Was there a reorganization and/or renumbering of NVZ421 before 2020? If so, what was the old zone ID, and more importantly, where can I get RFW data before 2020 (preferably since 2010 or 2015 to 2020)?

I apologize for the short notice, however, I only just realized this data oddity and I'm facing a deadline – it would be great if you could get back to me before Thanksgiving, if possible. Thank you for your time.

Best,  
Ben

**Benjamin Tang (he/him)**

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