

JUNE 2026 - ESIG

FORECASTING AND METEOROLOGY IN POWER SYSTEMS WORKSHOP

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METEOROLOGY AND FIRE
SCIENCE



XCEL ENERGY OVERVIEW

3.8 million

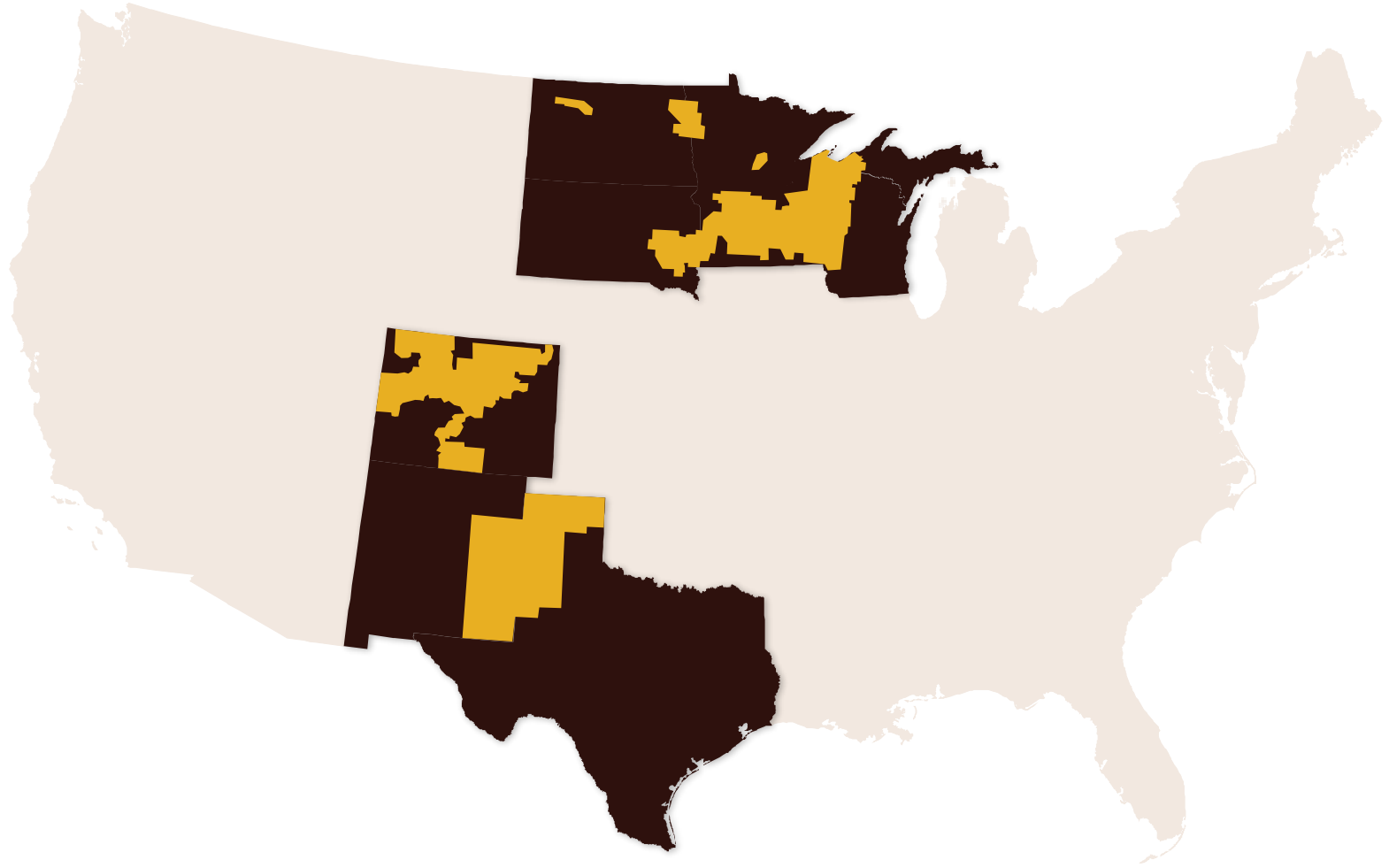
electric customers

2.2 million

natural gas customers

National leader

- Wind energy
- Energy efficiency
- Carbon emissions reductions
- Storm restoration



XCEL WILDFIRE METEOROLOGY PROGRAM UPDATES

Progress and challenges of a new program

11

Meteorology and Fire
Science staff

29

Wildfire Safety
Operation WSO (EPSS)
Forecast zones

442

Total Installed
Weather Stations

850

2027 Weather Station
Goal

1

Lowest snowpack
on record (mid 80s)
in Colorado

10

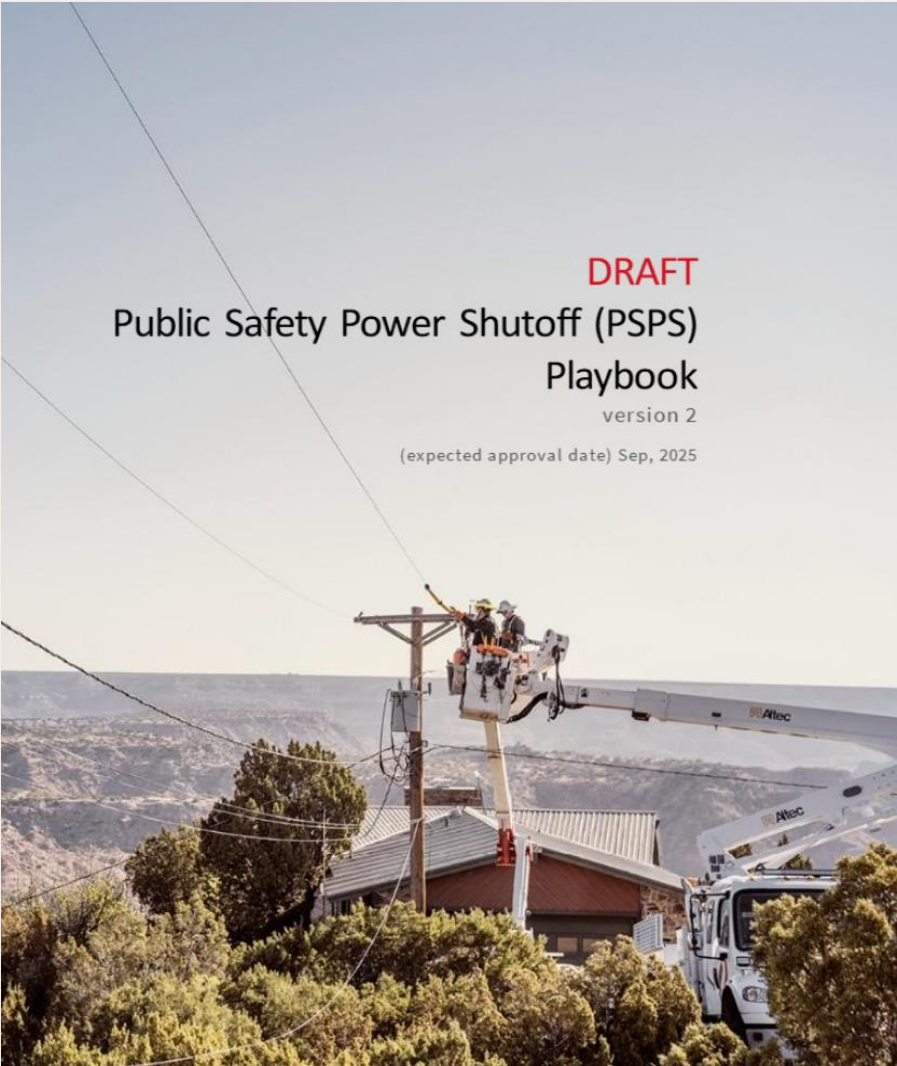
Emergency
Operations Standups
since Oct.

7

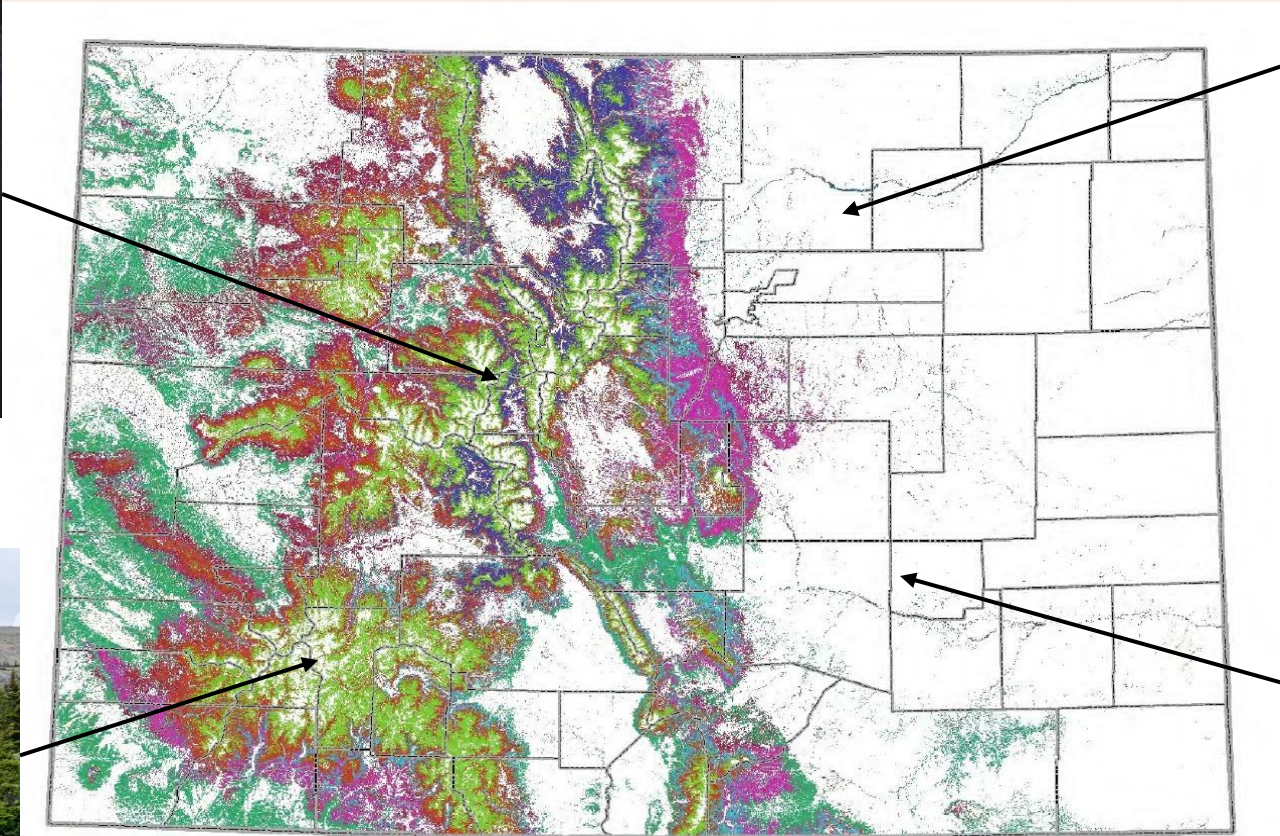
PSPS since last fall



PLAYBOOKS, AND PSPS IN THE INCIDENT COMMAND SYSTEM



THE FIRE ENVIRONMENT: FUELS - COLORADO

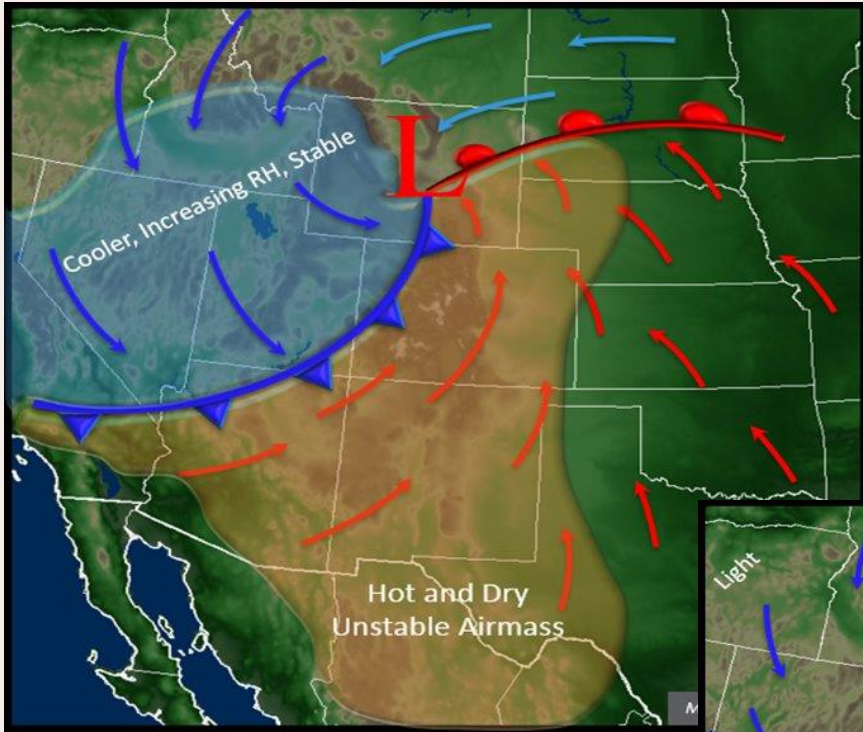


- Spruce-Fir
- Aspen
- Ponderosa Pine
- Pinyon-Juniper
- Plains Riparian
- Lodgepole Pine
- Mixed Conifer
- Montane Riparian
- Oak Shrubland
- Introduced Riparian Veg.

Colorado State Forest Service



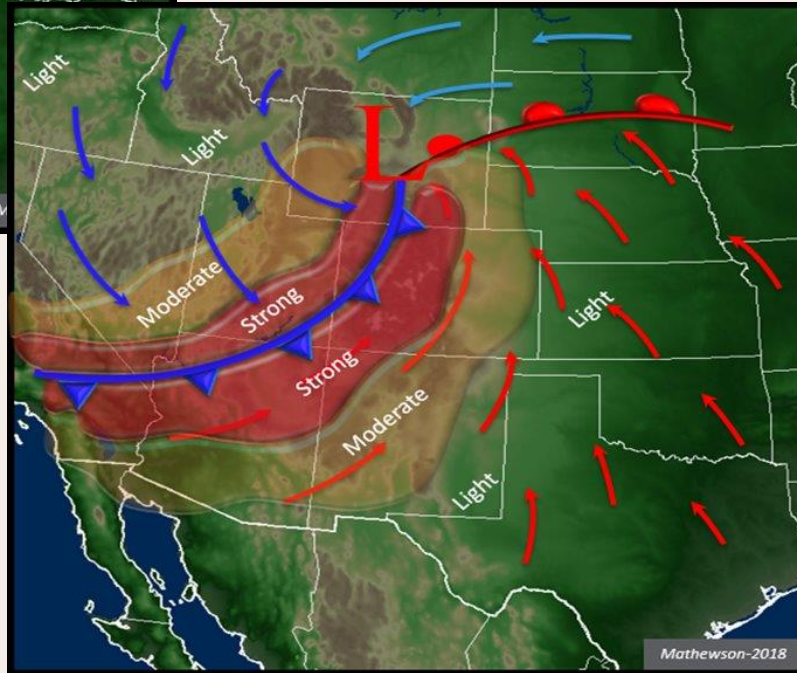
THE FIRE ENVIRONMENT: WEATHER



And can lead to one system the effects multiple Operating Companies



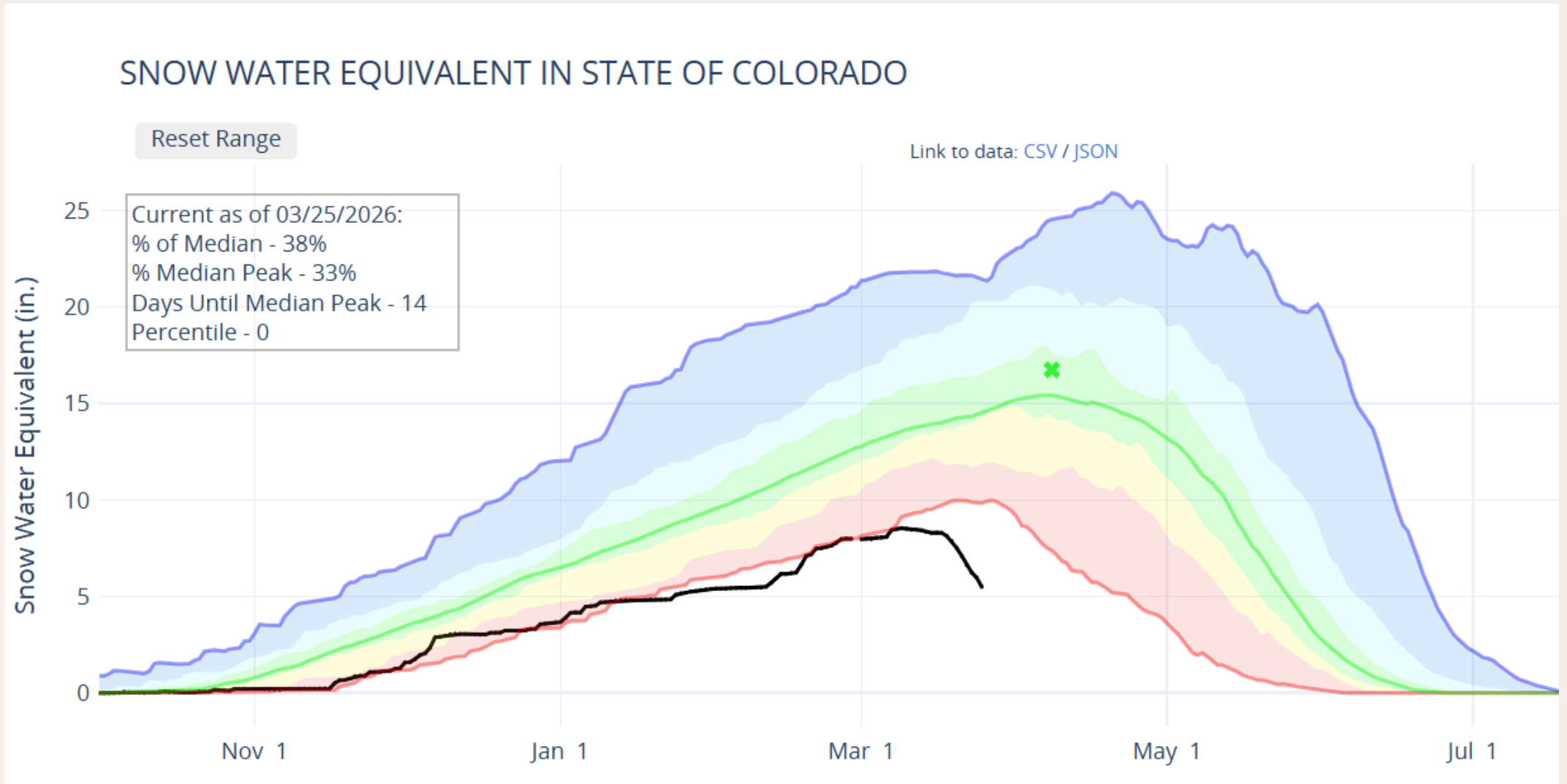
Large Geographic area
=
Large number of fire
weather patterns



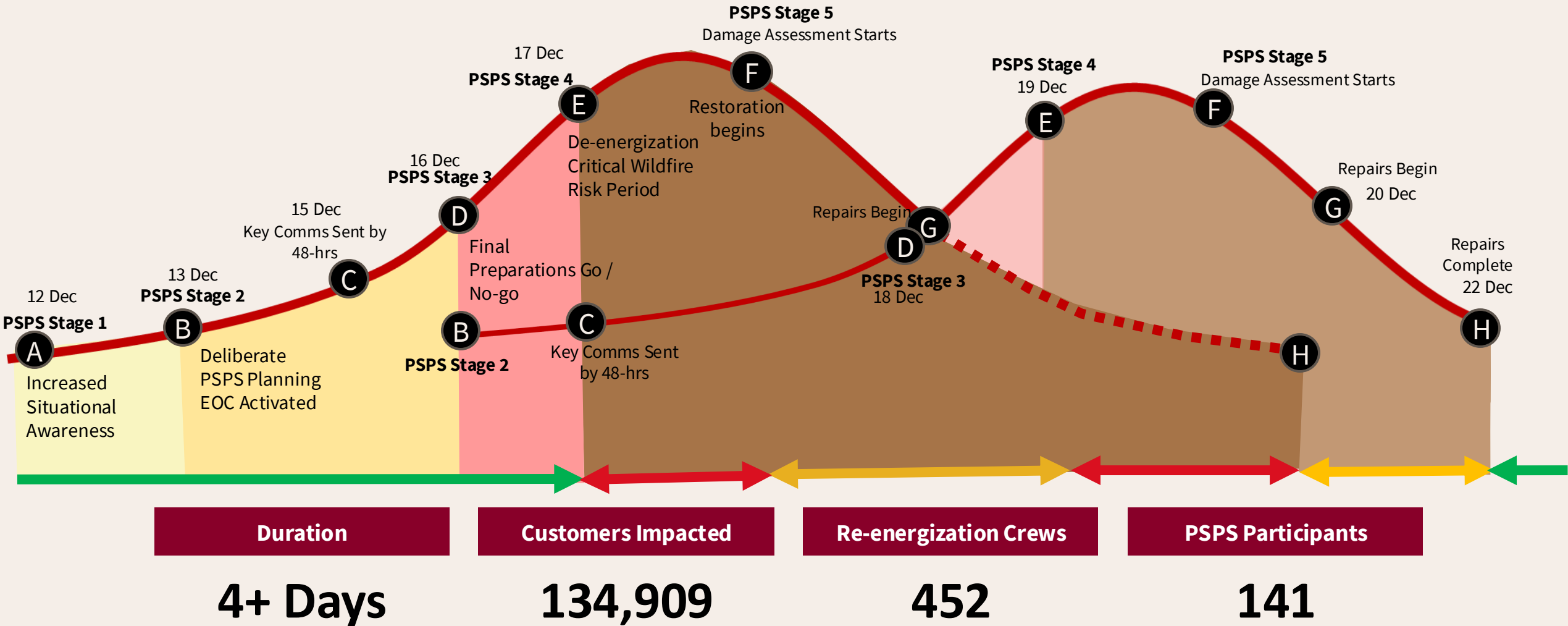
Downslope
Windstorms in
Colorado are an
especially difficult
challenge



HOW IS IT GOING SO FAR?

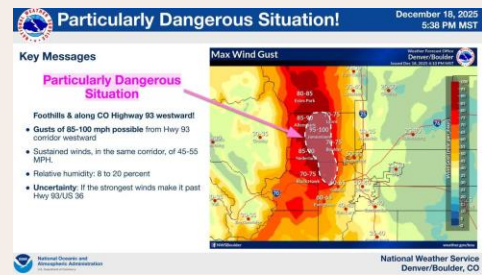
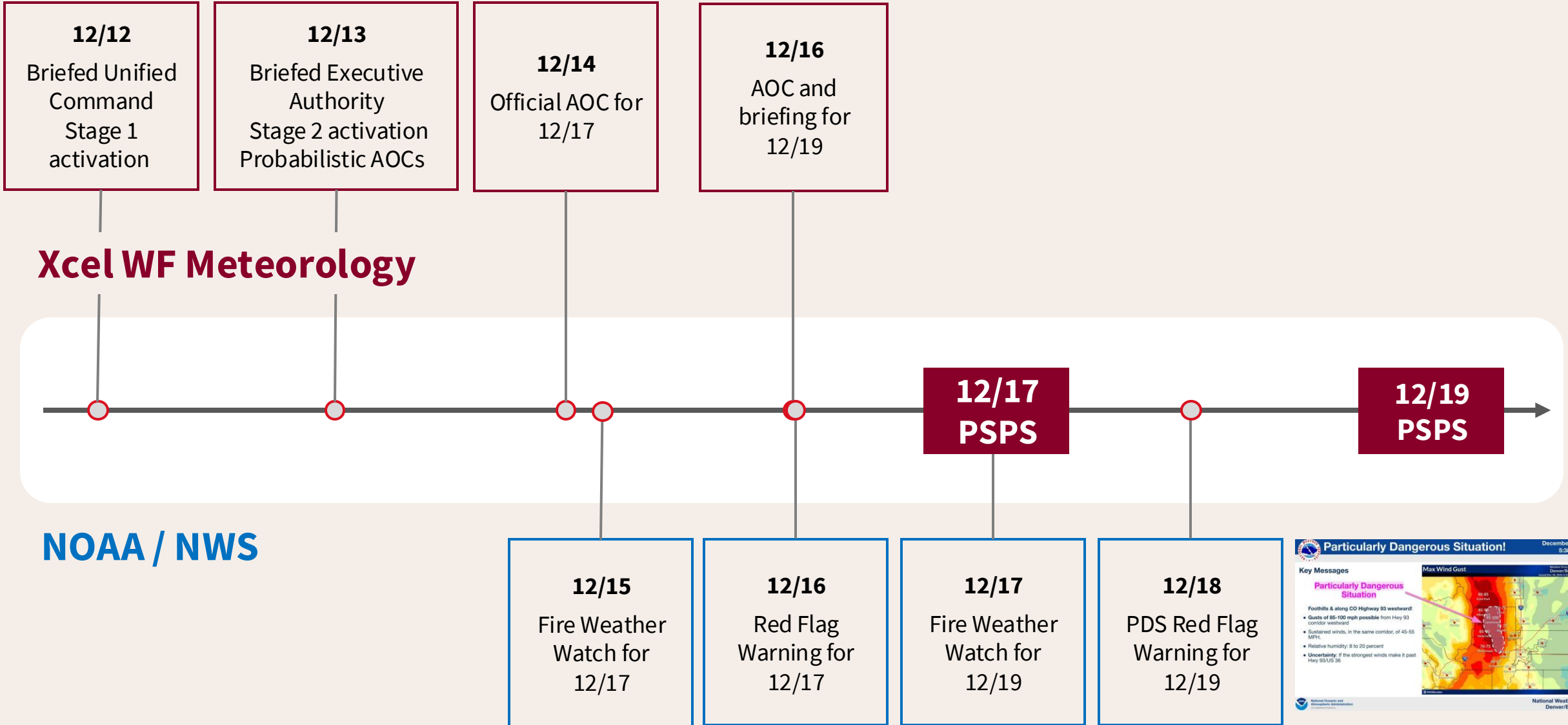


MANY CHALLENGES OF A LARGE-SCALE MULTI-WAVE EVENT



PSPS DECEMBER 2025 CHRONOLOGY

Timeline of Xcel Wildfire Meteorology Notifications and NWS Fire Weather Products



RECENT EMERGENCY OPERATIONS AND PSPS

Date	Status	State
10/20/2025	Cancelled	CO
12/17/2025	Executed	CO
12/19/2025	Executed	CO
01/16/2025	Executed	CO
01/20/2025	Cancelled	CO
02/17/2025	Executed	TX
02/17/2025	Executed	CO
03/12/2025	Cancelled	CO
03/14/2025	Executed	CO
04/22/2025	Executed	CO



THANK YOU

ZACH TOLBY
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AND FIRE SCIENCE

