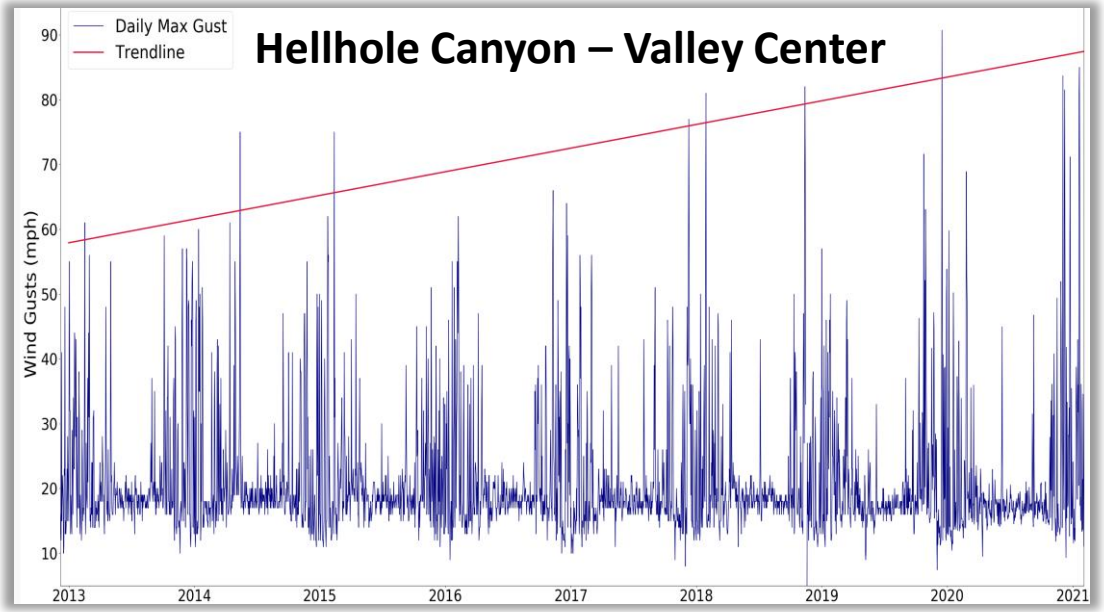
2021 WMP Update Workshop

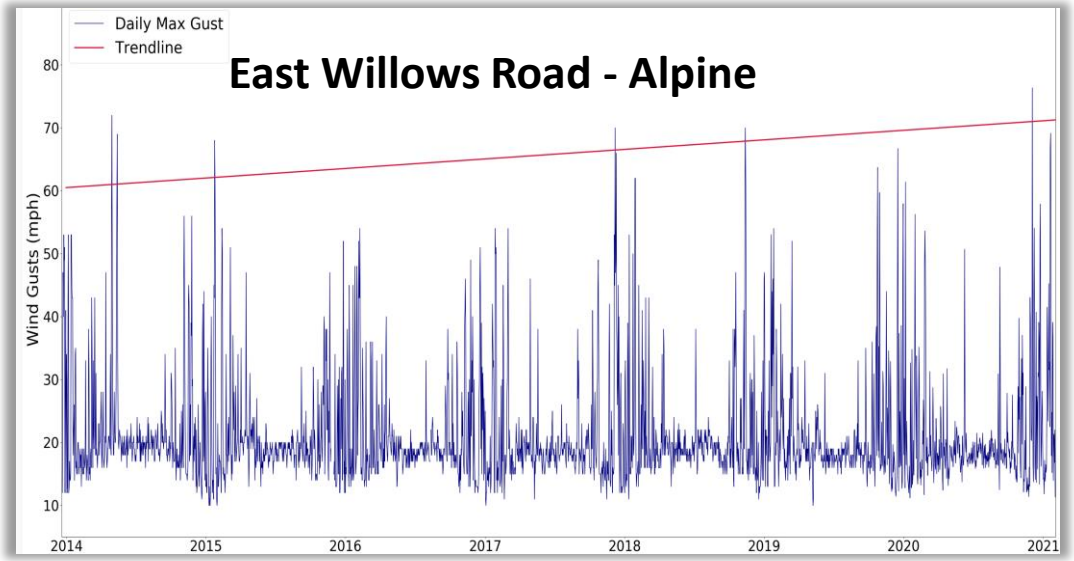
PSPS: Reducing the Scale, Scope and Frequency

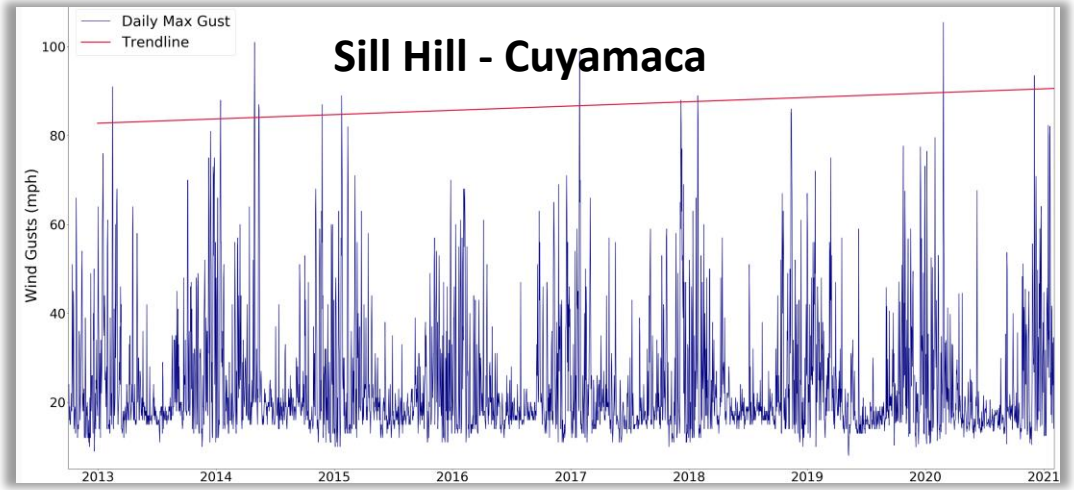
February 23, 2021

Wind Data Over Time

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.

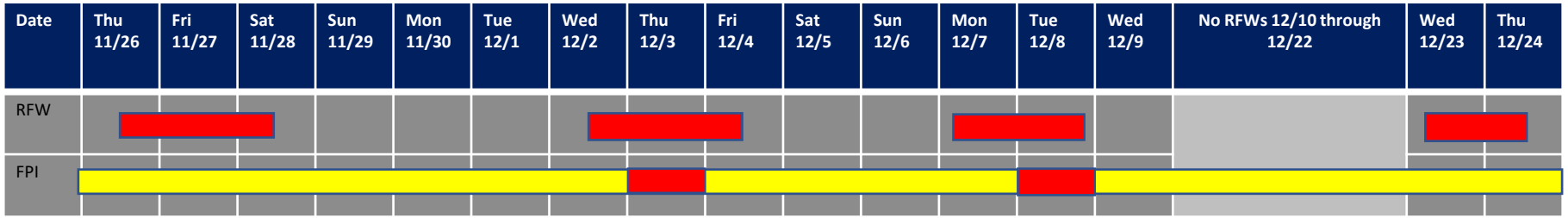






Late Season RFWs & PSPS

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



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

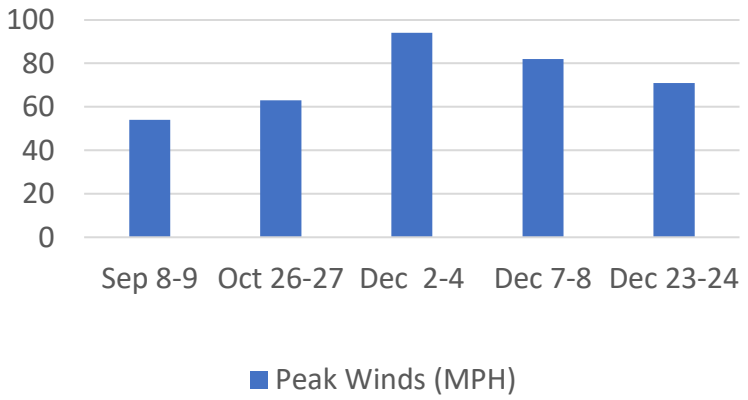
- Top 20 Average Gusts: 59 mph
- Wind Speed Records: 2
- Peak Gust: **82 mph**
- Stations Reaching 95%: 145
- Station Reaching 99%: 67
- PSPS Customers Notified: 50,483
- PSPS Customers affected: **15,300**
- CRCs Opened: 6 (415 cars)

Red Flag Warning
12/23-12/24

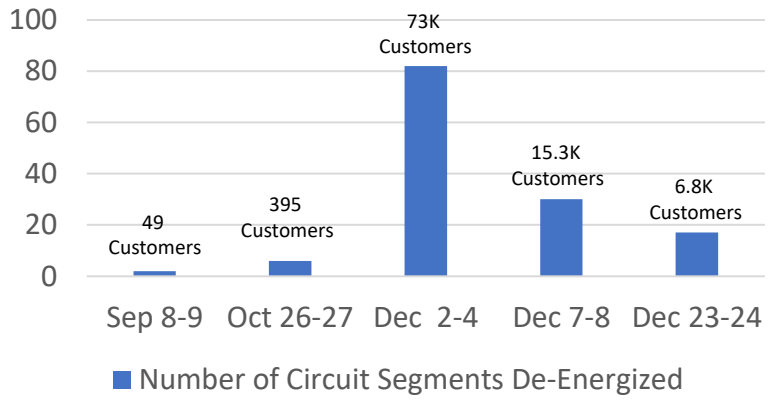
- Top 20 Average Gusts: 57 mph
- Wind Speed Records: 2
- Peak Gust: **71 mph**
- Stations Reaching 95%: 152
- Station Reaching 99%: 66
- PSPS Customers Notified: 30,394
- PSPS Customers affected: **6,797**
- CRCs Opened: 4 (59 cars)

2020 PSPS Event Summary

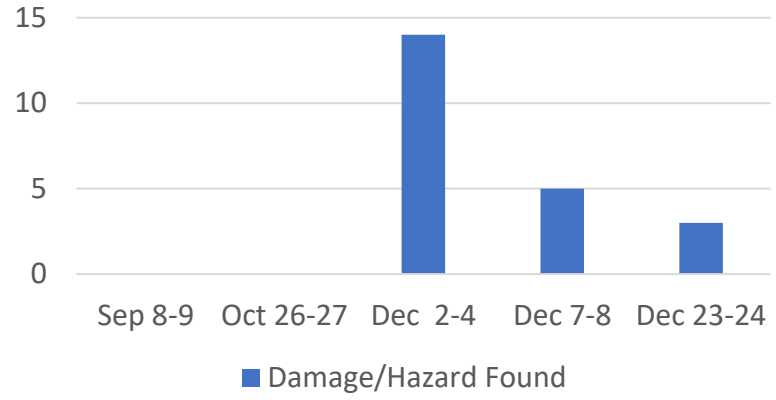
Peak Winds



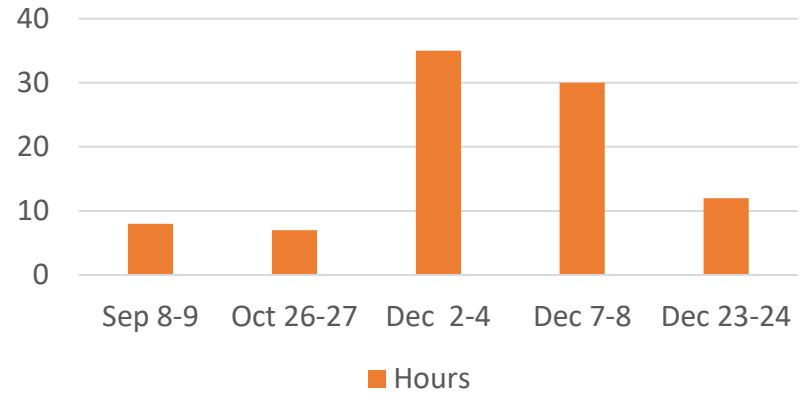
Circuit Segments De-Energized



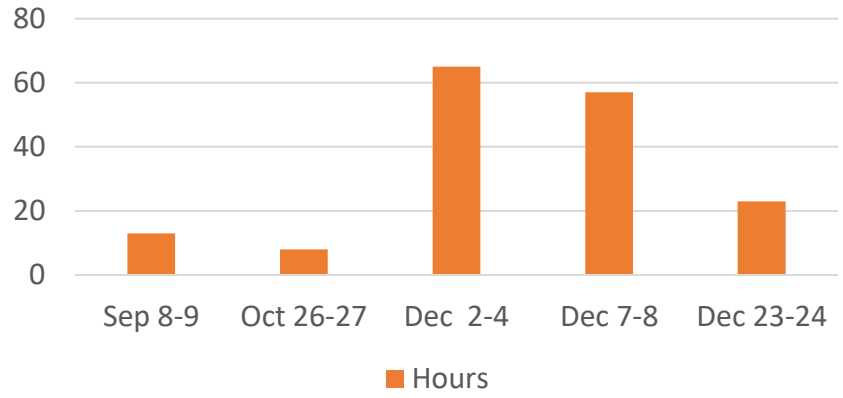
Damage/Hazard Found



Average Outage Duration



Longest Outage Duration



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

Generator Programs

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

Microgrid



- Dec 2nd Event
- Shelter Valley
- 219 Customers

Weather Station

- Dec 2nd Event
- Descanso, Alpine
- Simon Open Space – 1149 Customers

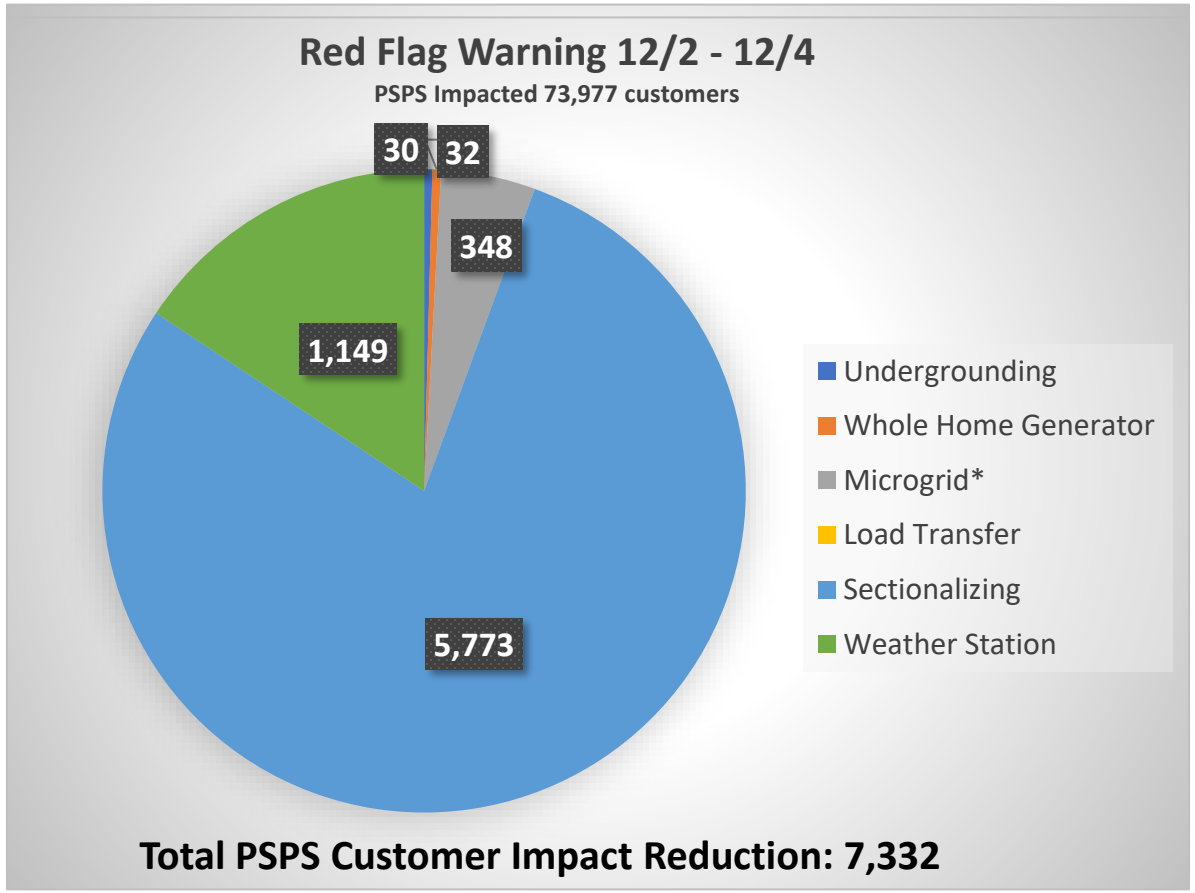
Sectionalizing Device

- Dec 2nd Event
- Ramona
- 2825 Customers

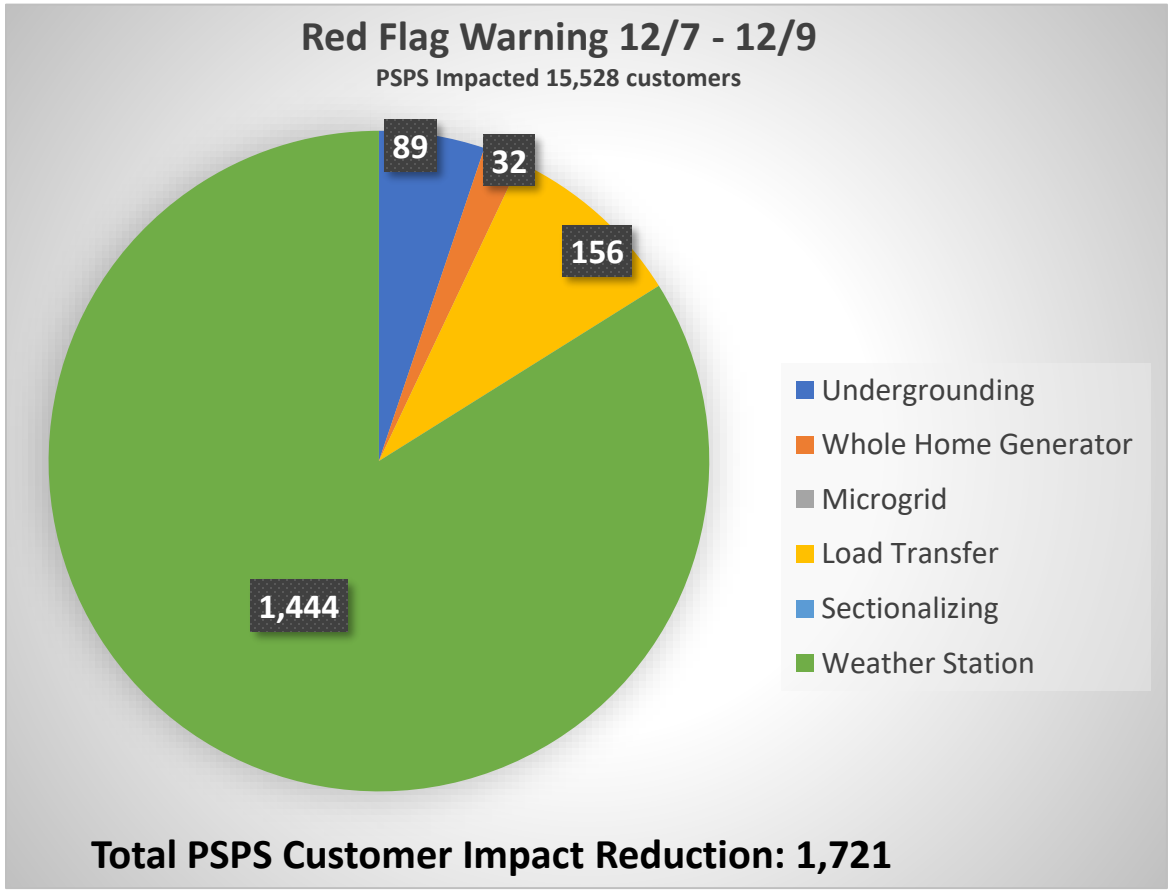
Load Transfer

- Dec 7th Event
- Chula Vista
- 156 Customers

2020 PSPS Customer Impact Reduction

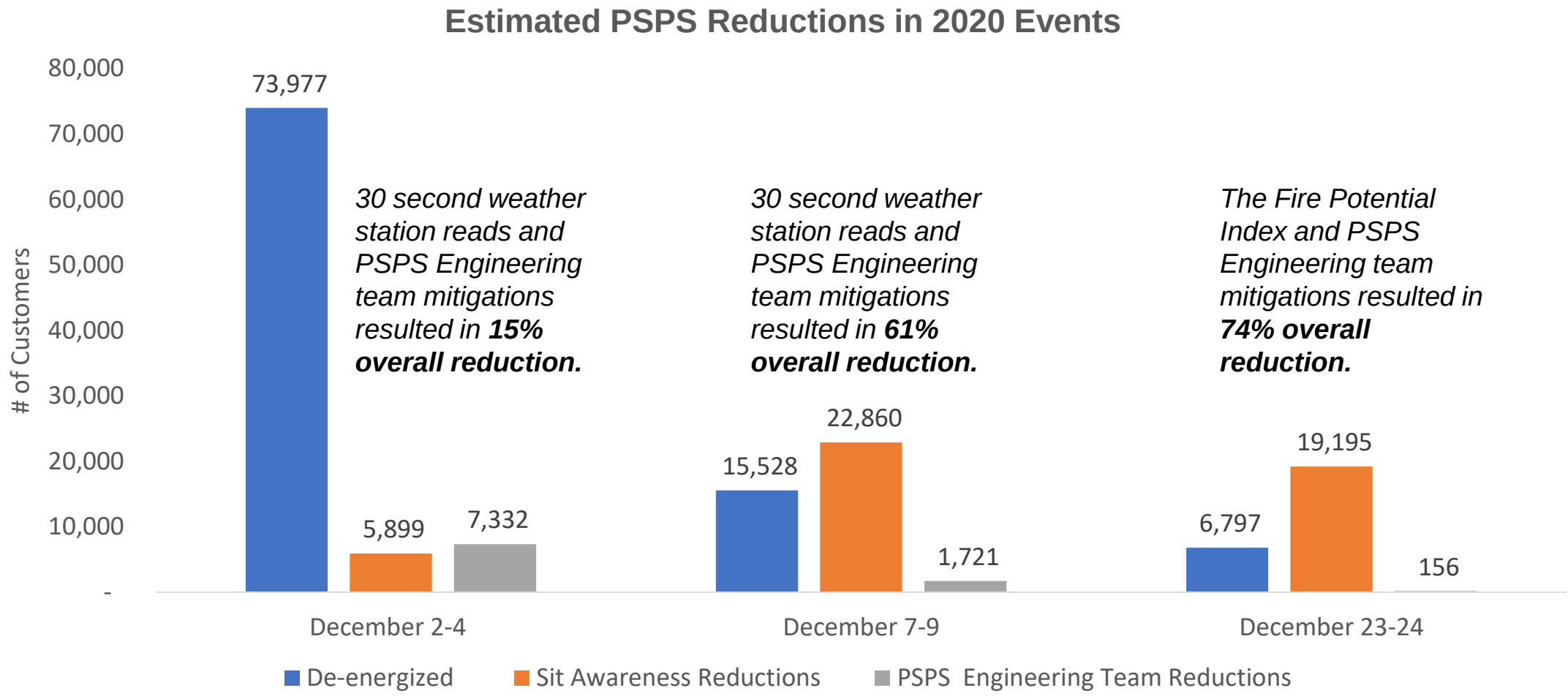


Total PSPS Customer Impact Reduction: 7,332



Total PSPS Customer Impact Reduction: 1,721

2020 PSPS Customer Impact Reduction



*30 second weather station reads and PSPS Engineering team mitigations resulted in **15% overall reduction.***

*30 second weather station reads and PSPS Engineering team mitigations resulted in **61% overall reduction.***

*The Fire Potential Index and PSPS Engineering team mitigations resulted in **74% overall reduction.***

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
Total		3223 – 7500*

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