

Strong Atmospheric River

Tuesday - Thursday

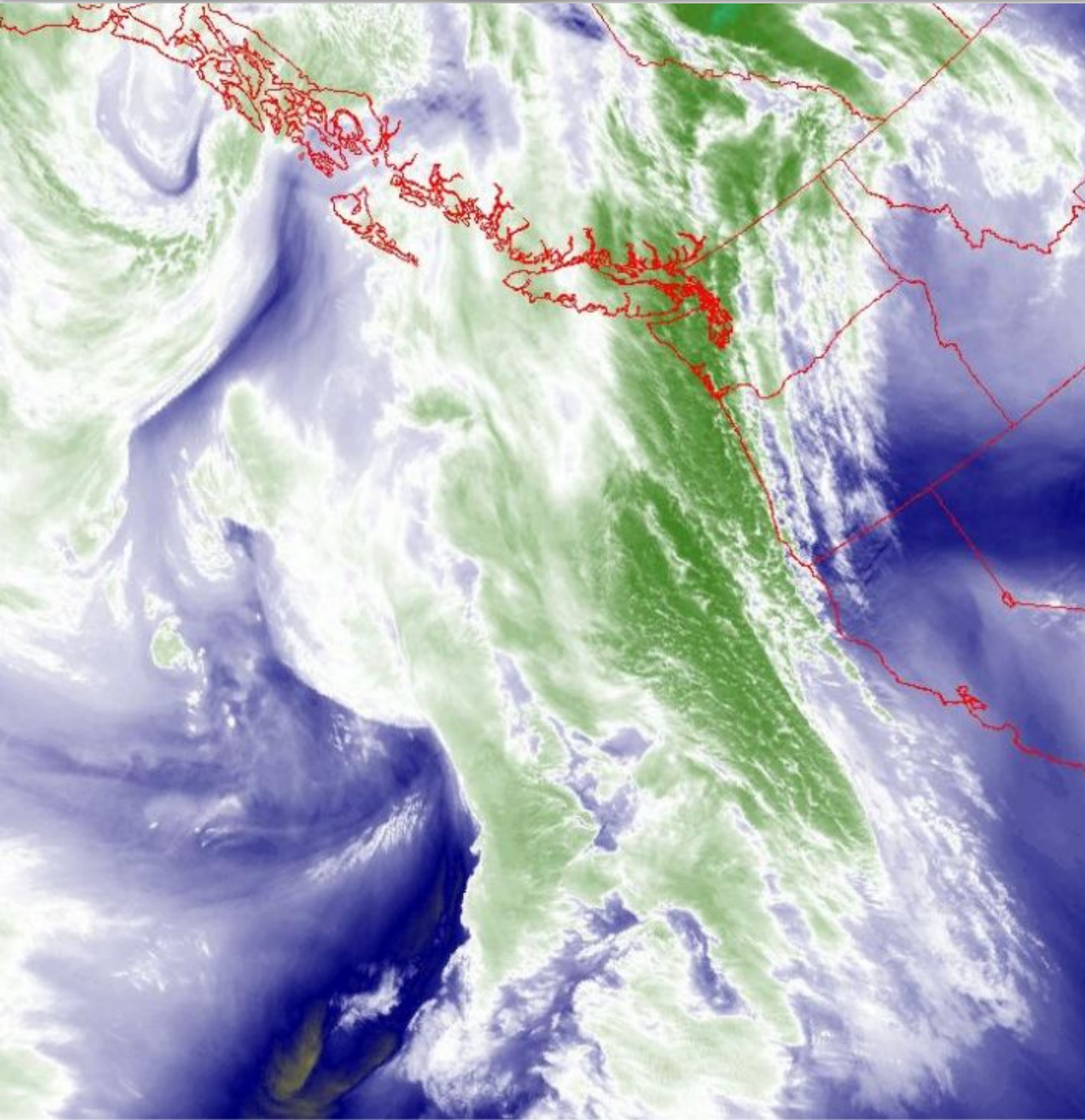
Presented by: James White



EUREKA CA

NOAA NATIONAL WEATHER SERVICE

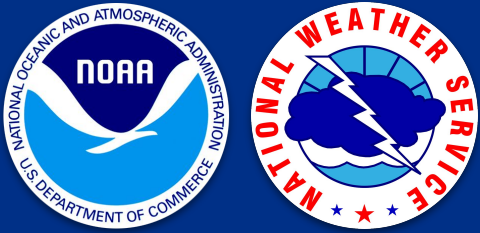
Issued January 29, 2024 10:40 AM





Key Points

- **High winds late Tuesday Night - Wednesday**
- **Heavy rain and small stream flooding Wednesday**
- **Main-stem river flooding Wednesday - Thursday**
- **Limited winter weather concerns**



Hazard Overview

WEATHER RISK OUTLOOK

Risk levels incorporate potential impacts from weather hazards and likelihood of occurrence for a reasonable worst case scenario.

	Mon 1/29	Tue 1/30	Wed 1/31	Thu 2/1	Fri 2/2	Sat 2/3
Del Norte County Crescent City, Gasquet	Little to None	Rain Gusty Wind	Rain Strong Wind Flooding	Rain	Rain Mountain Snow	Little to None
Humboldt County Eureka, Fortuna, Willow Creek	Little to None	Rain Gusty Wind	Rain Strong Wind Flooding	Rain Flooding	Rain Mountain Snow	Little to None
Trinity County Weaverville, Hayfork	Little to None	Rain Gusty Wind	Rain Gusty Wind Mountain Snow	Rain Mountain Snow	Rain Mountain Snow	Little to None
Mendocino County Ukiah, Fort Bragg	Little to None	Rain Wind	Rain Strong Wind Flooding	Rain Flooding	Light Rain	Little to None
Lake County Clearlake, Lakeport	Little to None	Rain Wind	Rain Gusty Wind Flooding	Rain Flooding	Light Rain	Little to None

Risk Levels

Little to None

Minor

Moderate

Major

Extreme

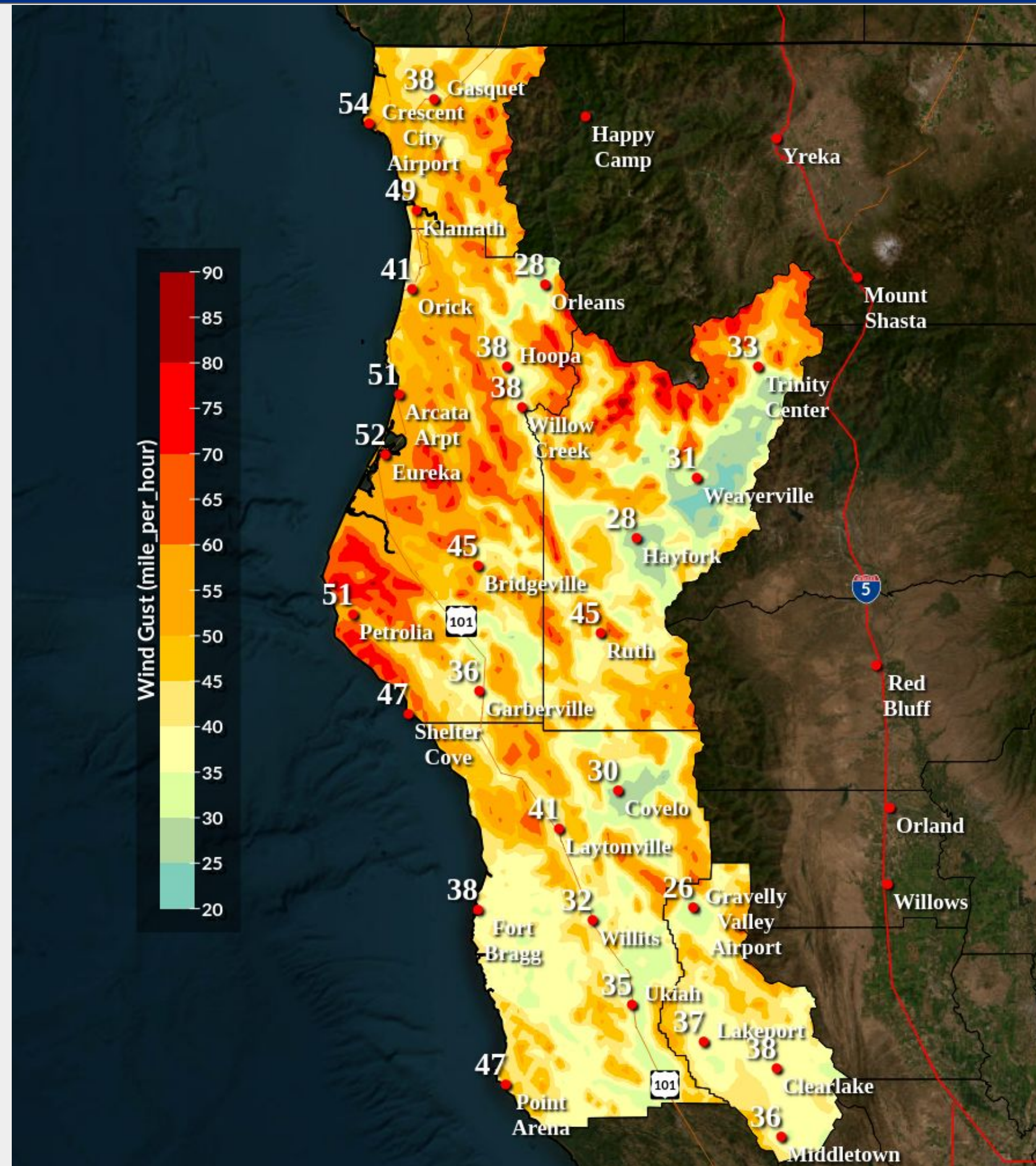


Rough Timeline of Wind





Most Likely Peak Wind Gusts

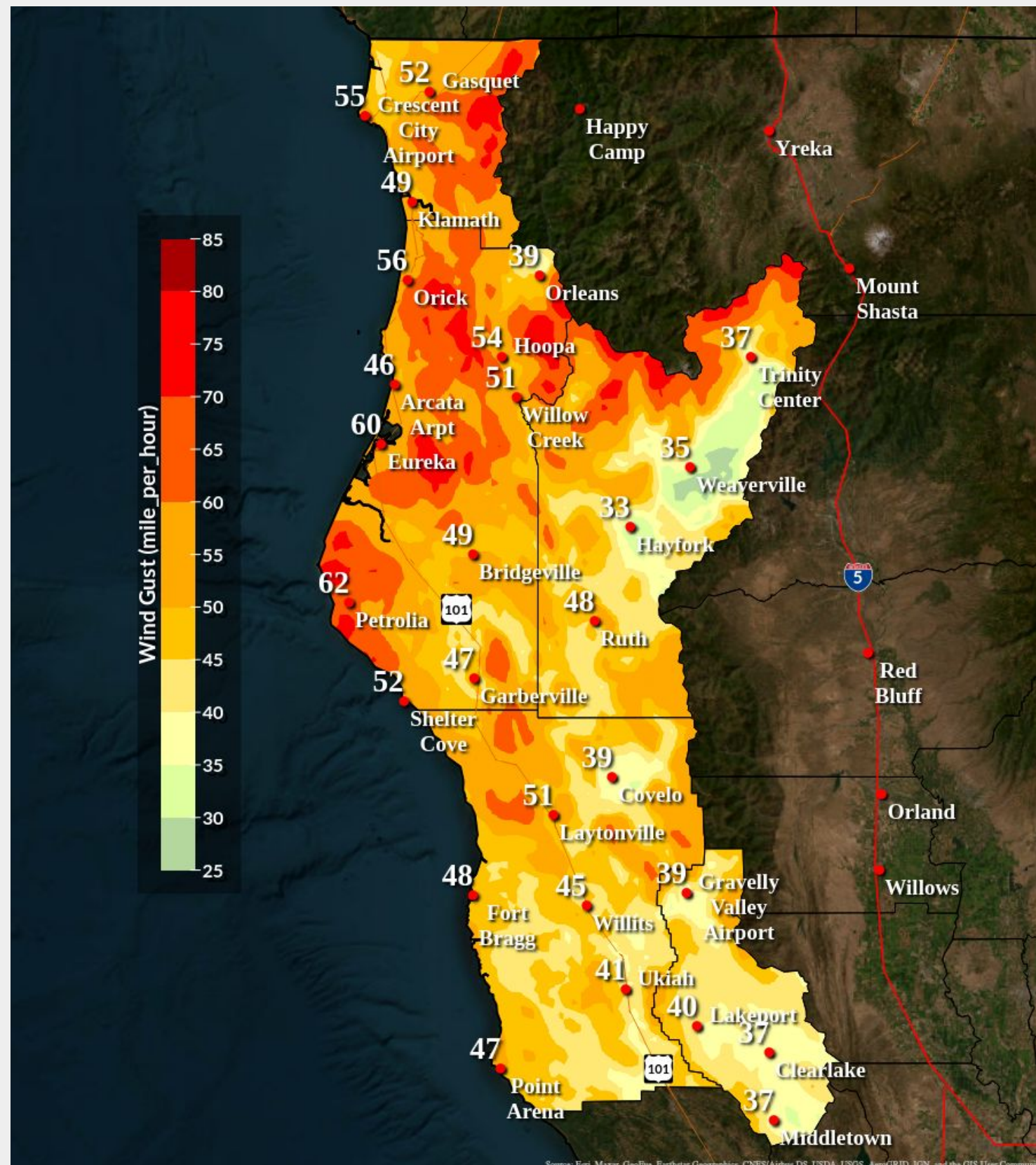


Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

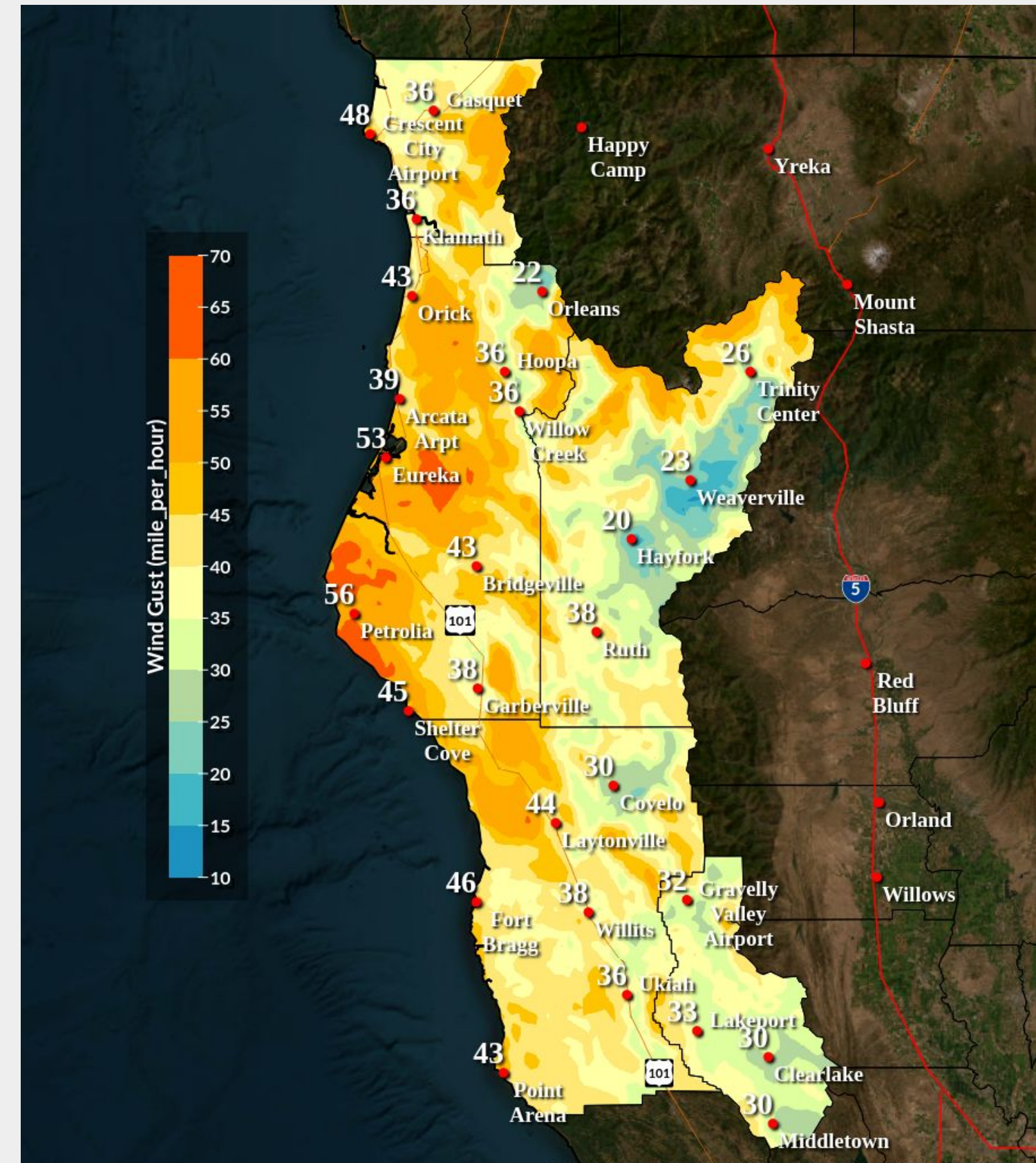


Wind Gust Probabilities

High End Wind Gusts



Low End Wind Gusts

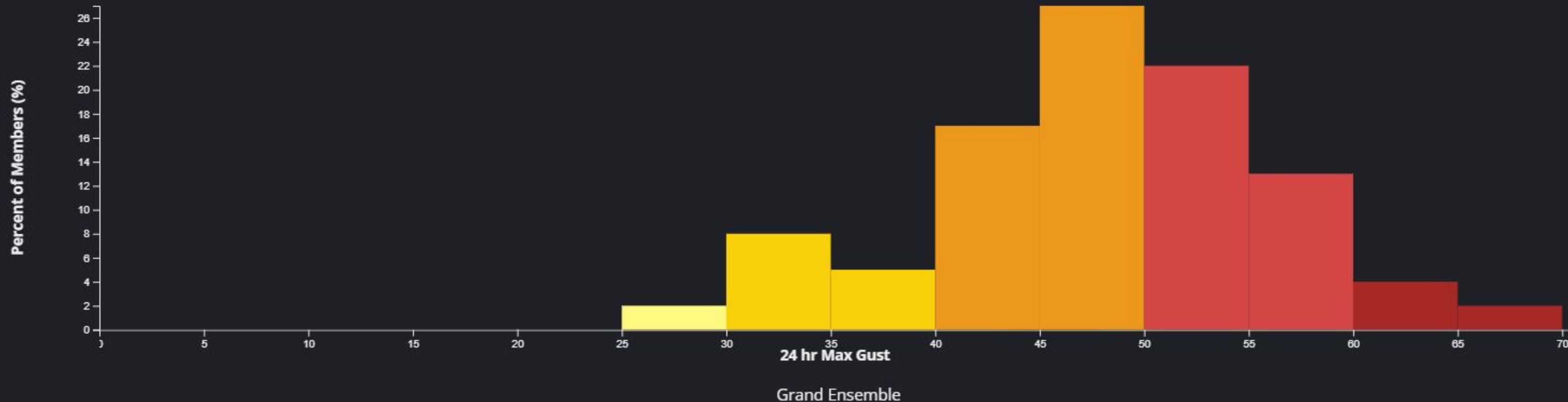
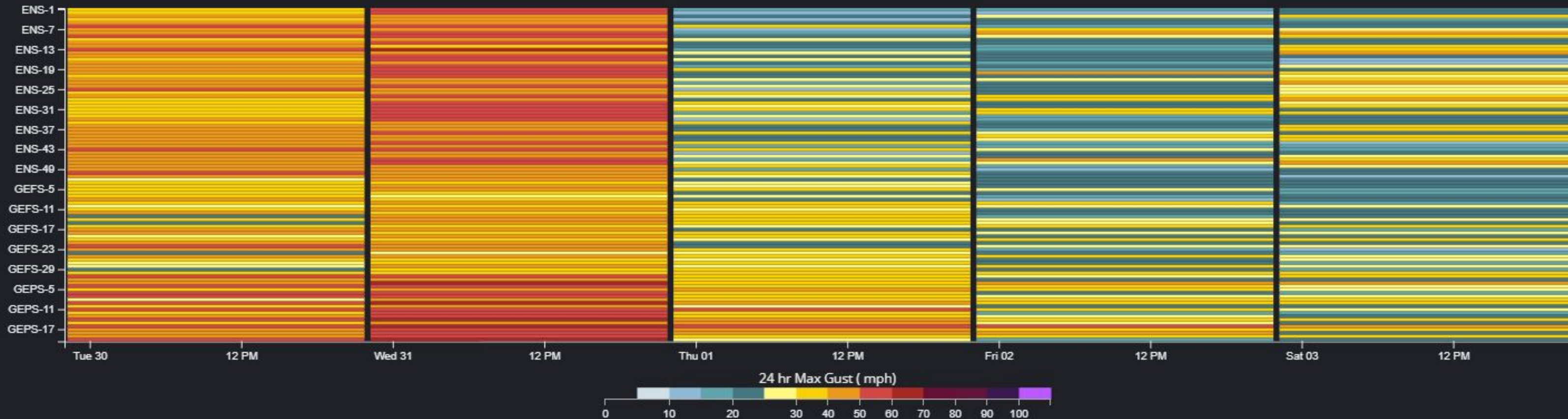




Wind Gusts at Crescent City

Sunday 04 pm PST, January 28, 2024

Box Whiskers: 5th, 25th, 75th, & 95th

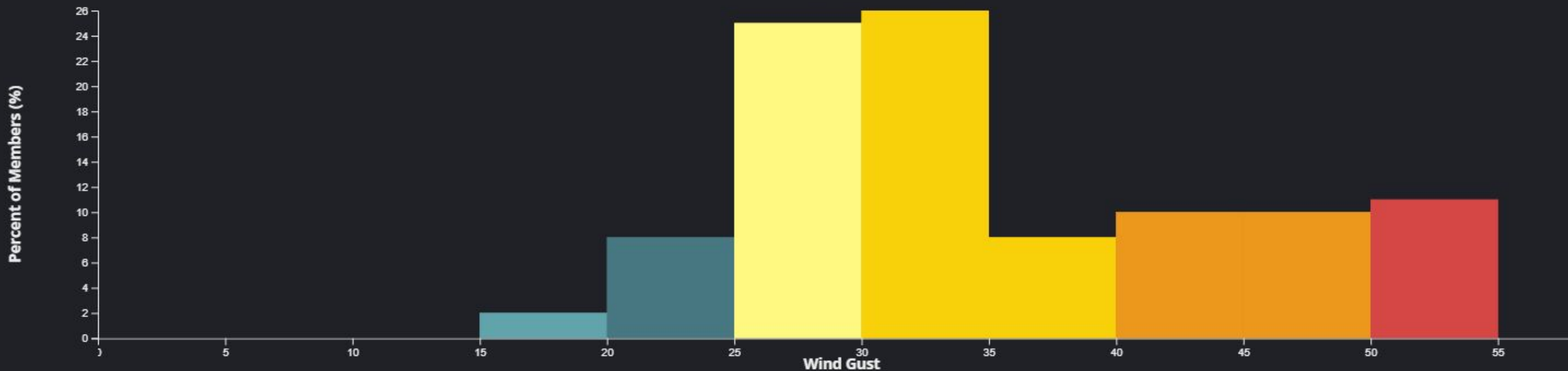
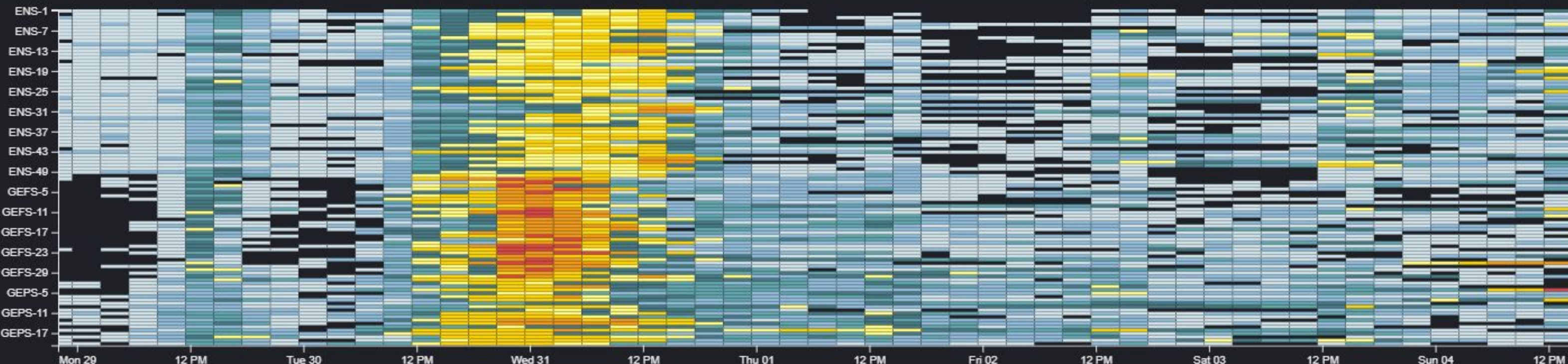




Wind Gusts at McKinleyville

Sunday 04 pm PST, January 28, 2024

Box Whiskers: 5th, 25th, 75th, & 95th



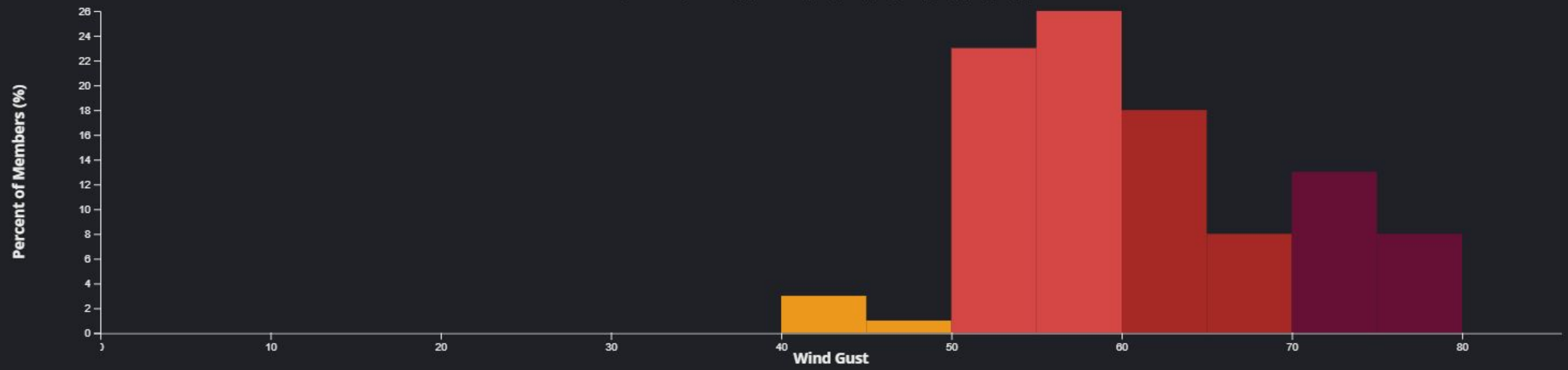
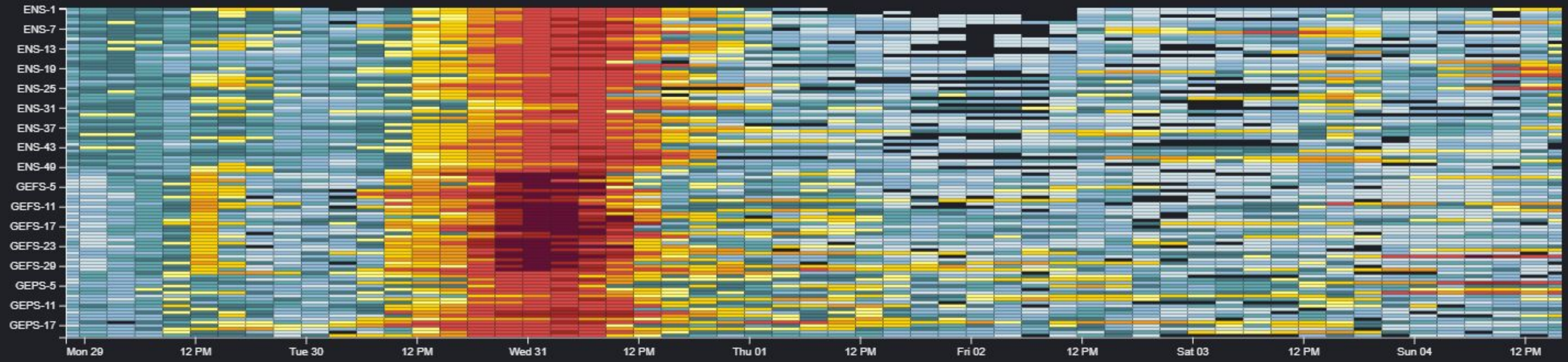
Grand Ensemble



Wind Gusts at Kneeland

Sunday 04 pm PST, January 28, 2024

Box Whiskers: 5th, 25th, 75th, & 95th

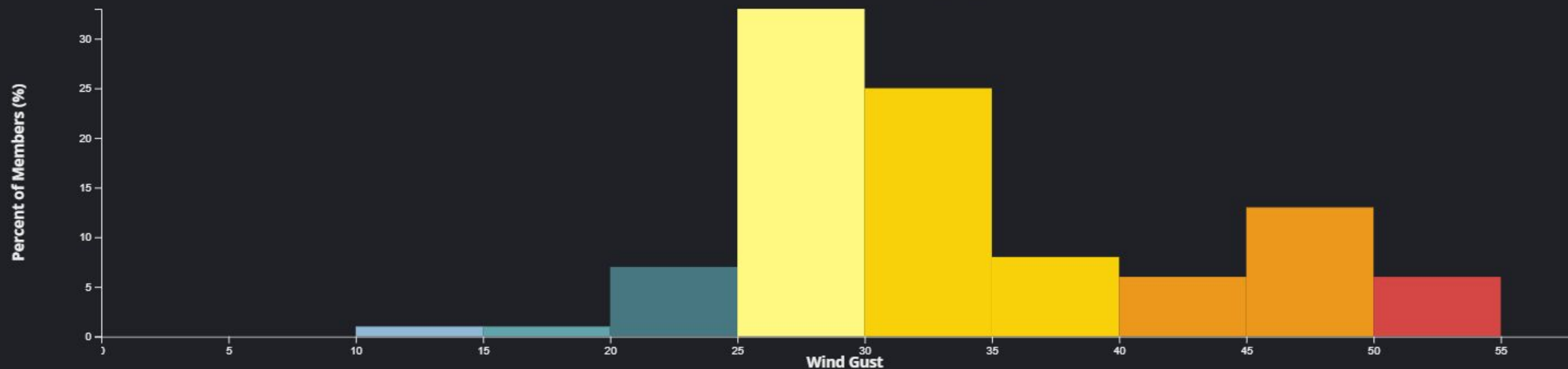
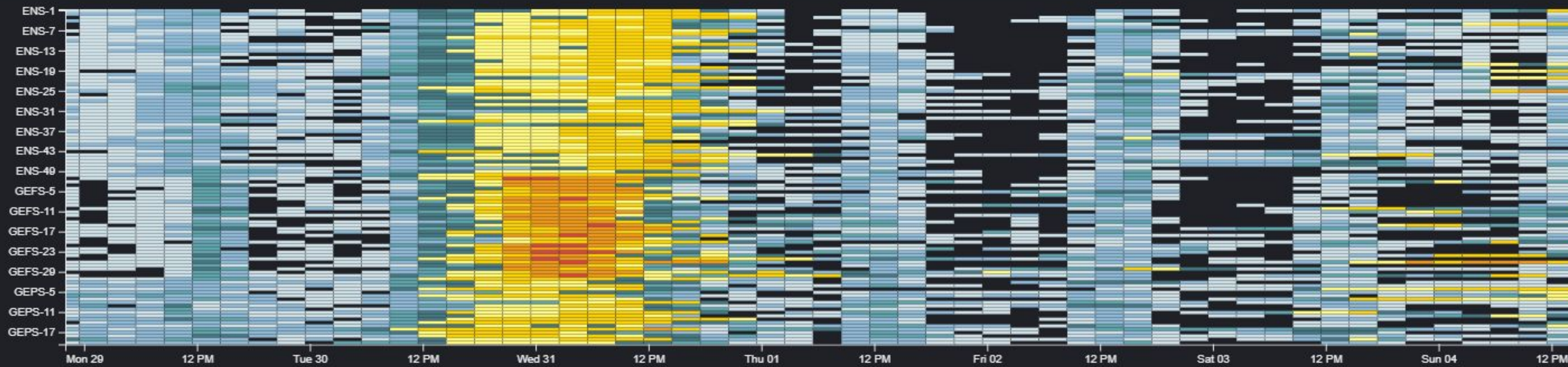




Wind Gusts at Laytonville

Sunday 04 pm PST, January 28, 2024

Box Whiskers: 5th, 25th, 75th, & 95th



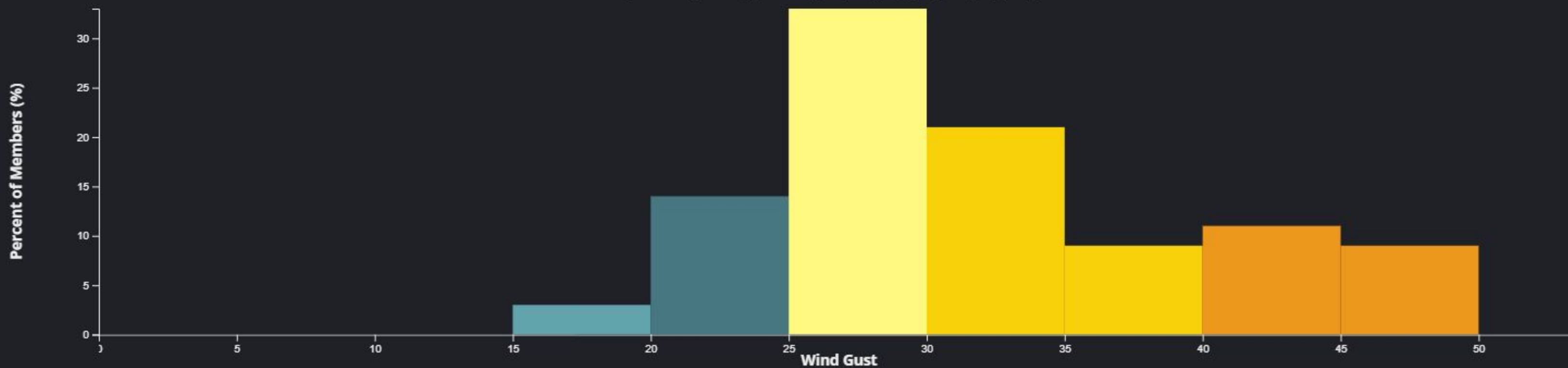
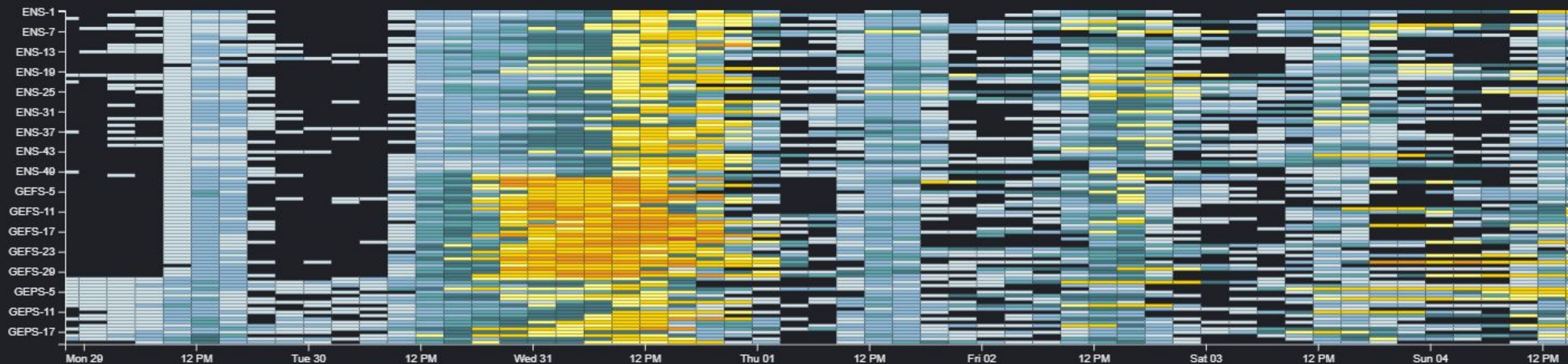
Grand Ensemble



Wind Gusts at Lakeport

Sunday 04 pm PST, January 28, 2024

Box Whiskers: 5th, 25th, 75th, & 95th



Grand Ensemble

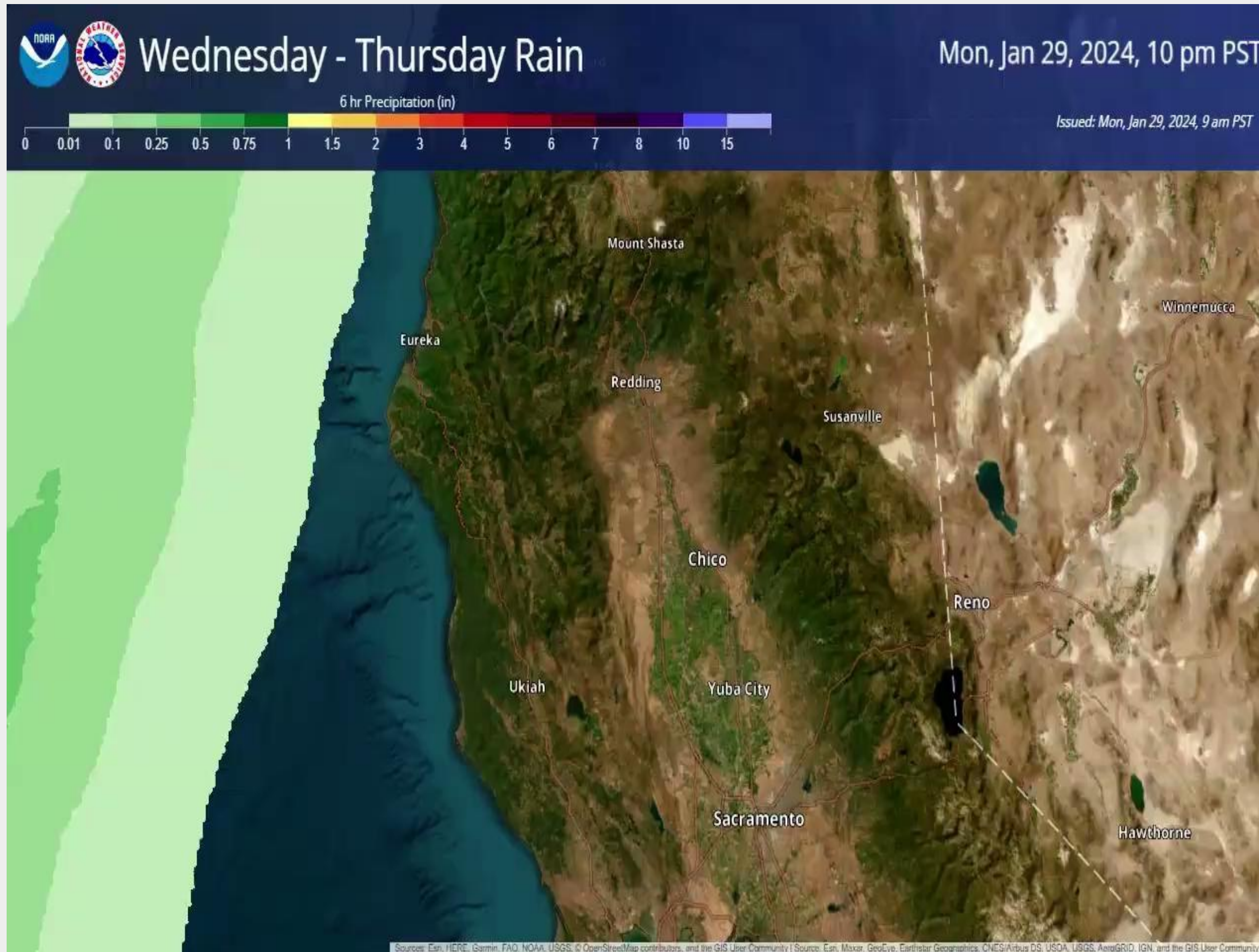


Wind Impacts

- **Strongest wind of the year so far**
- **Elevated risk of power outages**
- **Increased risk of tree damage and debris on roads**
- **Difficulty driving**

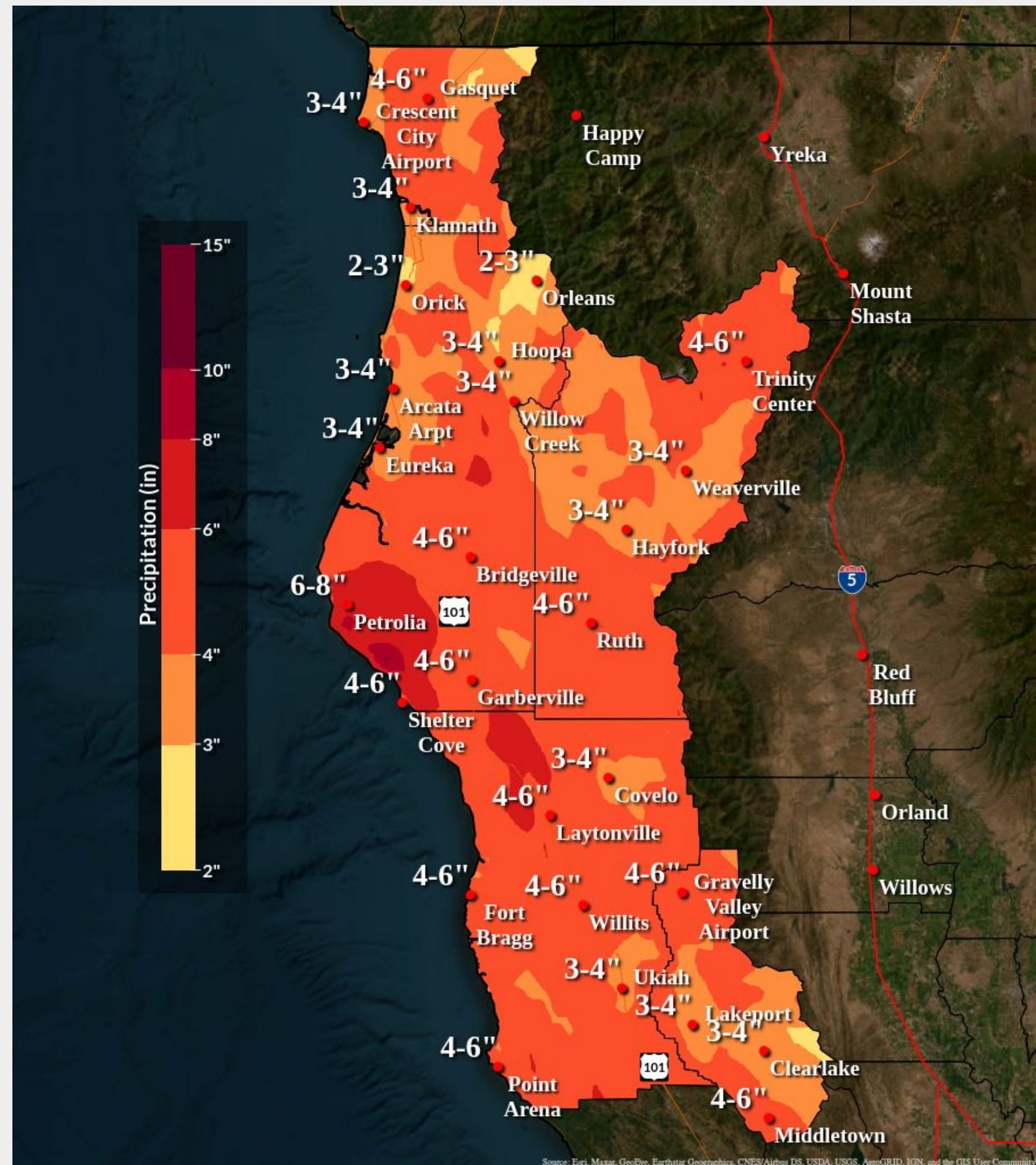


Rough Rain Timeline





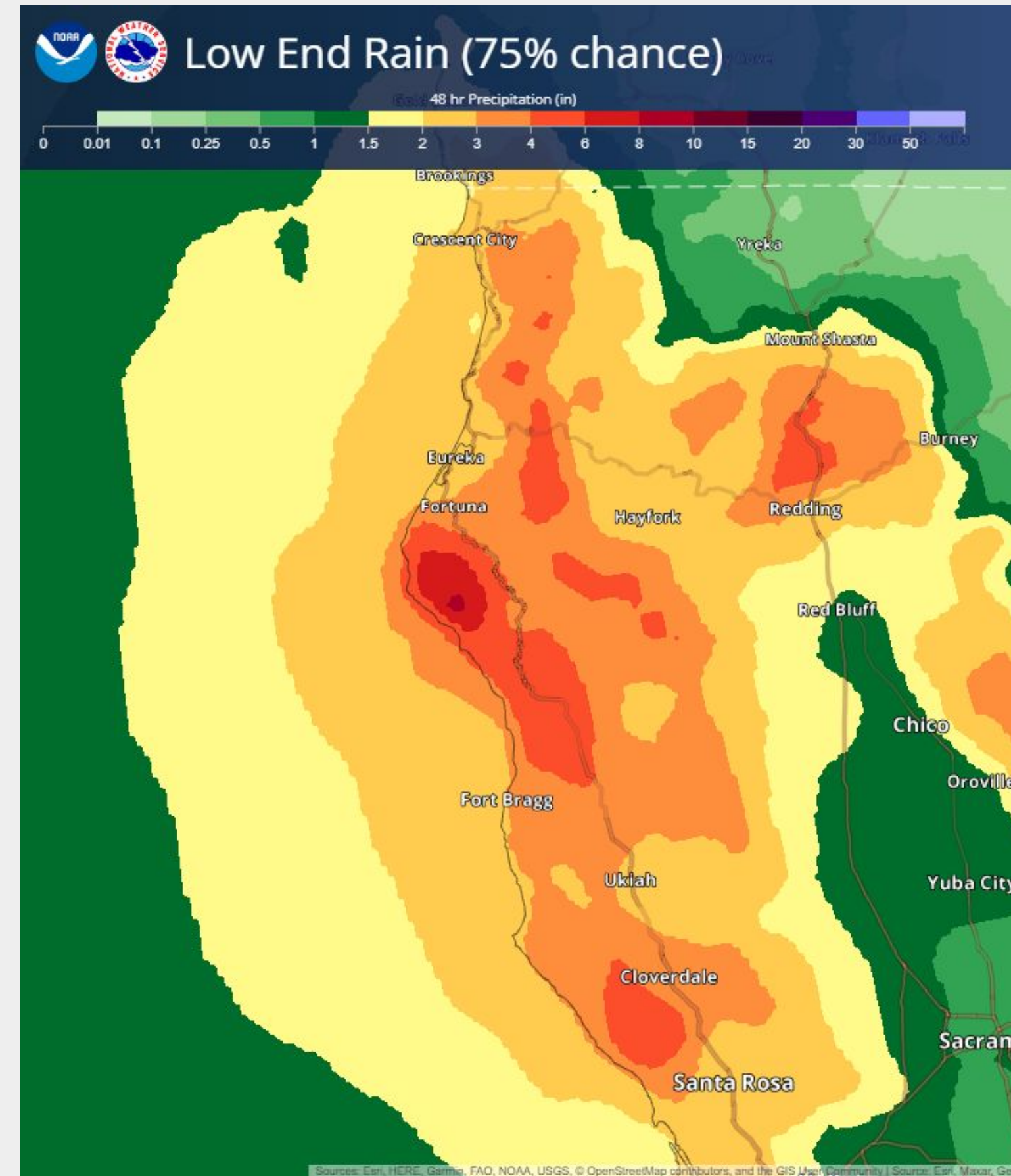
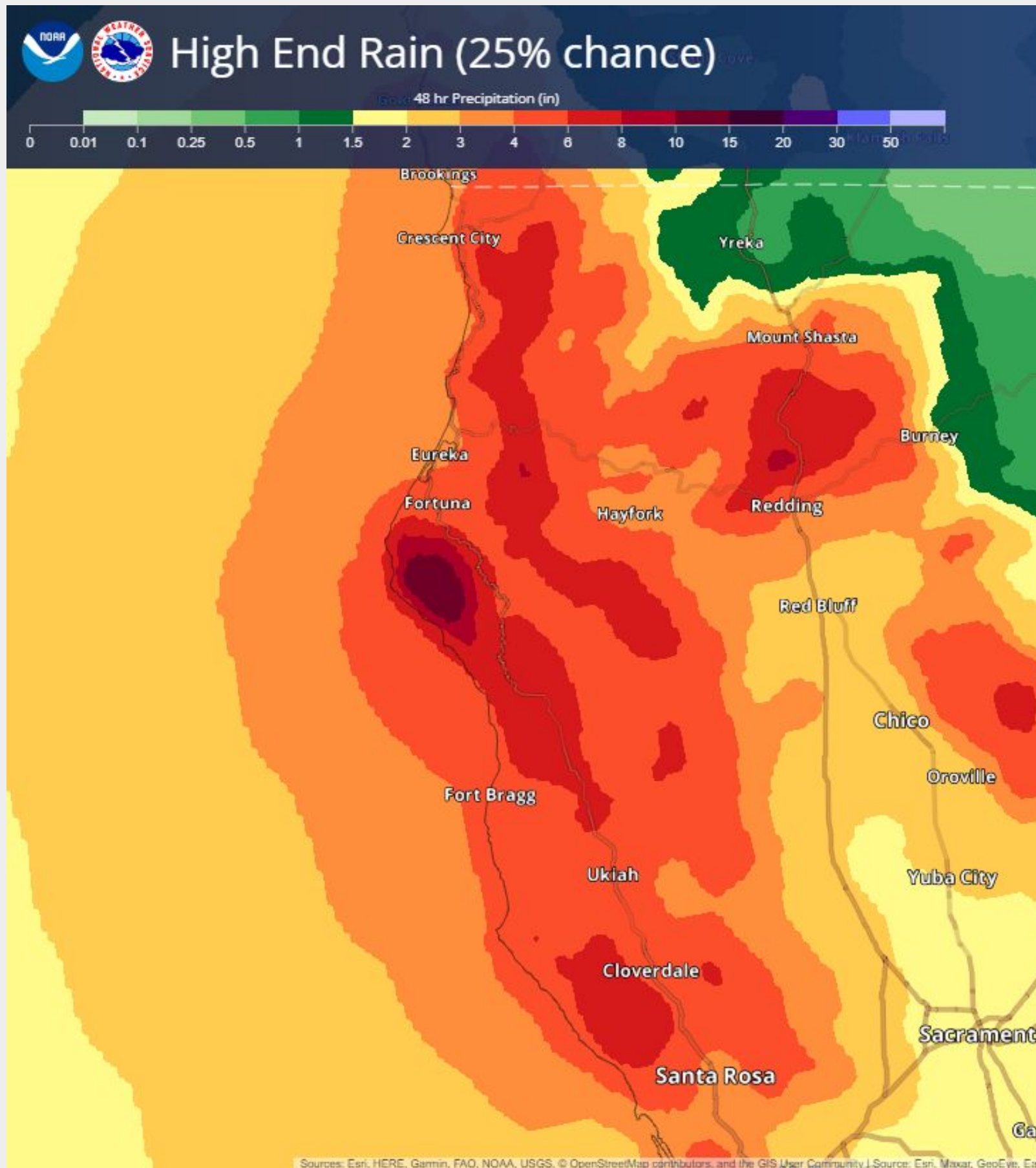
Most Likely Rainfall



Source: Fcst, Maxar, GeoPia, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Rainfall Probabilities

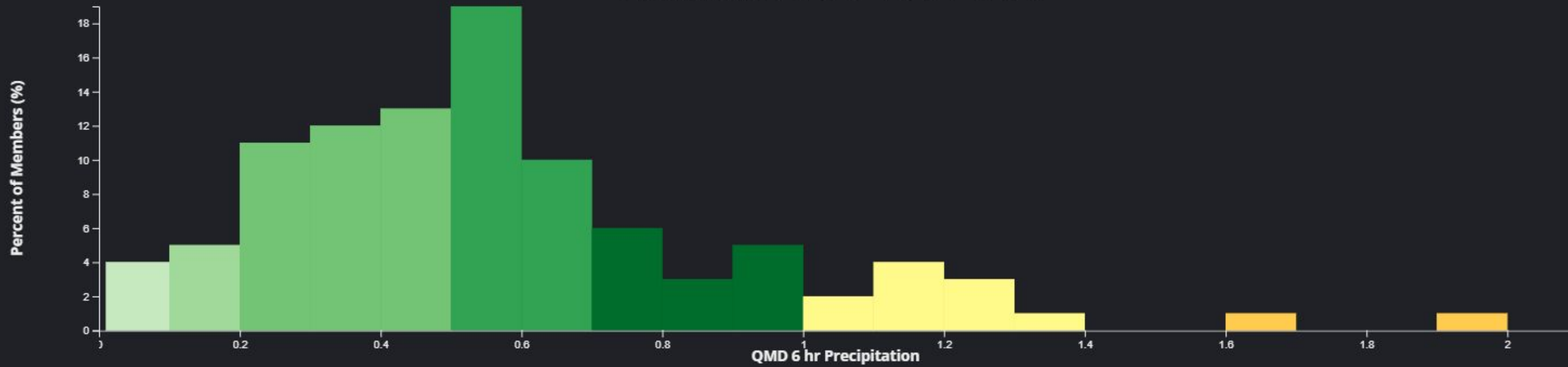
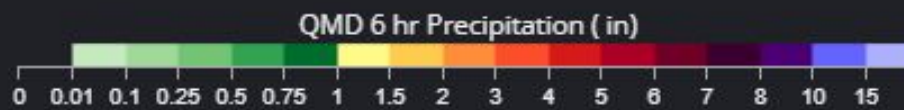
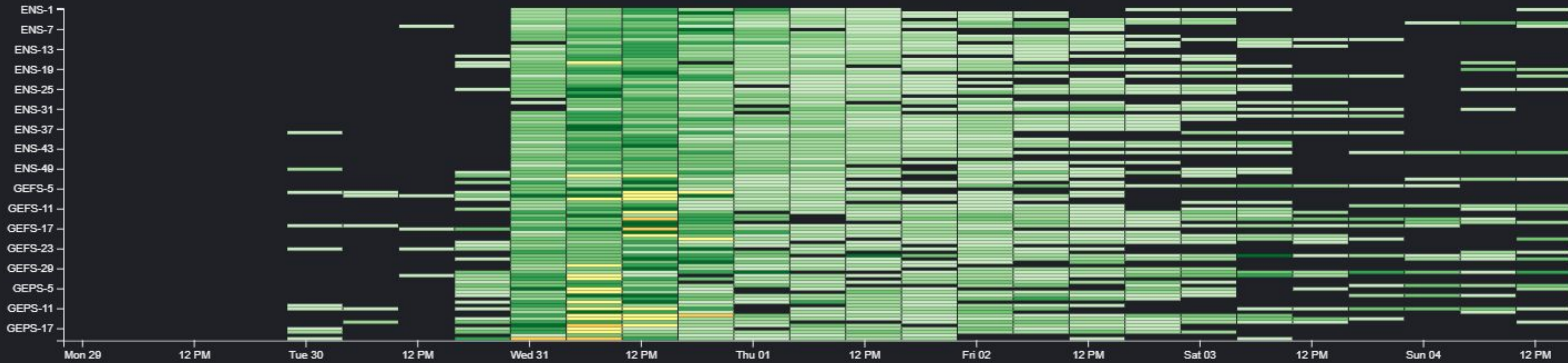




Rain in Crescent City

Sunday 04 pm PST, January 28, 2024

Box Whiskers: 5th, 25th, 75th, & 95th



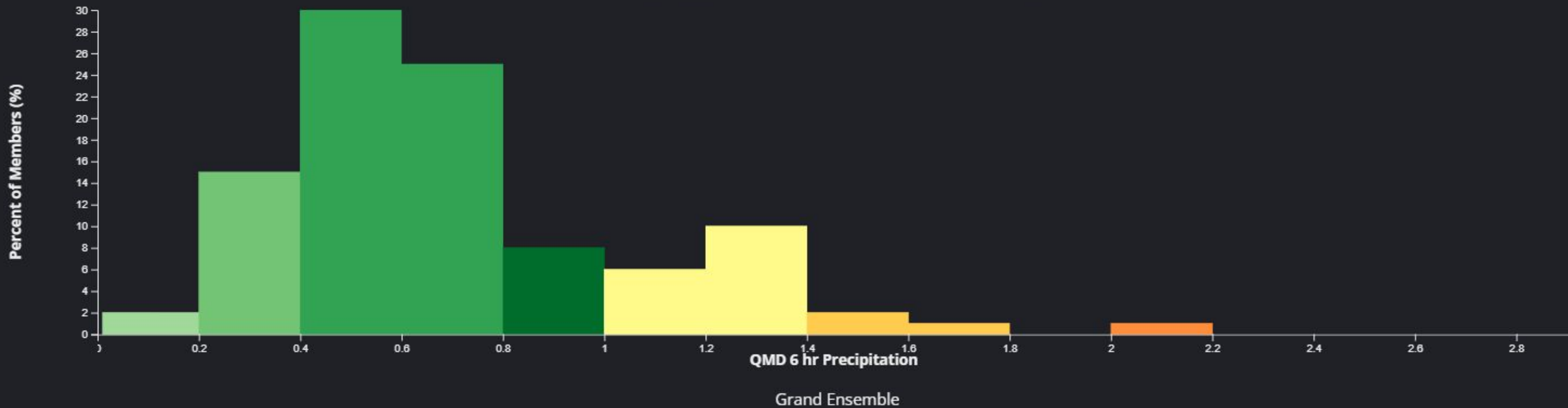
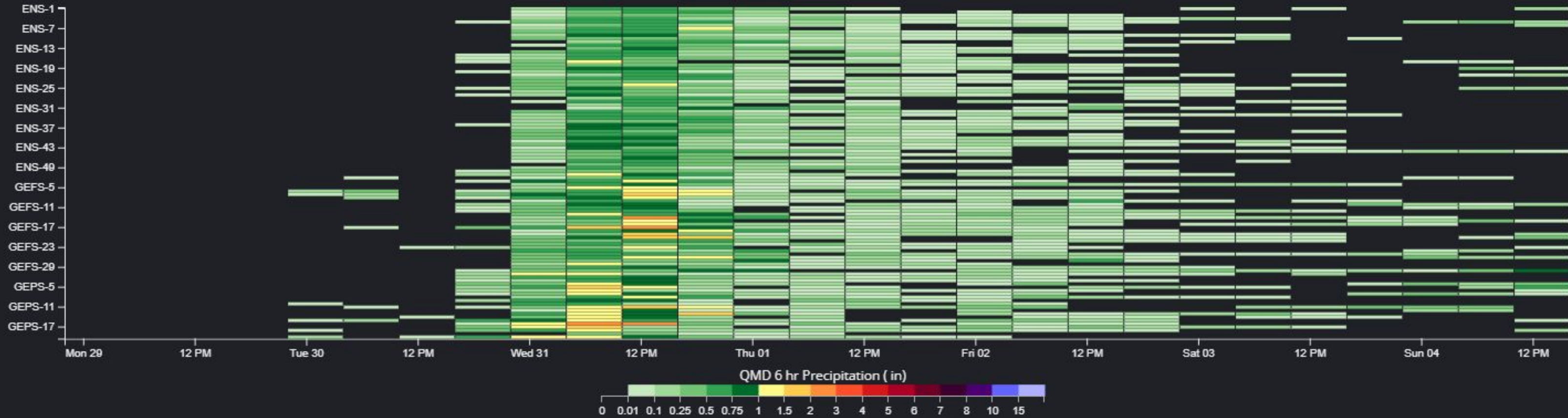
Grand Ensemble



Rain in Eureka

Sunday 04 pm PST, January 28, 2024

Box Whiskers: 5th, 25th, 75th, & 95th

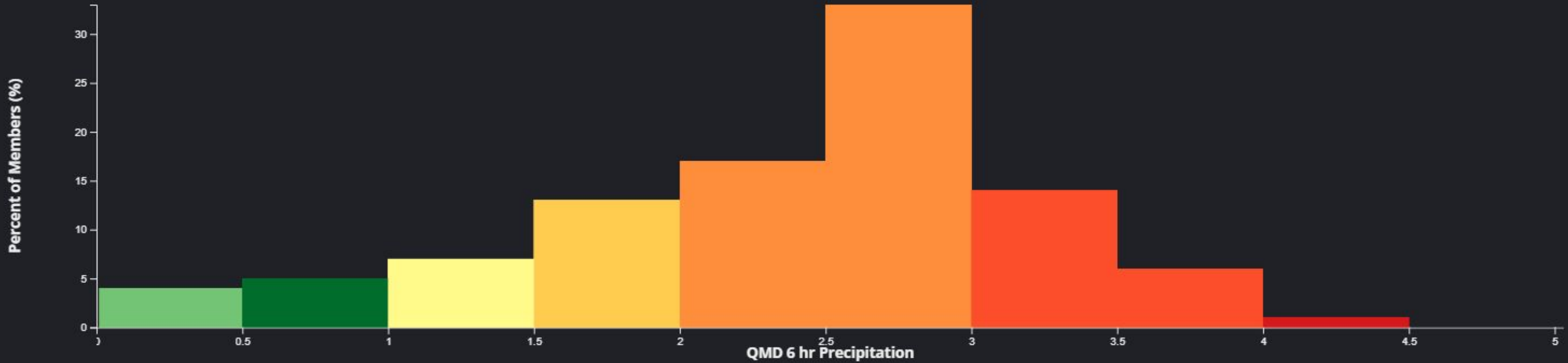
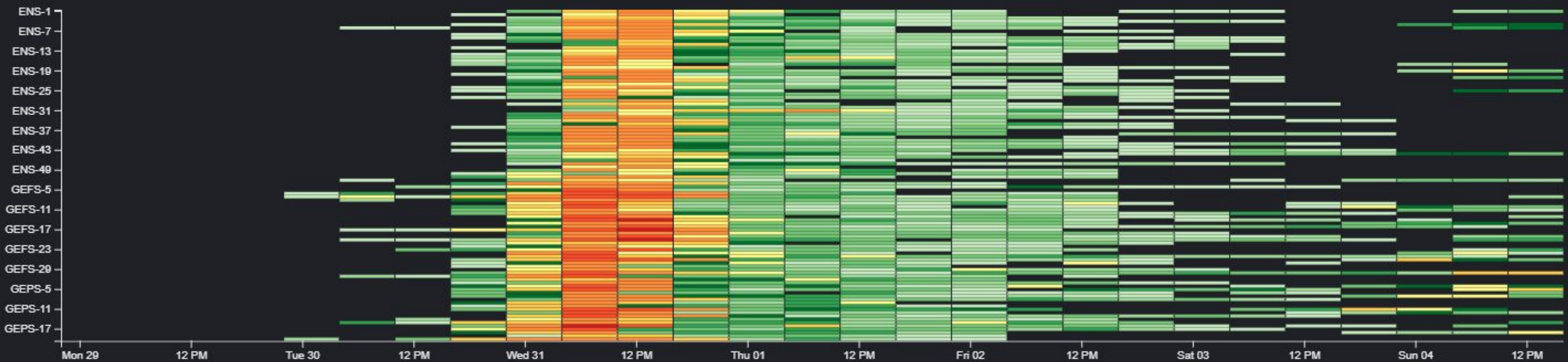




Rain in King Range

Sunday 04 pm PST, January 28, 2024

Box Whiskers: 5th, 25th, 75th, & 95th



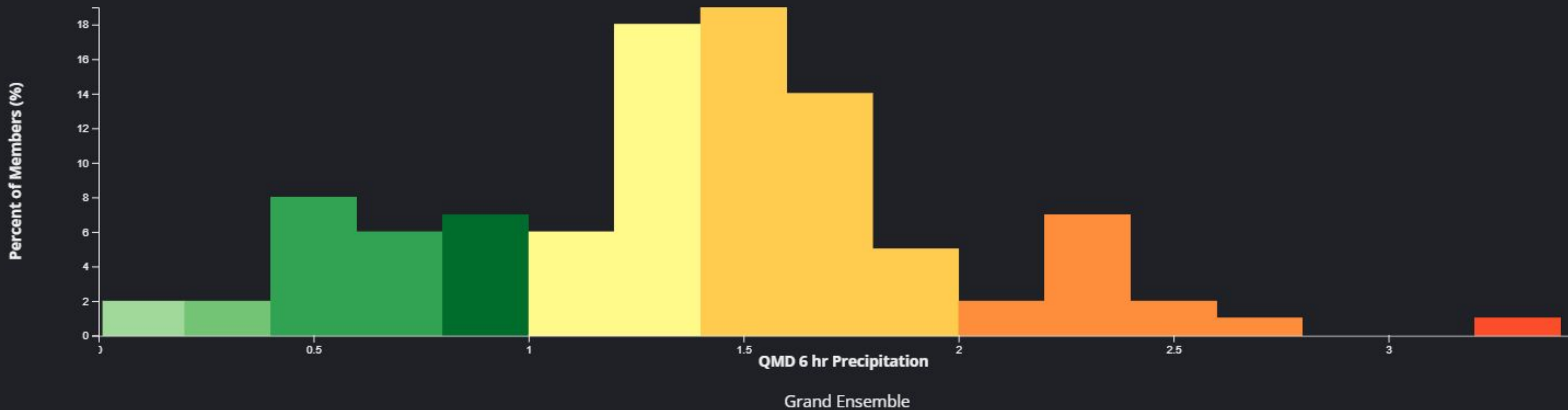
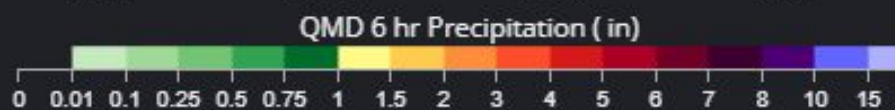
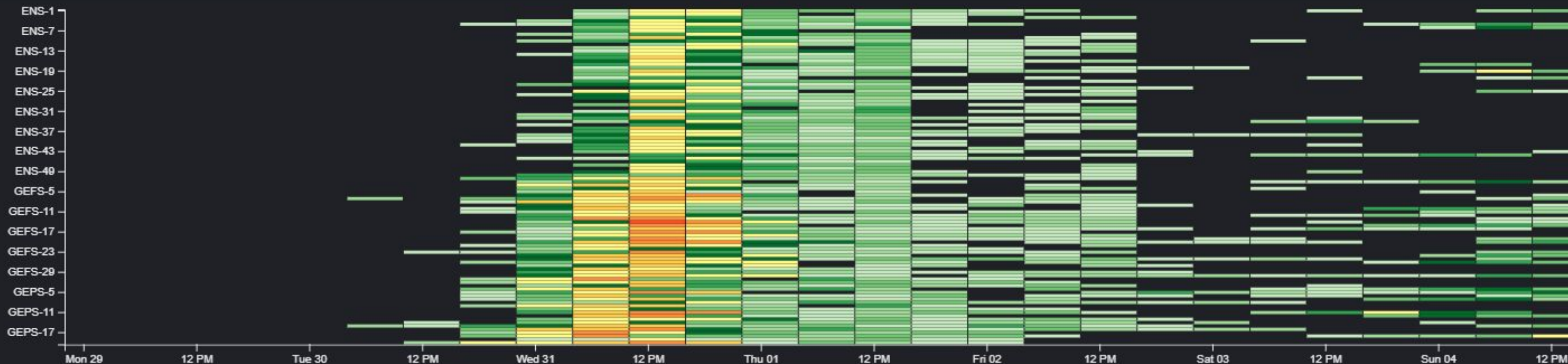
Grand Ensemble



Rain in Laytonville

Sunday 04 pm PST, January 28, 2024

Box Whiskers: 5th, 25th, 75th, & 95th

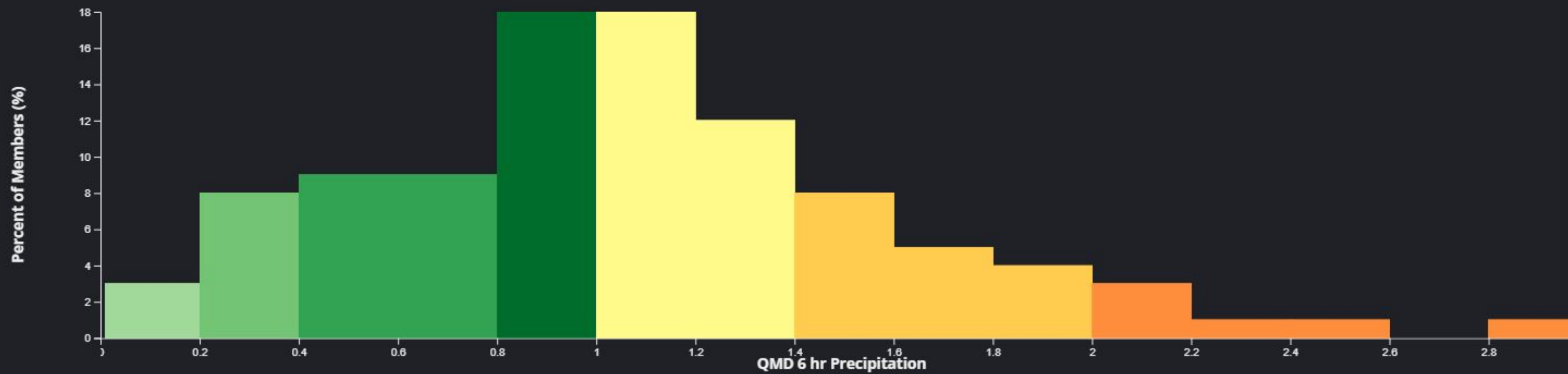
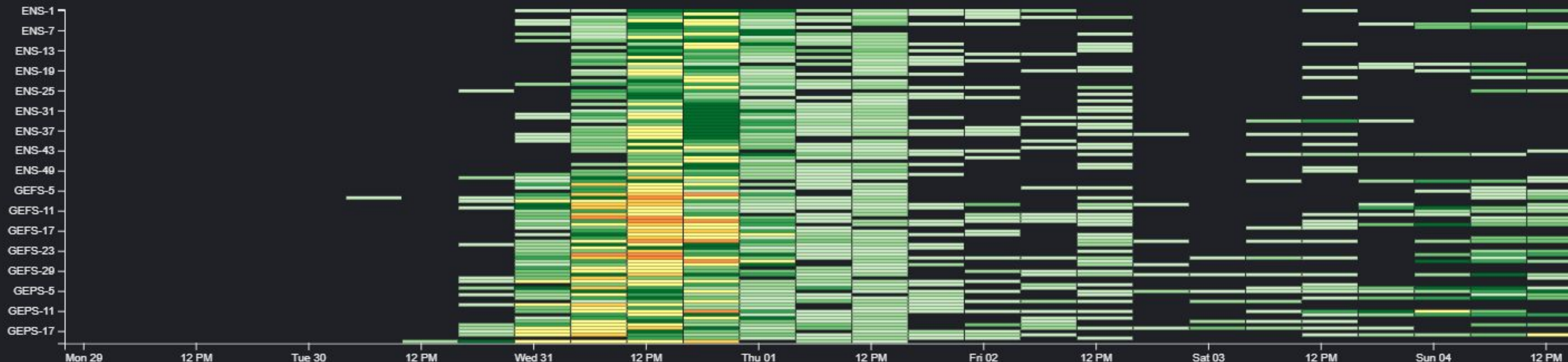




Rain in Ukiah

Sunday 04 pm PST, January 28, 2024

Box Whiskers: 5th, 25th, 75th, & 95th



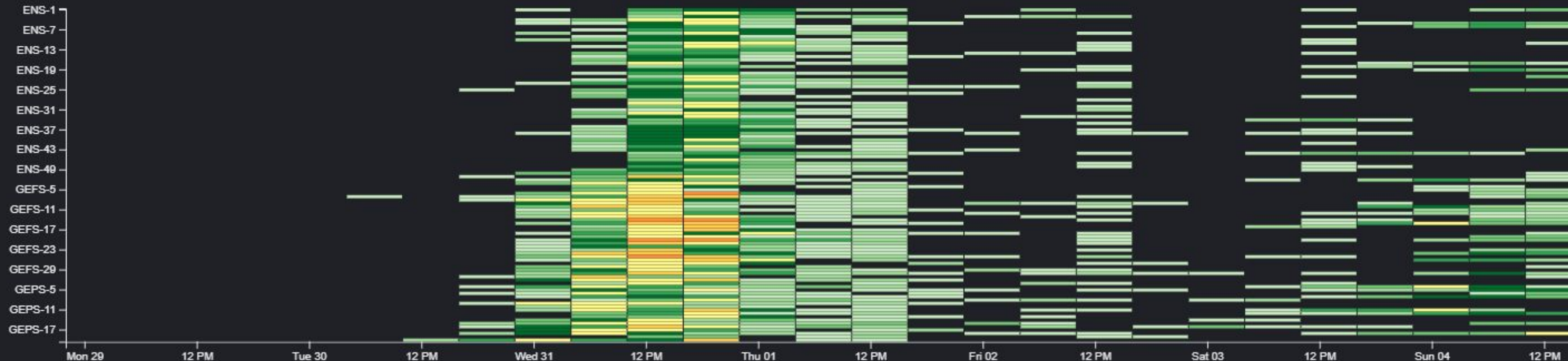
Grand Ensemble



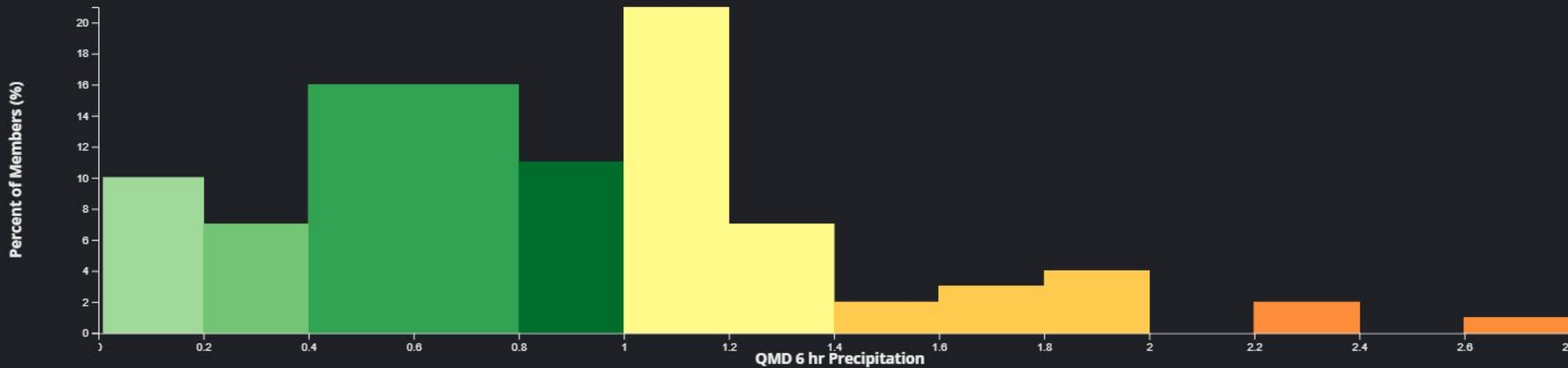
Rain in Lakeport

Sunday 04 pm PST, January 28, 2024

Box Whiskers: 5th, 25th, 75th, & 95th



QMD 6 hr Precipitation (in)



Grand Ensemble



Rain Impacts

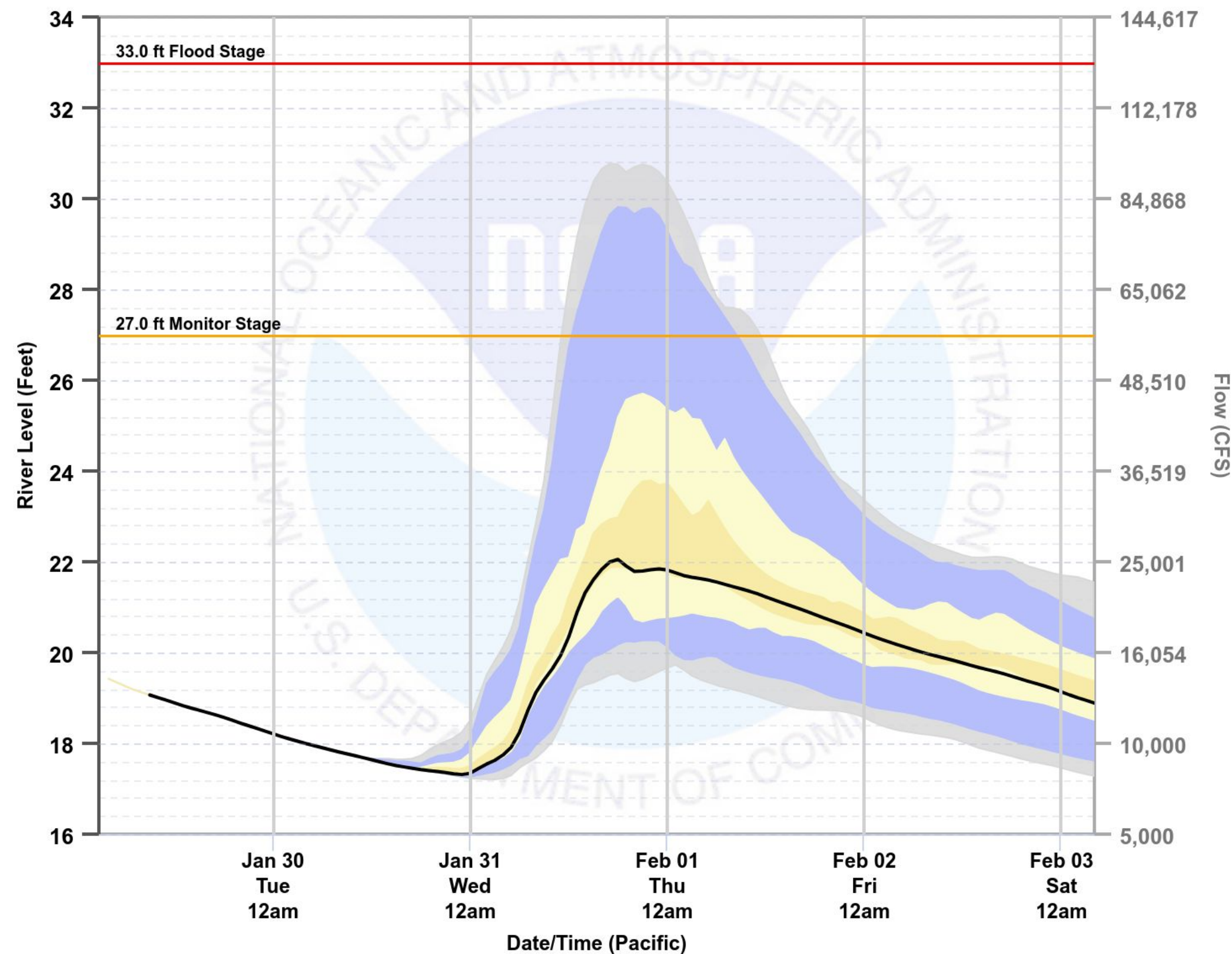
- **Enhanced risk of rock and mudslides on area roadways**
- **Increased risk of small stream and urban flooding, especially in Southern Humboldt, Lake, and Mendocino**



Smith River at Doctor Fine Bridge

Hourly River Level Probabilities
SMITH RIVER - DOCTOR FINE BRIDGE (FTDC1)

Created: 01/29/2024 at 8:38 AM PST



Chance of River Level Exceedance (Feet)
Forecast Period: 01/29/2024 4 am - 02/03/2024 4 am

Max	30.77	
5%	29.81	
10%	29.73	
25%	26.78	27.0 ft 21% Monitor Stage
50%	23.79	
75%	21.50	
90%	20.78	
95%	20.29	
Min	19.95	

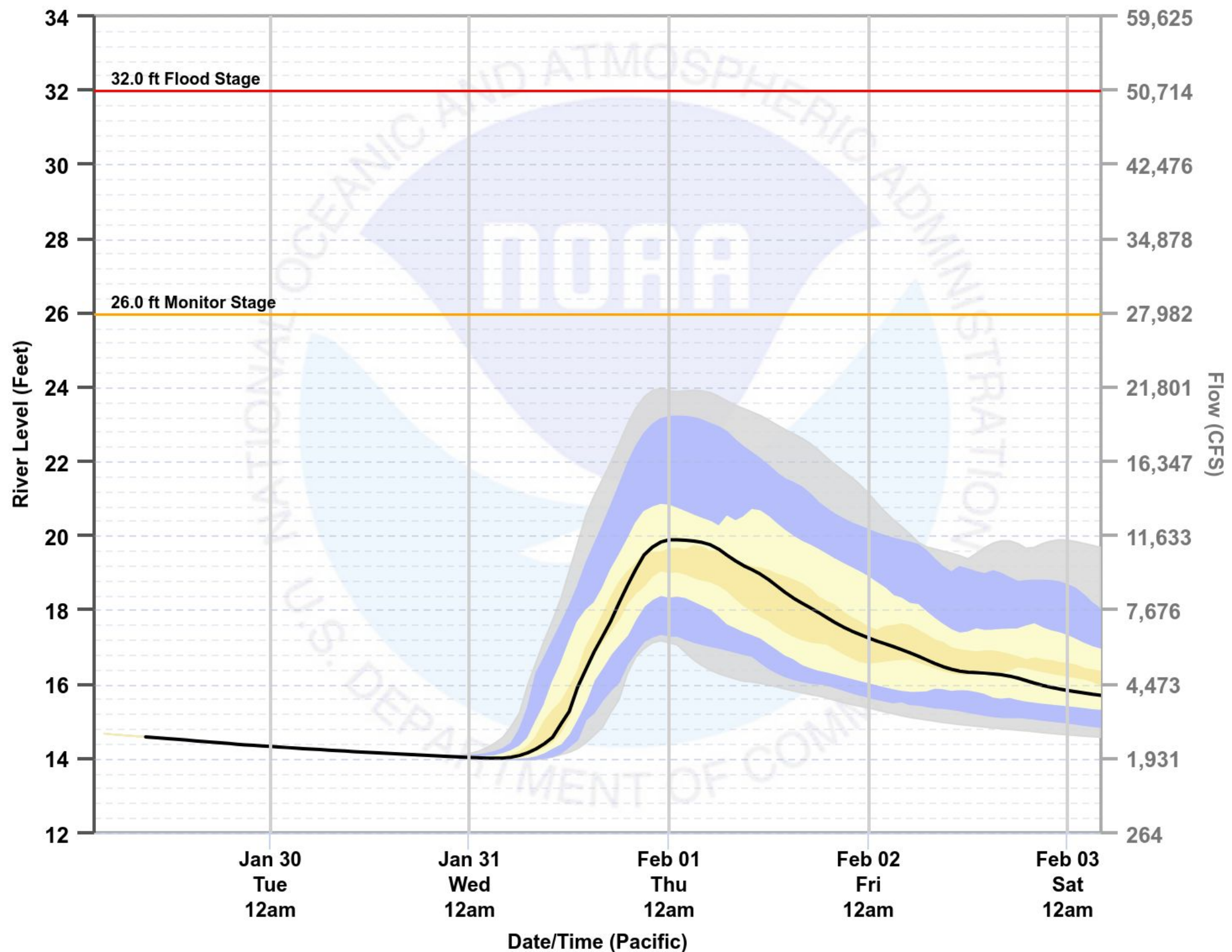
- Official Forecast (Deterministic)
- Ensemble Mean
- Model Traces
- Hourly Probabilities**
- 0-5% chance
- 5-25% chance
- 25-40% chance
- 40-60% chance



Redwood Creek at Orick

Hourly River Level Probabilities REDWOOD CREEK - ORICK (ORIC1)

Created: 01/29/2024 at 8:38 AM PST



Chance of River Level Exceedance (Feet)
Forecast Period: 01/29/2024 4 am - 02/03/2024 4 am

Max	23.97
5%	23.22
10%	22.48
25%	21.19
50%	19.87
75%	18.47
90%	17.85
95%	17.40
Min	17.18

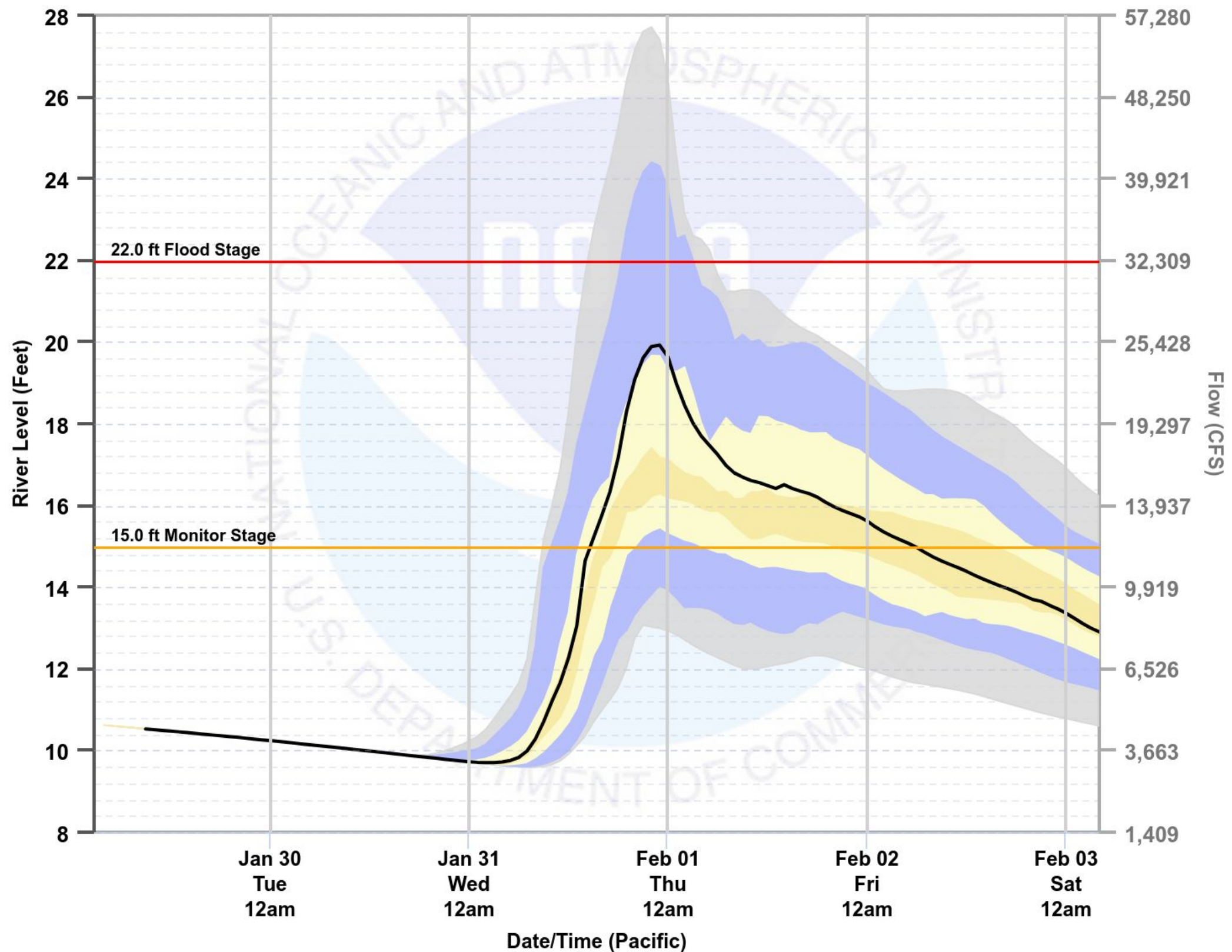
- Official Forecast (Deterministic)
 - Ensemble Mean
 - Model Traces
- Hourly Probabilities**
- 0-5% chance
 - 5-25% chance
 - 25-40% chance
 - 40-60% chance



Mad River at Arcata

Hourly River Level Probabilities MAD RIVER - ARCATA (ARCC1)

Created: 01/29/2024 at 8:38 AM PST



Chance of River Level Exceedance (Feet)
Forecast Period: 01/29/2024 4 am - 02/03/2024 4 am

Max	27.71	
5%	24.40	
10%	23.21	
25%	20.06	Flood Stage 22.0 ft 21%
50%	17.41	
75%	15.71	
90%	14.98	15.0 ft 88% Monitor Stage
95%	14.05	
Min	13.17	

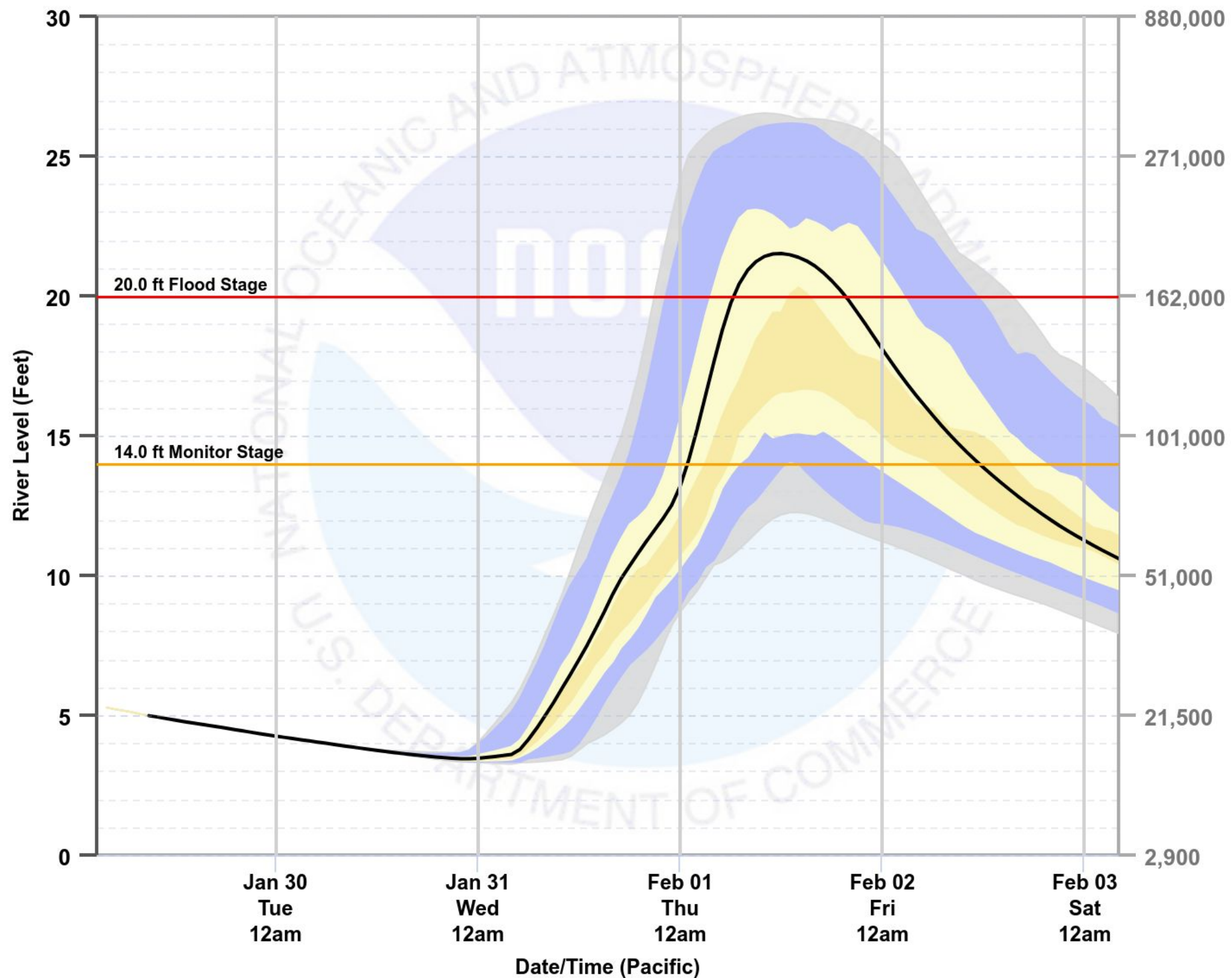
- Official Forecast (Deterministic)
 - Ensemble Mean
 - Model Traces
- Hourly Probabilities**
- 0-5% chance
 - 5-25% chance
 - 25-40% chance
 - 40-60% chance



Eel River at Fernbridge

Hourly River Level Probabilities EEL RIVER - FERNBRIDGE (FRNC1)

Created: 01/29/2024 at 8:38 AM PST



Chance of River Level Exceedance (Feet)
Forecast Period: 01/29/2024 4 am - 02/03/2024 4 am

Max	26.53	
5%	26.17	
10%	25.58	
25%	23.09	Flood Stage 20.0 ft 42%
50%	17.83	
75%	15.48	
90%	14.44	
95%	14.15	14.0 ft 95% Monitor Stage
Min	12.26	

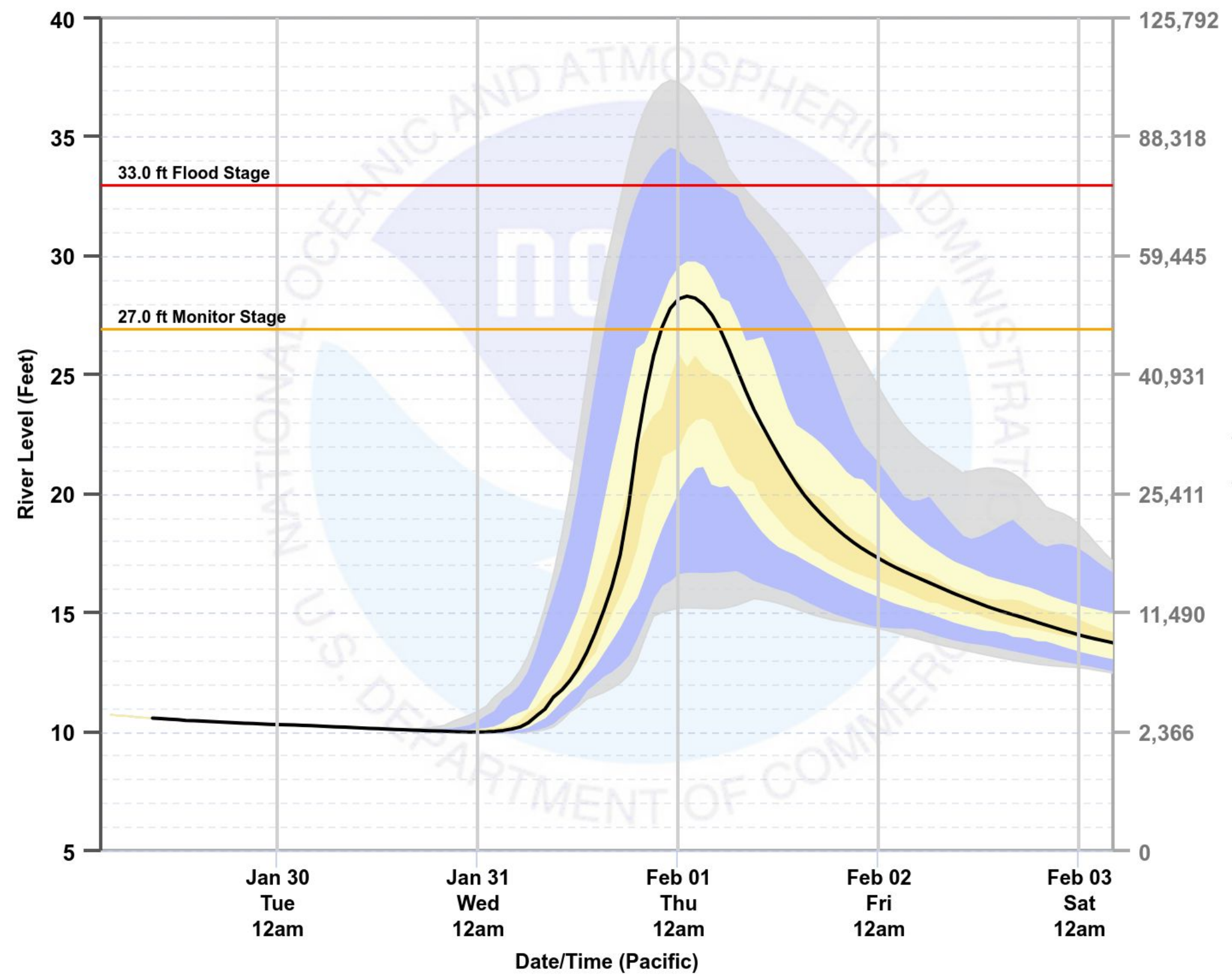
- Official Forecast (Deterministic)
- Ensemble Mean
- Model Traces
- Hourly Probabilities**
 - 0-5% chance
 - 5-25% chance
 - 25-40% chance
 - 40-60% chance



Eel River at Miranda

Hourly River Level Probabilities SOUTH FORK EEL RIVER - MIRANDA (MRNC1)

Created: 01/29/2024 at 8:38 AM PST



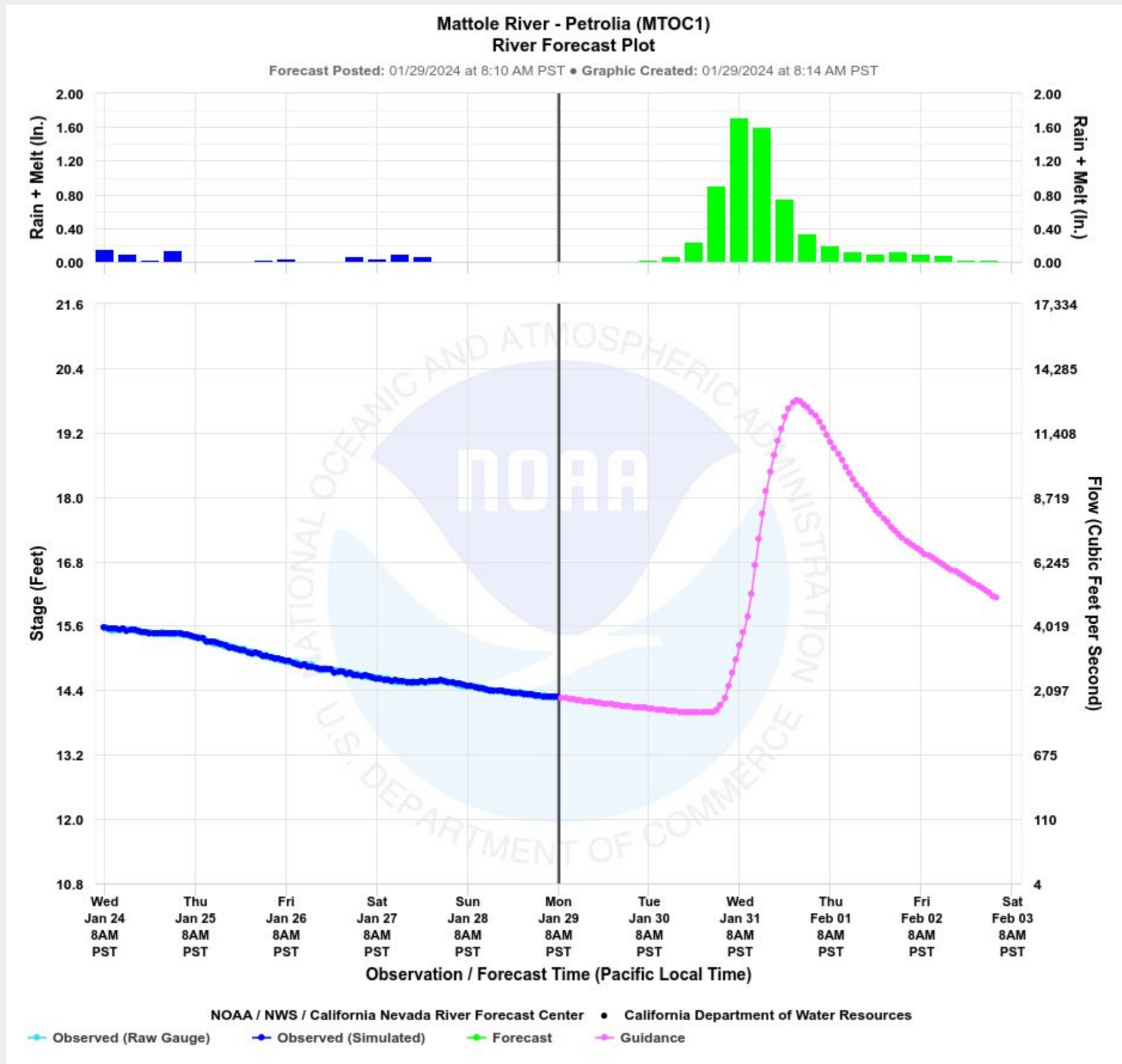
Chance of River Level Exceedance (Feet)
Forecast Period: 01/29/2024 4 am - 02/03/2024 4 am

Max	37.37	
5%	34.67	
10%	33.82	Flood Stage 33.0 ft 16%
25%	30.19	
50%	26.18	27.0 ft 42% Monitor Stage
75%	21.33	
90%	19.54	
95%	16.80	
Min	15.71	

- Official Forecast (Deterministic)
- Ensemble Mean
- Model Traces
- Hourly Probabilities**
 - 0-5% chance
 - 5-25% chance
 - 25-40% chance
 - 40-60% chance



Mattole River at Petrolia

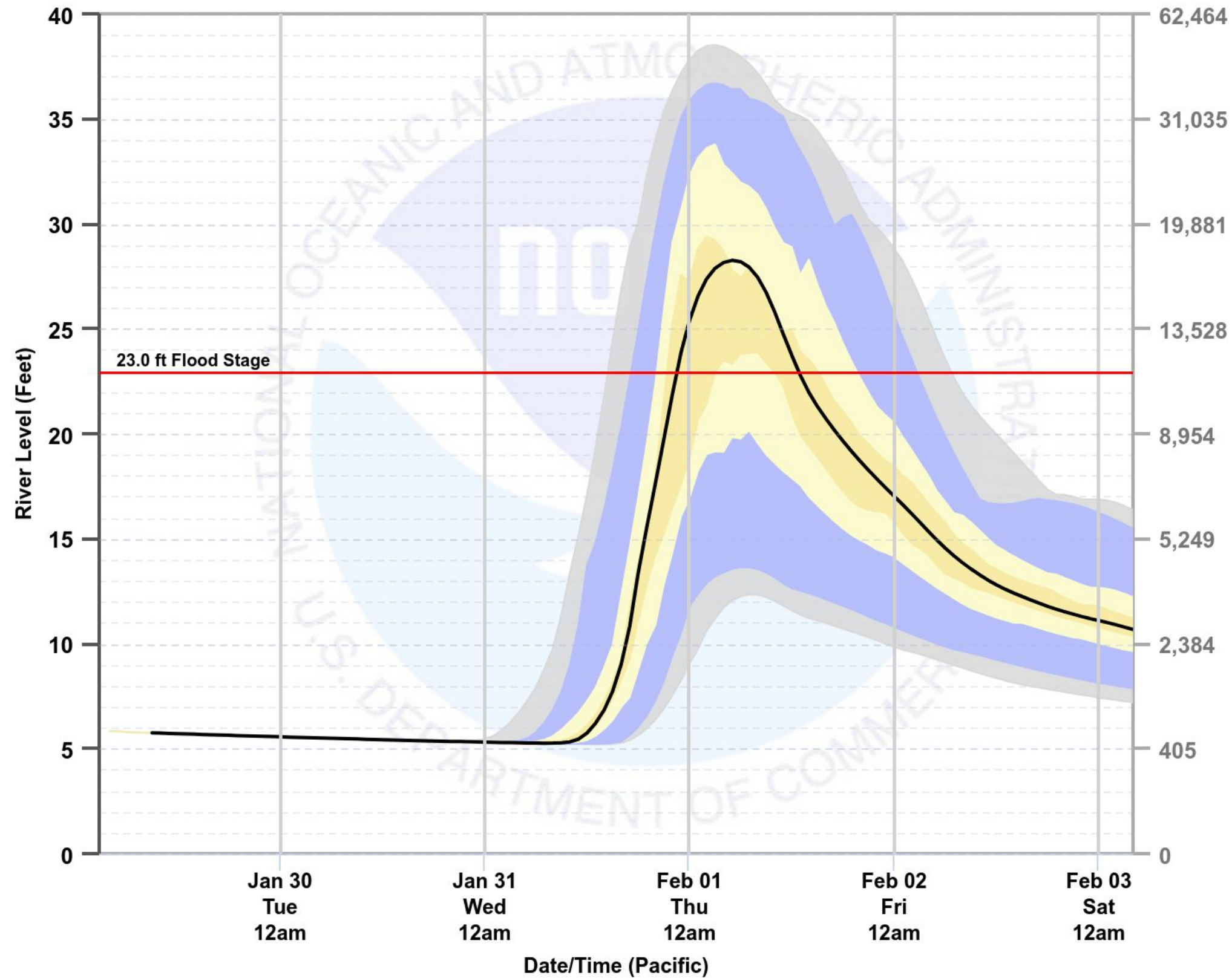




Navarro River at Navarro

Hourly River Level Probabilities NAVARRO RIVER - NAVARRO (NVRC1)

Created: 01/29/2024 at 8:50 AM PST



Chance of River Level Exceedance (Feet)
Forecast Period: 01/29/2024 4 am - 02/03/2024 4 am

Max	38.52
5%	36.70
10%	36.40
25%	34.53
50%	29.45
75%	21.51
90%	14.50
95%	13.97
Min	12.34

Flood Stage 23.0 ft 72%

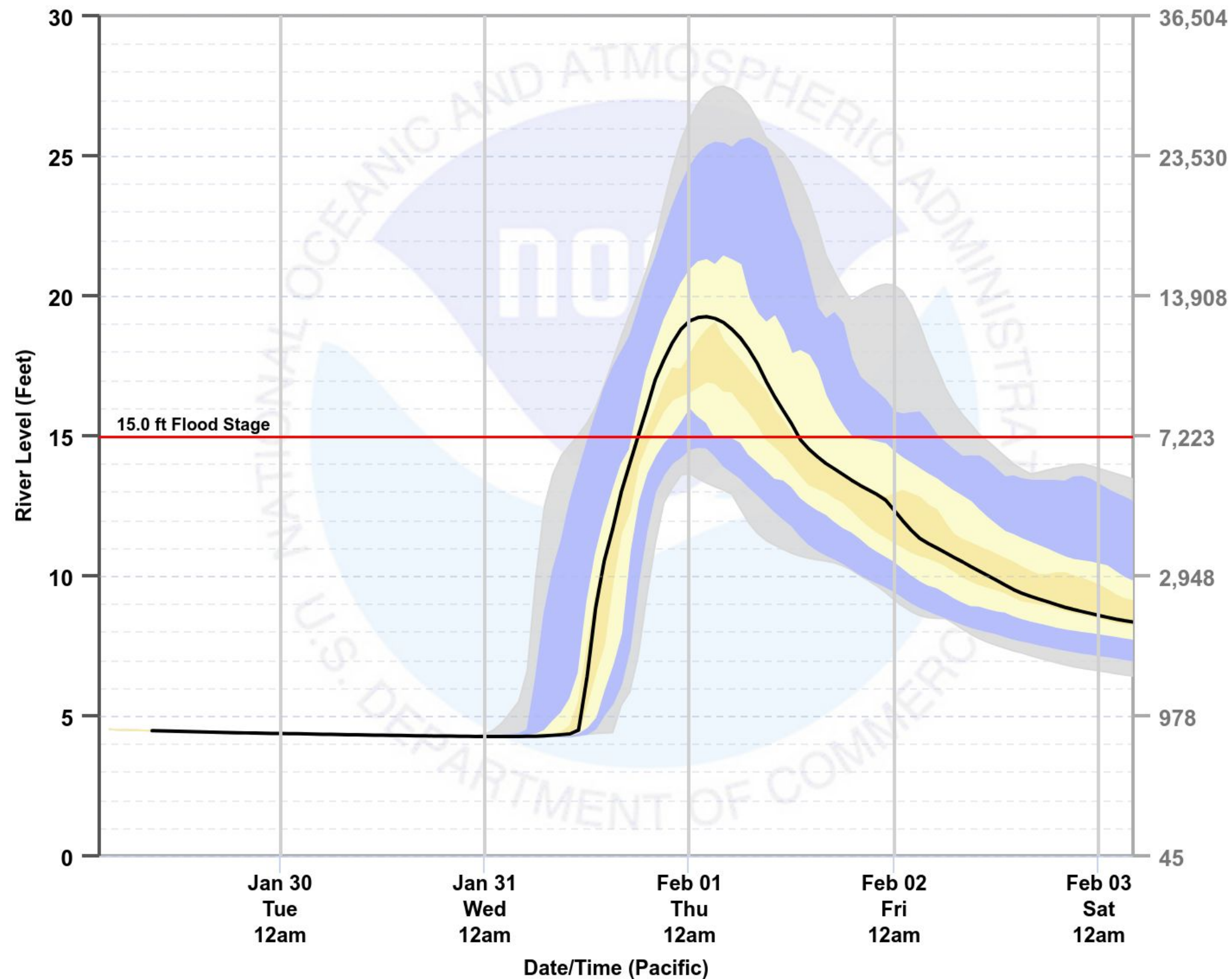
- Official Forecast (Deterministic)
 - Ensemble Mean
 - Model Traces
- Hourly Probabilities**
- 0-5% chance
 - 5-25% chance
 - 25-40% chance
 - 40-60% chance



Russian River at Hopland

Hourly River Level Probabilities RUSSIAN RIVER - HOPLAND (HOPLC1)

Created: 01/29/2024 at 8:50 AM PST



Chance of River Level Exceedance (Feet)
Forecast Period: 01/29/2024 4 am - 02/03/2024 4 am

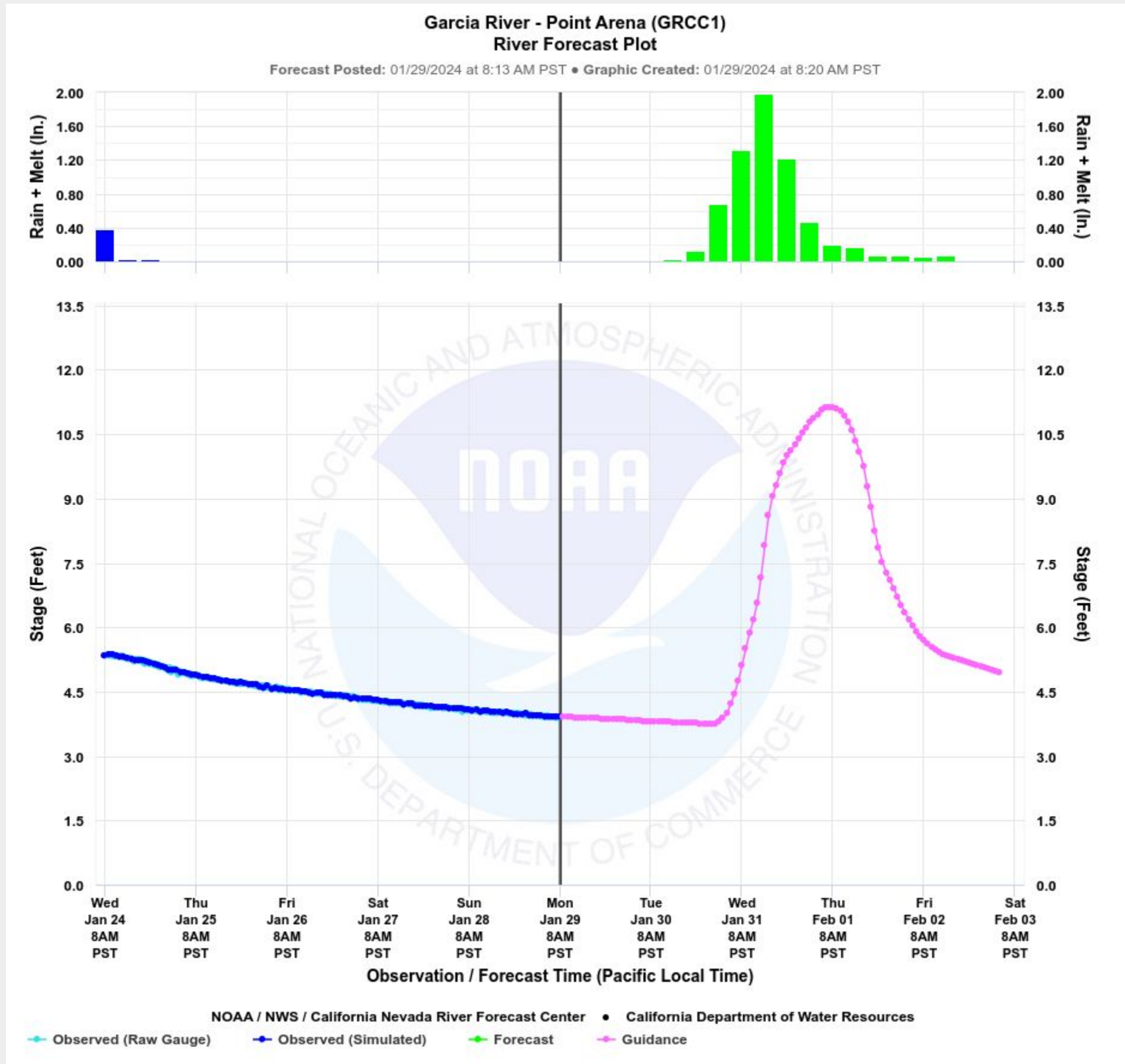
Max	27.48
5%	25.62
10%	25.45
25%	21.89
50%	18.25
75%	16.47
90%	15.18
95%	14.77
Min	13.89

Flood Stage 15.0 ft 91%

- Official Forecast (Deterministic)
- Ensemble Mean
- Model Traces
- Hourly Probabilities
 - 0-5% chance
 - 5-25% chance
 - 25-40% chance
 - 40-60% chance



Garcia River at Point Arena

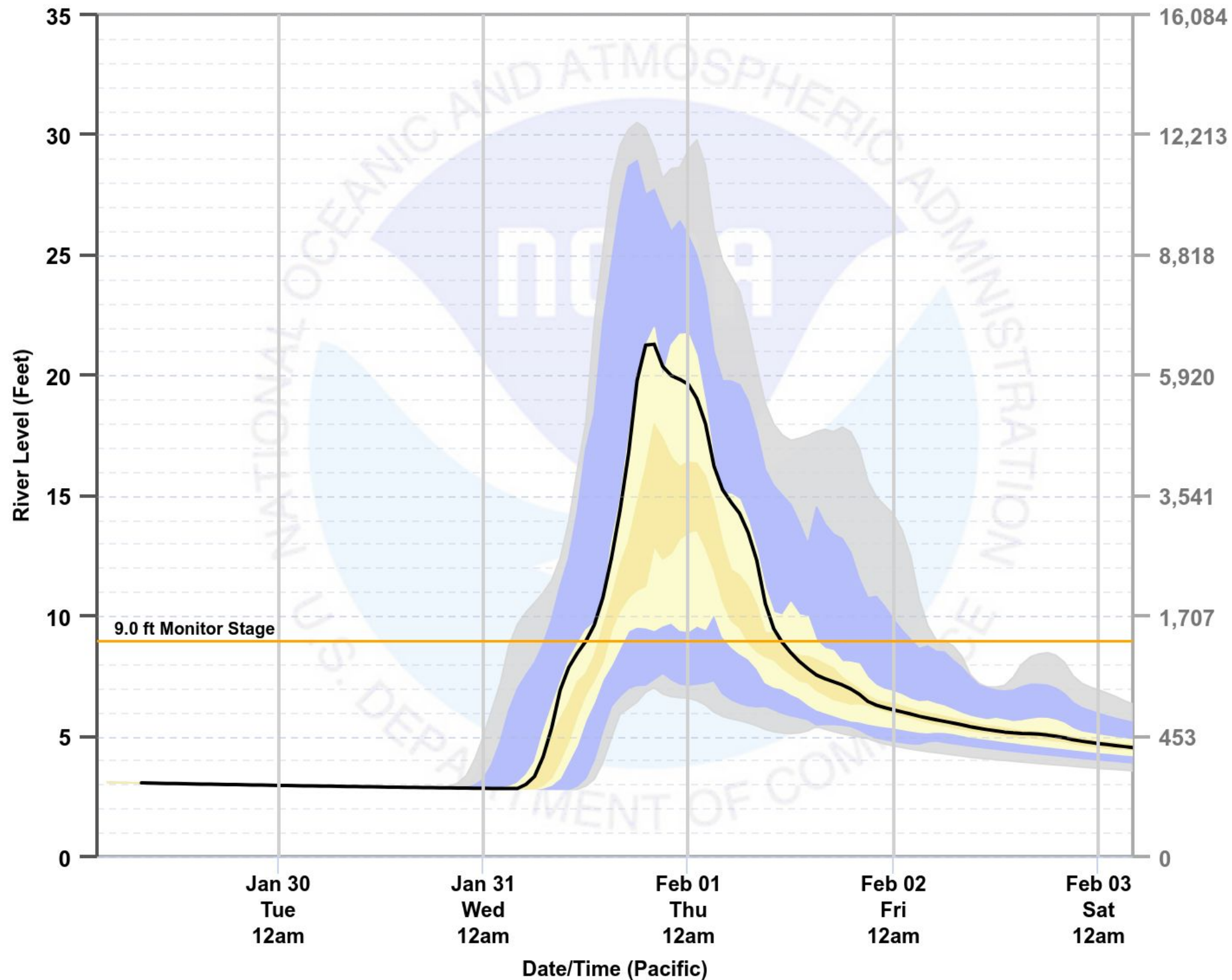




Scotts Creek at Lakeport

Hourly River Level Probabilities SCOTTS CREEK - LAKEPORT (SKPC1)

Created: 01/29/2024 at 8:55 AM PST



Chance of River Level Exceedance (Feet)
Forecast Period: 01/29/2024 4 am - 02/03/2024 4 am

Max	30.52
5%	29.36
10%	28.64
25%	24.28
50%	18.81
75%	12.98
90%	9.03
95%	8.46
Min	7.13

9.0 ft 91% Monitor Stage

- Official Forecast (Deterministic)
- Ensemble Mean
- Model Traces
- Hourly Probabilities**
 - 0-5% chance
 - 5-25% chance
 - 25-40% chance
 - 40-60% chance

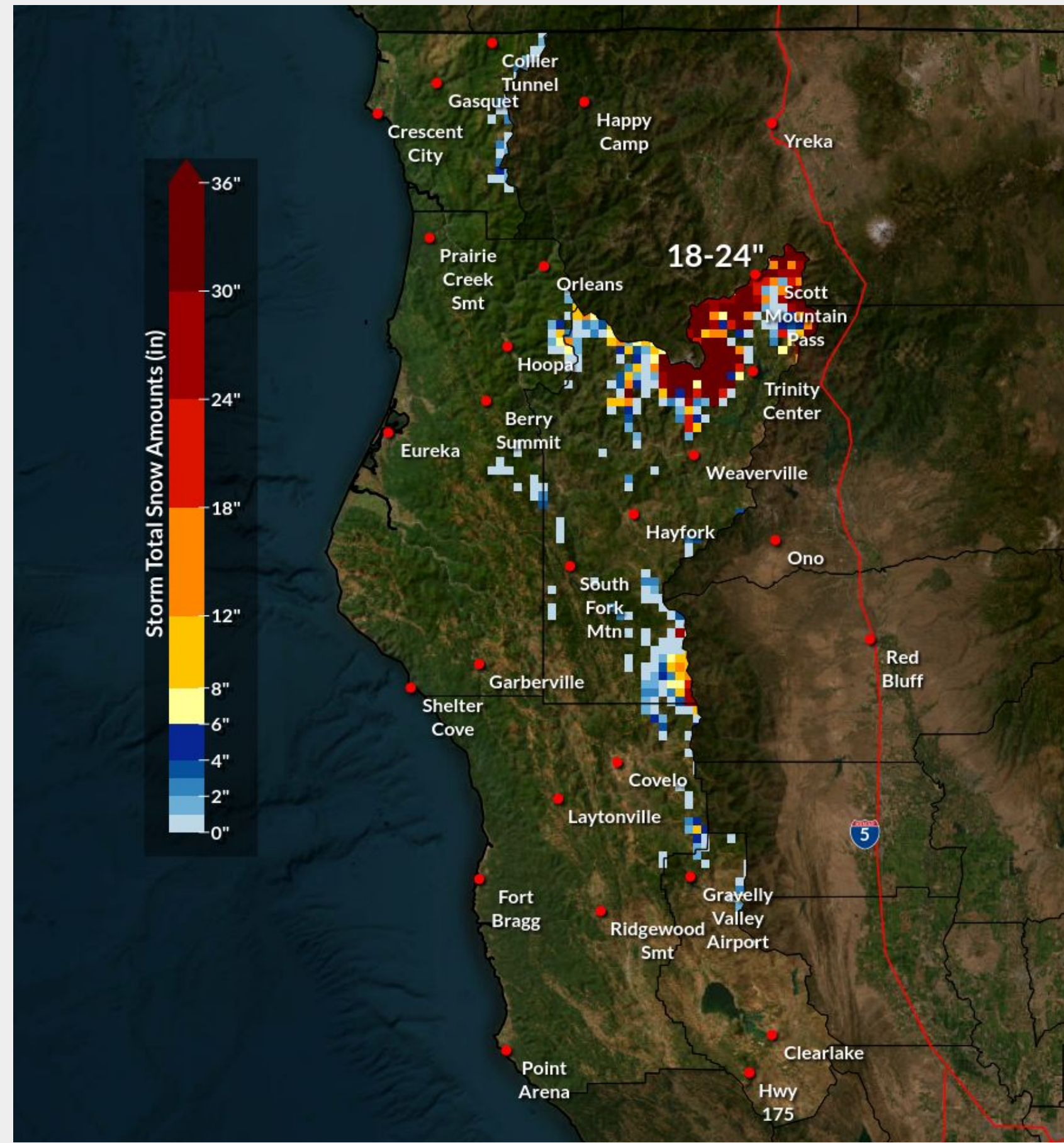


River Flooding Impacts

- **River forecasts can change rapidly, stay tuned to the CNRFC for specific impacts.**
- **Greatest concerns in Lake and Mendocino, more limited concerns in Humboldt.**
- **River flooding will likely peak early Thursday.**

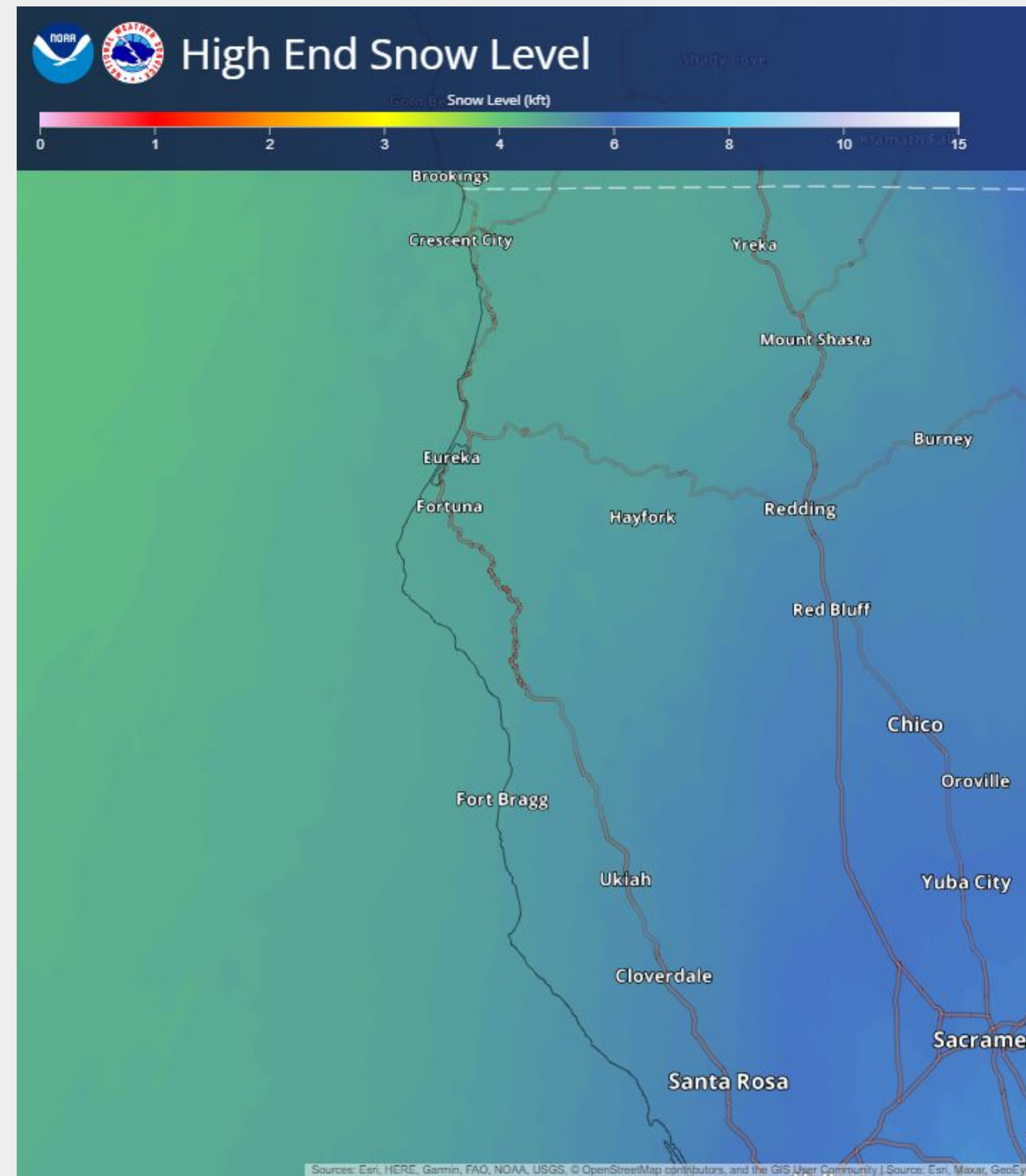
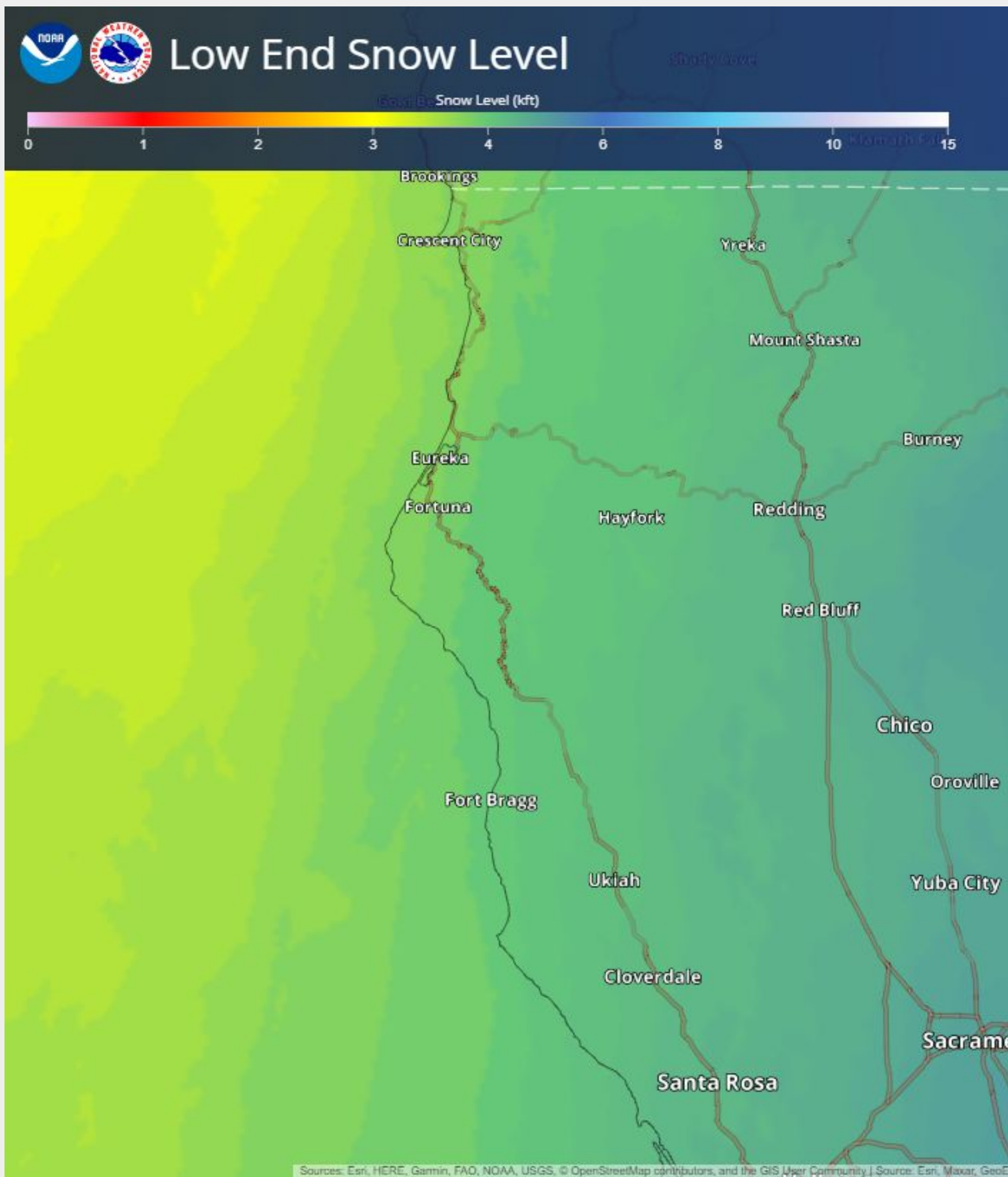


Most Likely Snowfall





Snow Level Probabilities



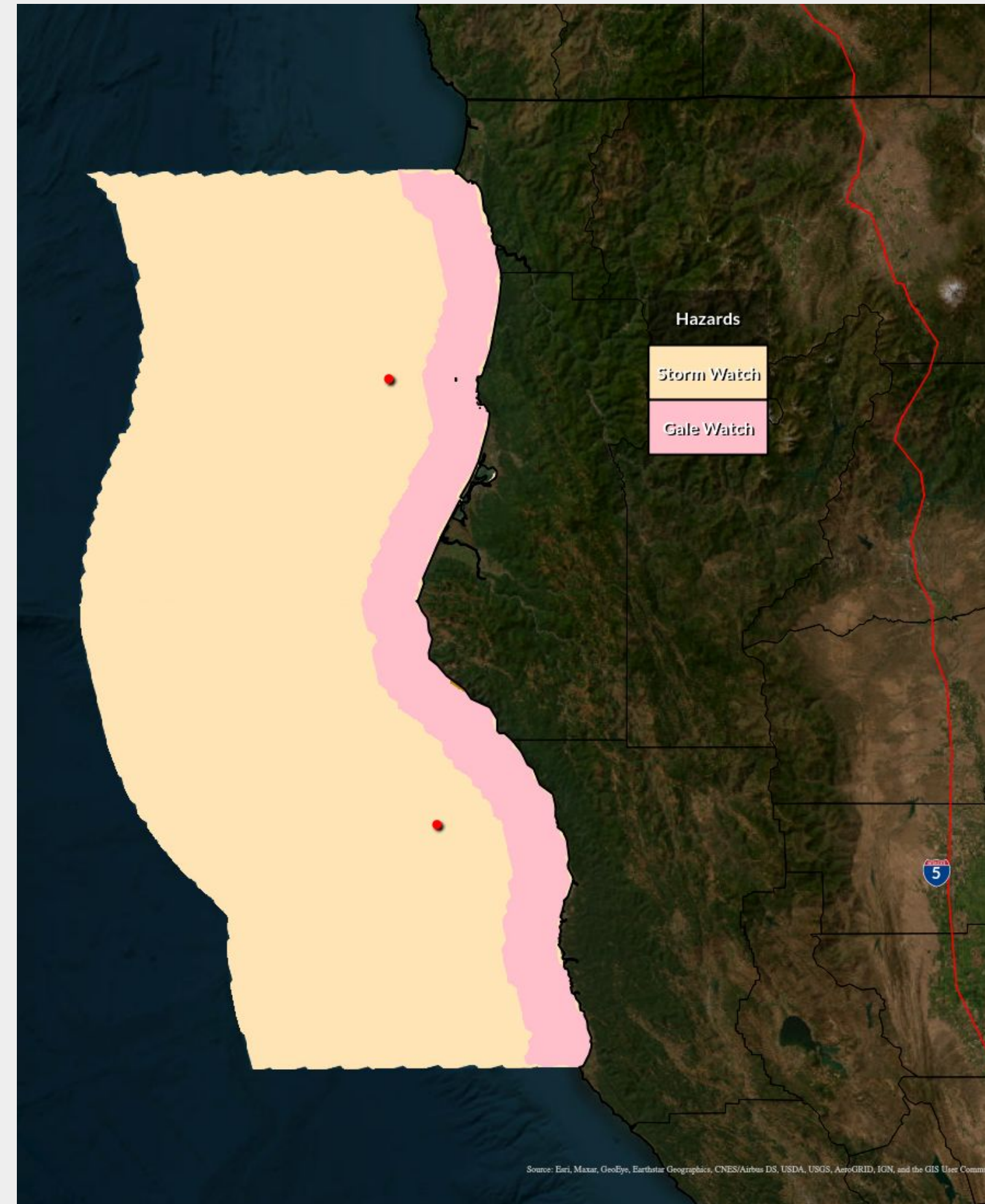
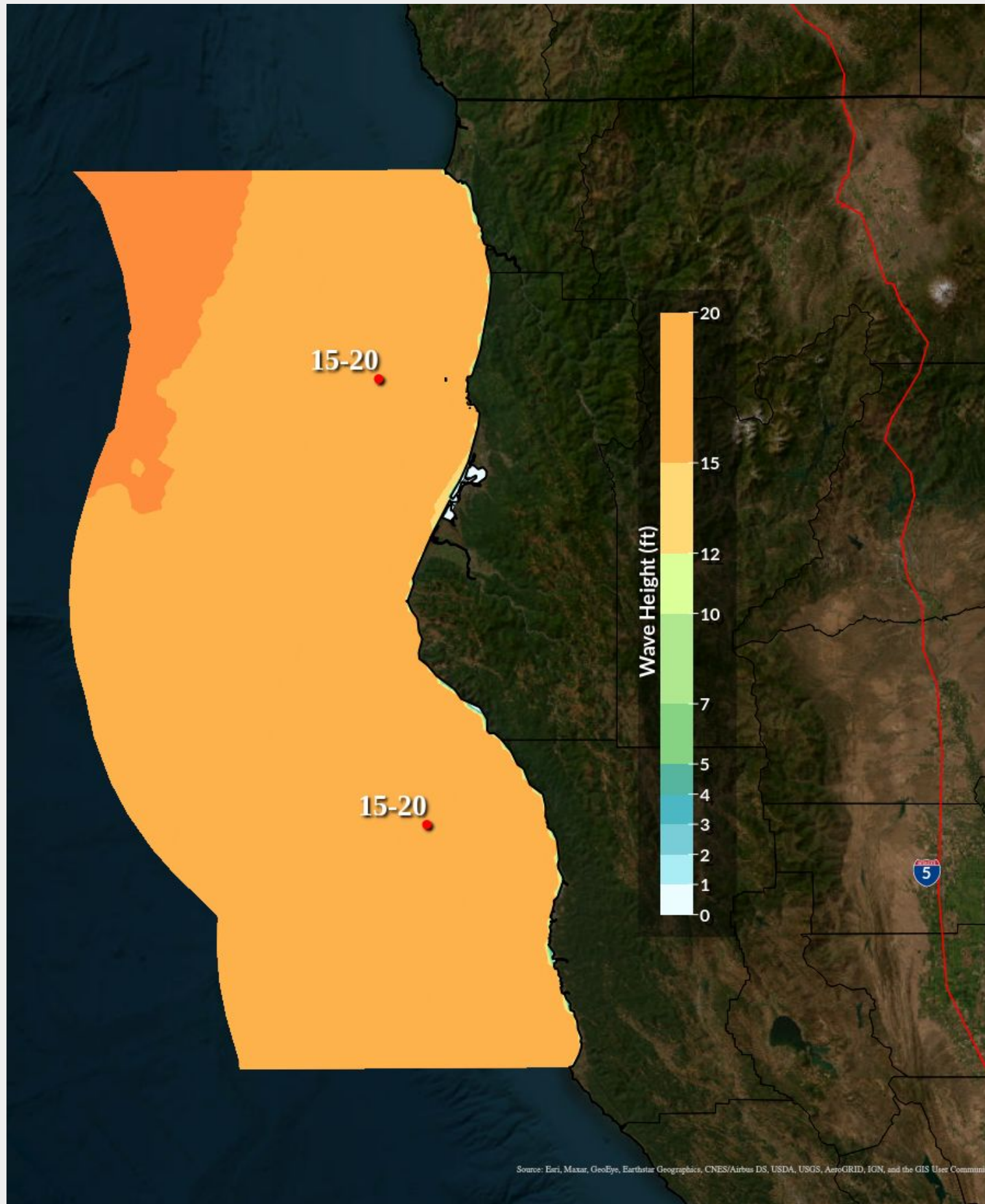


Winter Weather Impacts

- **Snow impacts most likely above 4 kft with 1 to 2 feet.**
- **Snow possible as low as 3 kft in Trinity.**
- **If snow levels drop, 4 to 8 inches of snow possible on high passes of highway 36 and highway 299**
- **Increased risk of chain requirements on high passes.**



Marine Hazards



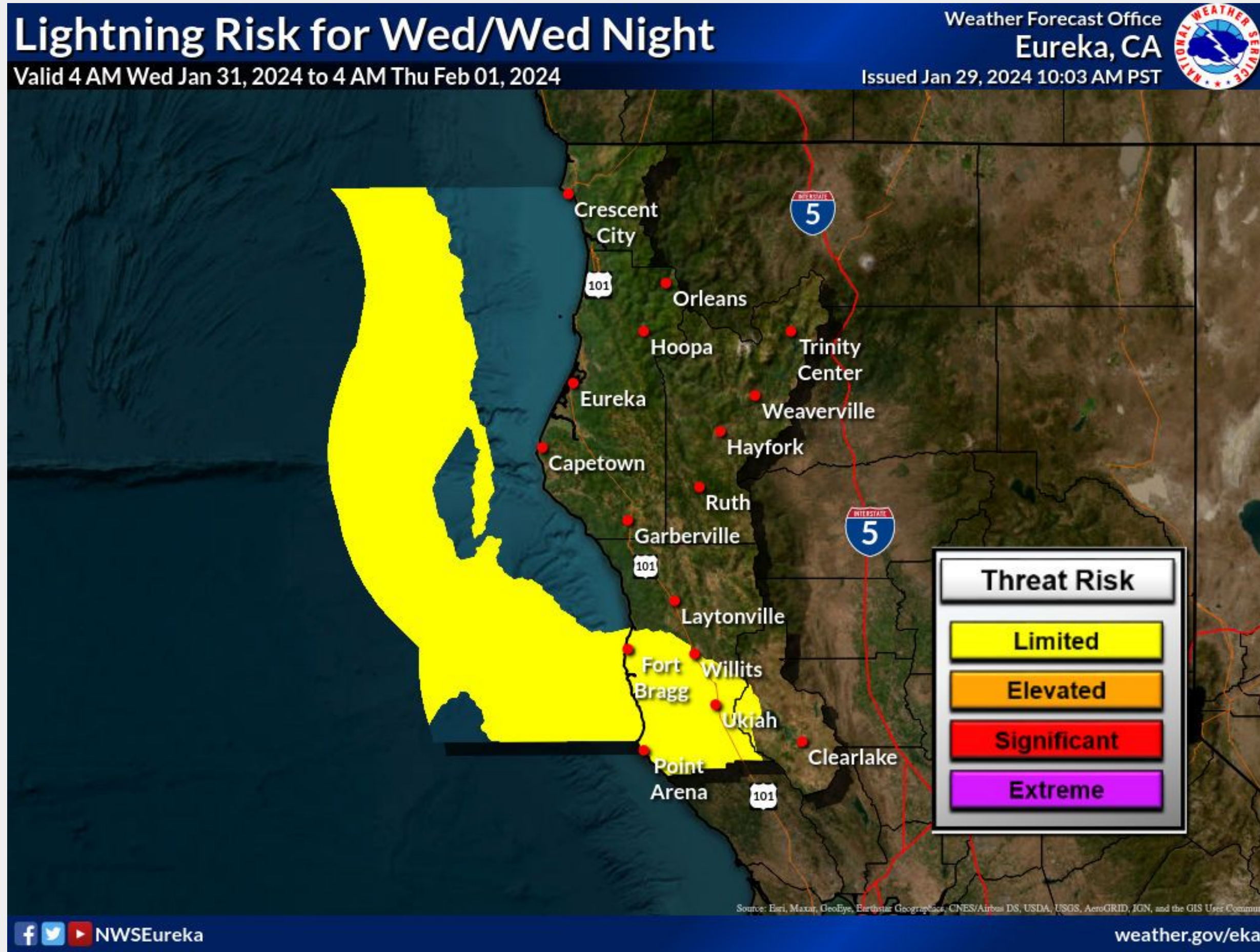


Marine Impacts

- **Very steep short period seas Wednesday**
- **High surf behind the storm on Thursday with surf run up as high as 25 feet.**



Limited Thunder Risk Thursday





Hazard Overview

WEATHER RISK OUTLOOK

Risk levels incorporate potential impacts from weather hazards and likelihood of occurrence for a reasonable worst case scenario.

	Mon 1/29	Tue 1/30	Wed 1/31	Thu 2/1	Fri 2/2	Sat 2/3
Del Norte County Crescent City, Gasquet	Little to None	Rain Gusty Wind	Rain Strong Wind Flooding	Rain	Rain Mountain Snow	Little to None
Humboldt County Eureka, Fortuna, Willow Creek	Little to None	Rain Gusty Wind	Rain Strong Wind Flooding	Rain Flooding	Rain Mountain Snow	Little to None
Trinity County Weaverville, Hayfork	Little to None	Rain Gusty Wind	Rain Gusty Wind Mountain Snow	Rain Mountain Snow	Rain Mountain Snow	Little to None
Mendocino County Ukiah, Fort Bragg	Little to None	Rain Wind	Rain Strong Wind Flooding	Rain Flooding	Light Rain	Little to None
Lake County Clearlake, Lakeport	Little to None	Rain Wind	Rain Gusty Wind Flooding	Rain Flooding	Light Rain	Little to None

Risk Levels

Little to None

Minor

Moderate

Major

Extreme



Summary

- **High winds late Tuesday Night - Wednesday**
- **Heavy rain and small stream flooding Wednesday**
- **Main-stem river flooding Wednesday - Thursday**
- **Limited winter weather concerns**



nws.eureka@noaa.gov



(707) 443-6484



weather.gov/eureka

