



# 2021 WMP Update Workshop

**PSPS: Reducing the Scale, Scope and Frequency**

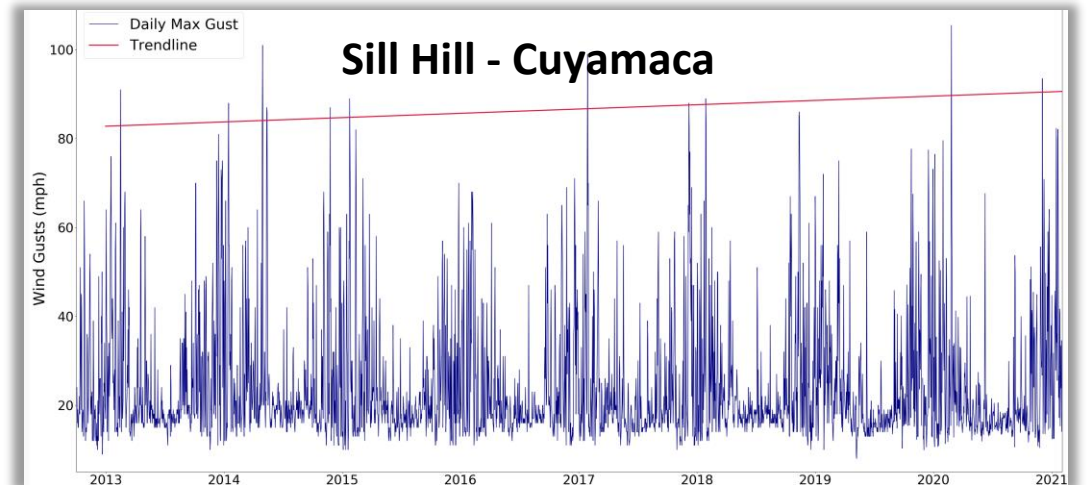
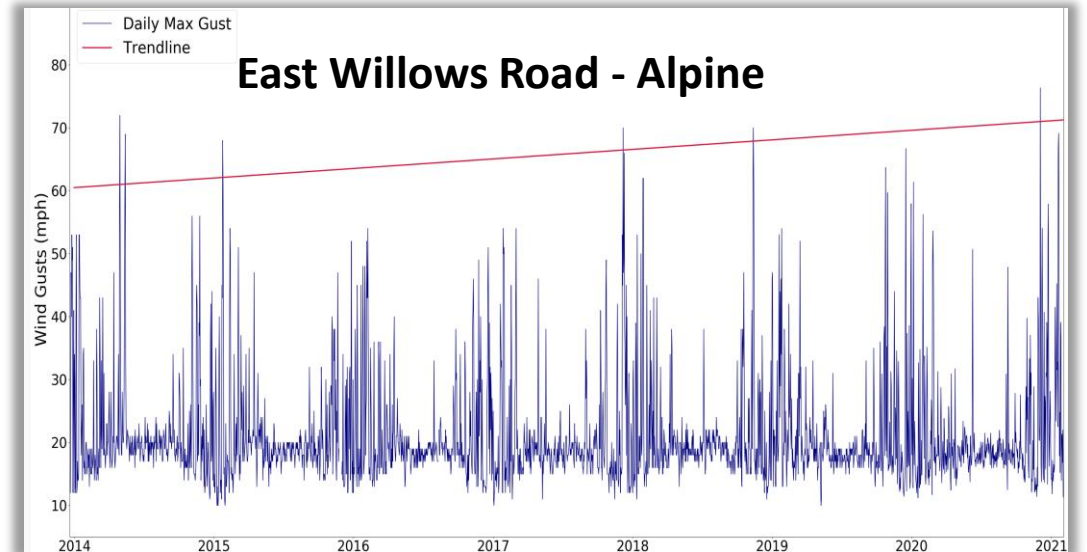
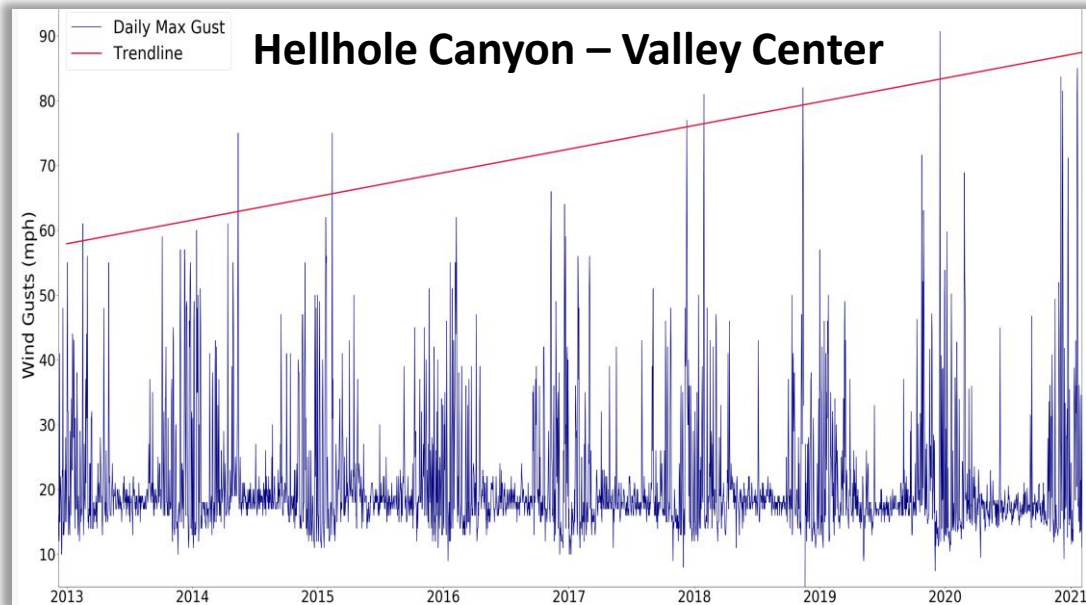
February 23, 2021

# Wind Data Over Time



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2013-2021 weather data collected from the SDG&E weather network indicates an **increase in occurrences** of high wind events over the last several years.



# Late Season RFWs & PSPS

*In 2020, there were 4 late-season RFW/PSPS events out of a total of 11 RFW/PSPS events for the season*

Date	Thu 11/26	Fri 11/27	Sat 11/28	Sun 11/29	Mon 11/30	Tue 12/1	Wed 12/2	Thu 12/3	Fri 12/4	Sat 12/5	Sun 12/6	Mon 12/7	Tue 12/8	Wed 12/9	No RFWs 12/10 through 12/22	Wed 12/23	Thu 12/24	
RFW	█						█					█					█	
FPI	█							█	█				█	█				

## Red Flag Warning 11/26-11/28

- Top 20 Average Gusts: 48 mph
- Wind Speed Records: 0
- Peak Gust: **56 mph**
- Stations Reaching 95%: 75
- Station Reaching 99%: 8
- PSPS Customers Notified: 2,739
- PSPS Customers affected: **0**
- CRCs Opened: 0

## Red Flag Warning High Wind Warning 12/2-12/4

- Top 20 Average Gusts: 71 mph
- Wind Speed Records: 43
- **Peak Gust: 94 mph**
- Stations Reaching 95%: 170
- **Station Reaching 99%: 126**
- PSPS Customers Notified: 95,000
- **PSPS Customers affected: 73,000**
- CRCs Opened: 10 (2,667 cars)

## Red Flag Warning High Wind Warning 12/7-12/8

- Top 20 Average Gusts: 59 mph
- Wind Speed Records: 2
- Peak Gust: **82 mph**
- Stations Reaching 95%: 145
- Station Reaching 99%: 67
- PSPS Customers Notified: 50,483
- PSPS Customers affected: **15,300**
- CRCs Opened: 6 (415 cars)

## Red Flag Warning 12/23-12/24

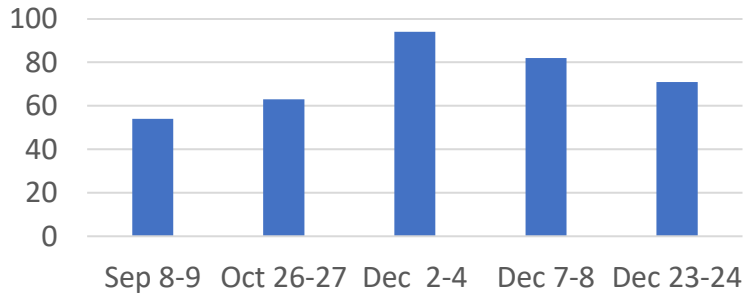
- Top 20 Average Gusts: 57 mph
- Wind Speed Records: 2
- Peak Gust: **71 mph**
- Stations Reaching 95%: 152
- Station Reaching 99%: 66
- PSPS Customers Notified: 30,394
- PSPS Customers affected: **6,797**
- CRCs Opened: 4 (59 cars)

# 2020 PSPS Event Summary



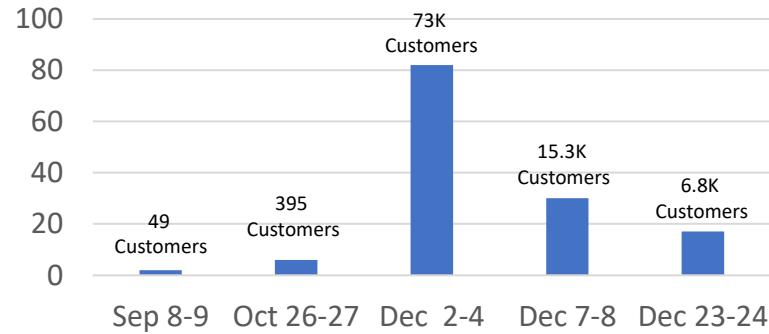
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### Peak Winds



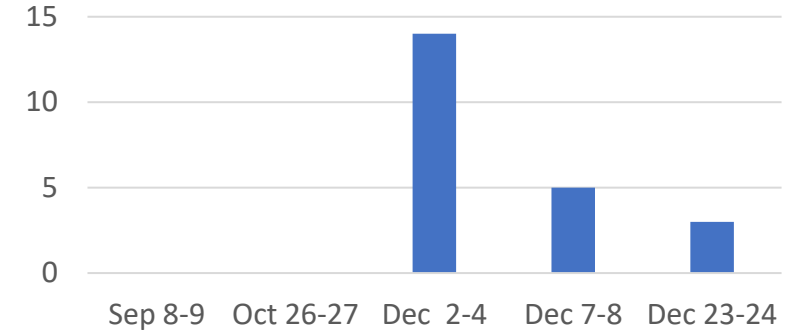
■ Peak Winds (MPH)

### Circuit Segments De-Energized



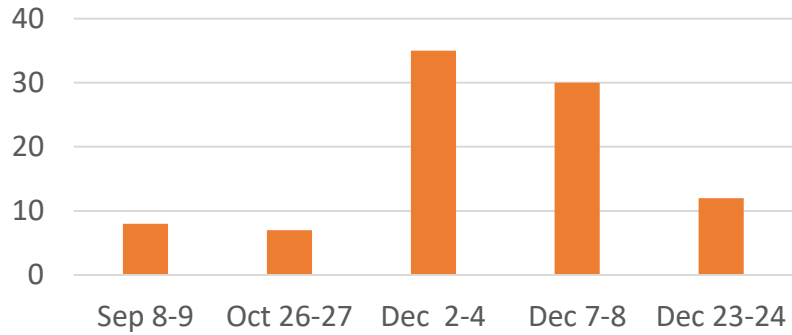
■ Number of Circuit Segments De-Energized

### Damage/Hazard Found



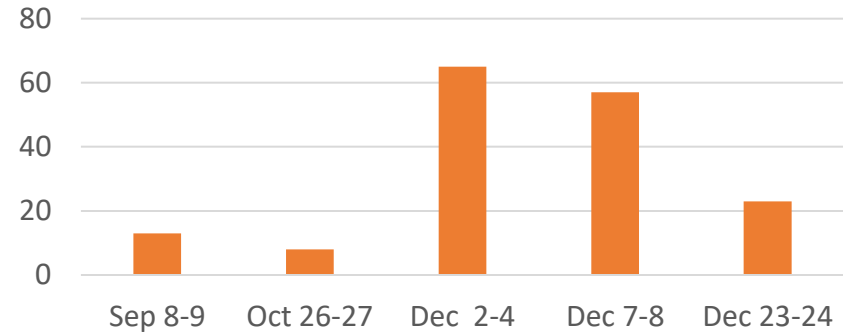
■ Damage/Hazard Found

### Average Outage Duration



■ Hours

### Longest Outage Duration



■ Hours

# 2020 PSPS Customer Impact Reduction: Generators and Microgrids

- **1,334** portable battery-powered generators to Medical Baseline customers
- **2,284 generator purchase** rebates to customer in HFTD
- **80** Whole-Home Generators
- Emergency Ops. Center: PSPS generator to Alpine mental health facility
- **5 Microgrids** enabled to keep communities energized (non-renewable, renewable options online beginning in 2021)
  - Ramona Air-Attack Base
  - Cameron Corners
  - Butterfield Ranch
  - Shelter Valley
  - Julian Town Center



# 2020 PSPS Customer Impact Reduction: Weather Technology & Load Transfer/Switching


- **New weather technology**
  - 30 new weather stations
  - 30-second weather data available at over 210 weather stations
  - New PSPS dashboard and geospatial tool to monitor weather conditions
- **New load transfer/localized switching plans**
  - Del Mar (Circuit 68)
  - San Clemente (Circuits 200, 204, 329, 311)
  - Viejas Reservation (Circuit 78)
  - Rincon Reservation (Circuit 909)



# 2020 PSPS Customer Impact Reduction




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### Generator Programs

- Generator Grant Program
- Generator Assistance Program
- Whole Facility Generators



### Weather Station

- Dec 2<sup>nd</sup> Event
- Descanso, Alpine
- Simon Open Space – 1149 Customers



### Microgrid

- Dec 2<sup>nd</sup> Event
- Shelter Valley
- 219 Customers



### Sectionalizing Device

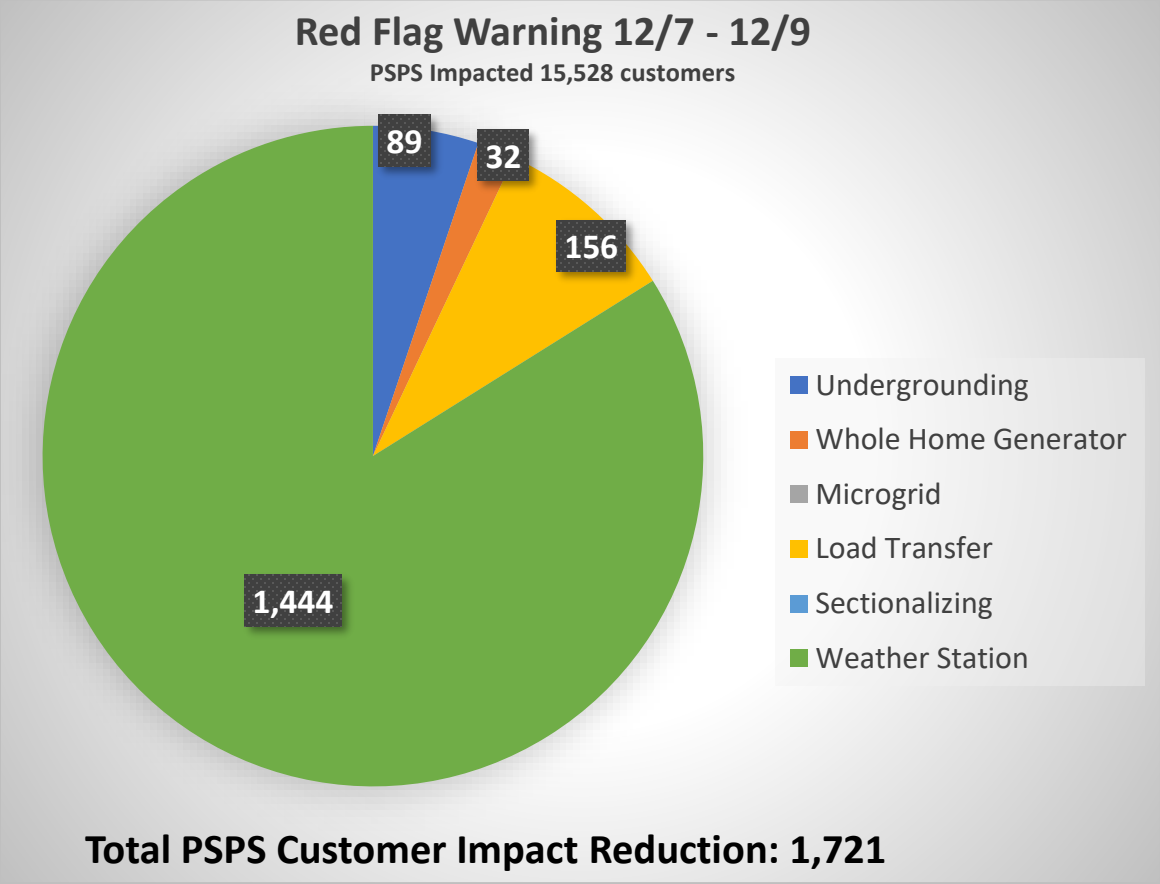
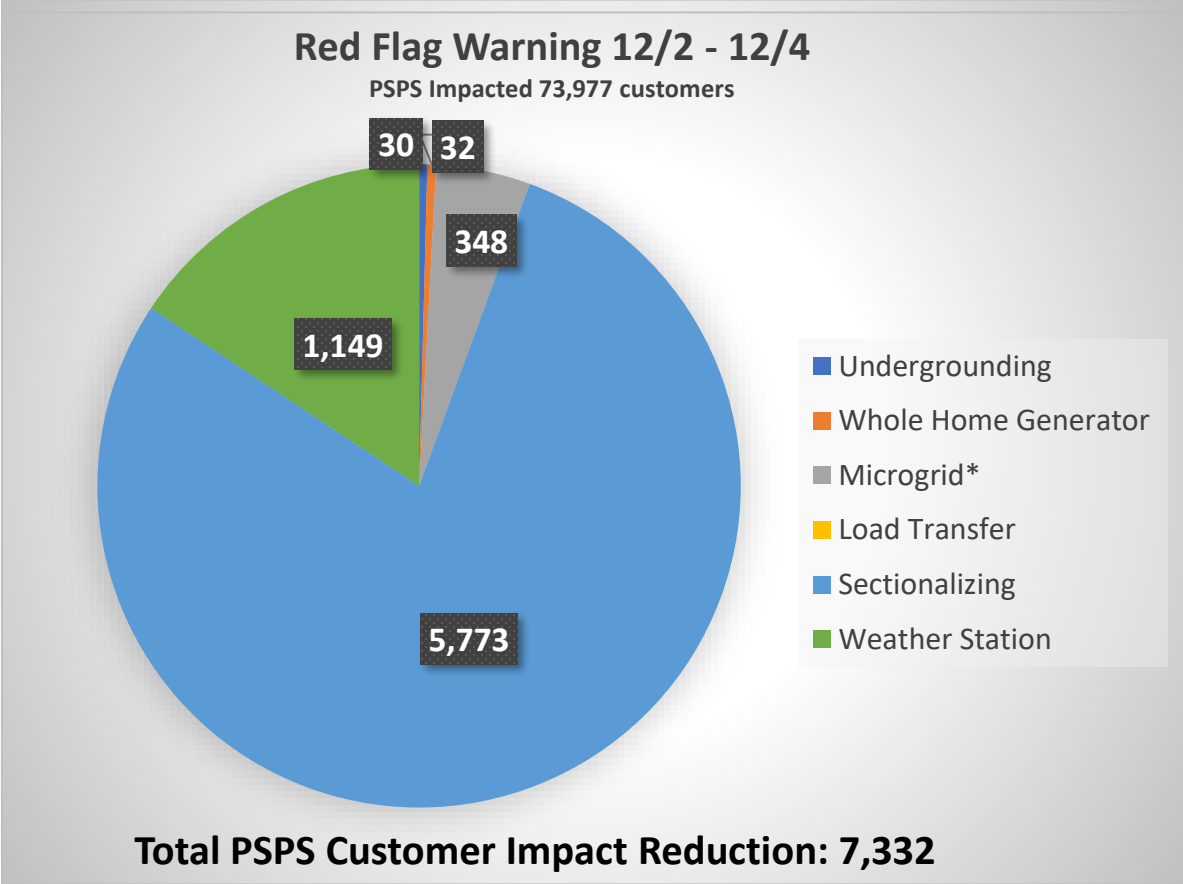
- Dec 2<sup>nd</sup> Event
- Ramona
- 2825 Customers



### Load Transfer

- Dec 7<sup>th</sup> Event
- Chula Vista
- 156 Customers

# 2020 PSPS Customer Impact Reduction

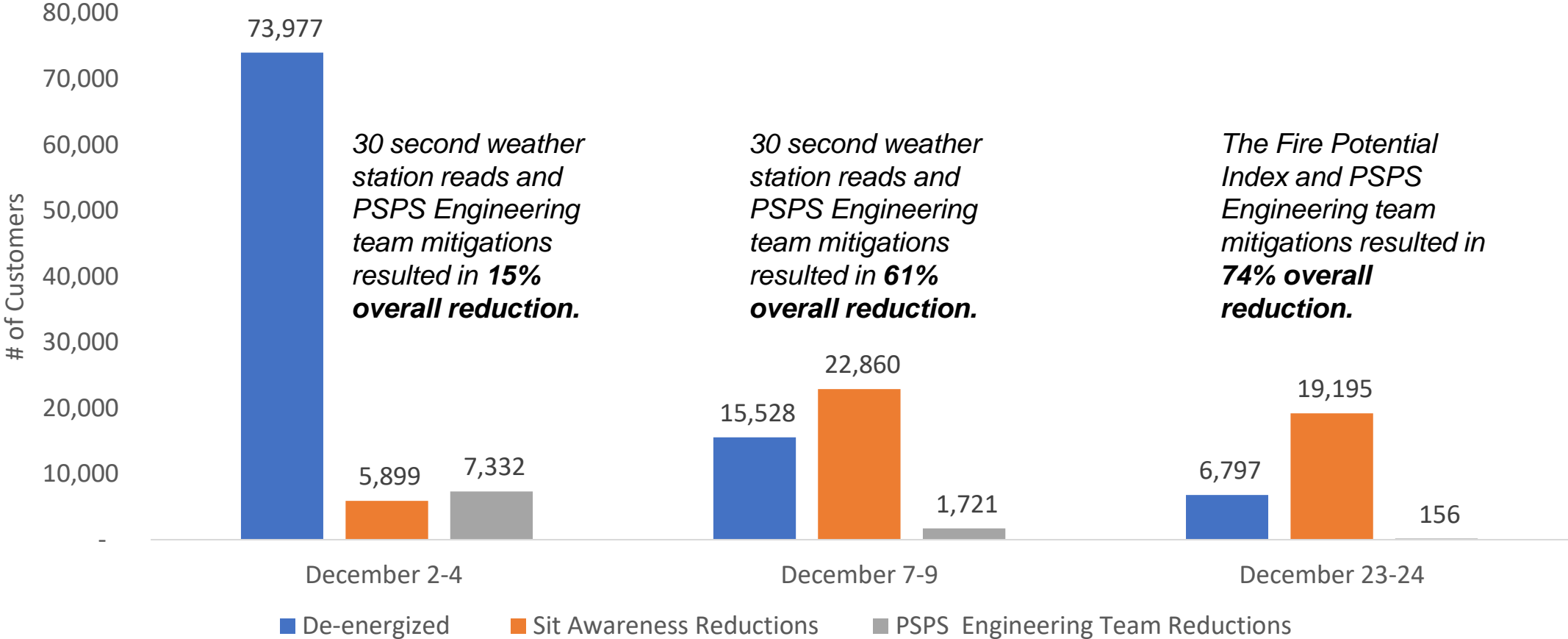




# 2020 PSPS Customer Impact Reduction



Estimated PSPS Reductions in 2020 Events



# 2021 PSPS Impact Reduction



WMP Program	2021 Number of Locations	2021 Customer PSPS Impact Reduction
PSPS Sectionalizing	10	3223 – 5145*
Standby Power Programs	300	300**
Resiliency Grant Programs	~	1000
Microgrids	6	578
Undergrounding	9	1127
<b>Total</b>		<b>3223 – 7500*</b>

\*Weather events will dictate the actual number of customers reduced by the project

\*\*Portable generators