Rocky Mountain Power
Wildfire Mitigation Plan

Utah Public Service Commission Presentation
August 12, 2019





ROCKY MOUNTAIN POWER
POWERING YOUR GREATNESS

Our Priority and Utah Wildfire Statistics

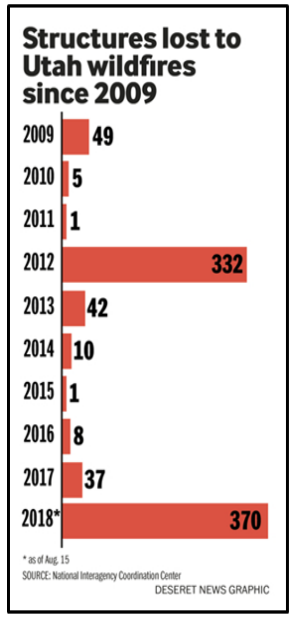
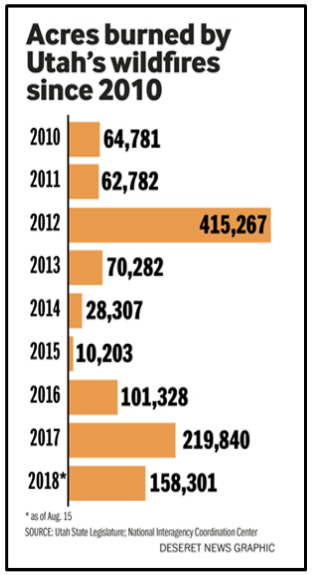


Table 1. Utah's 10 Largest Wildfires 2005 - 2018

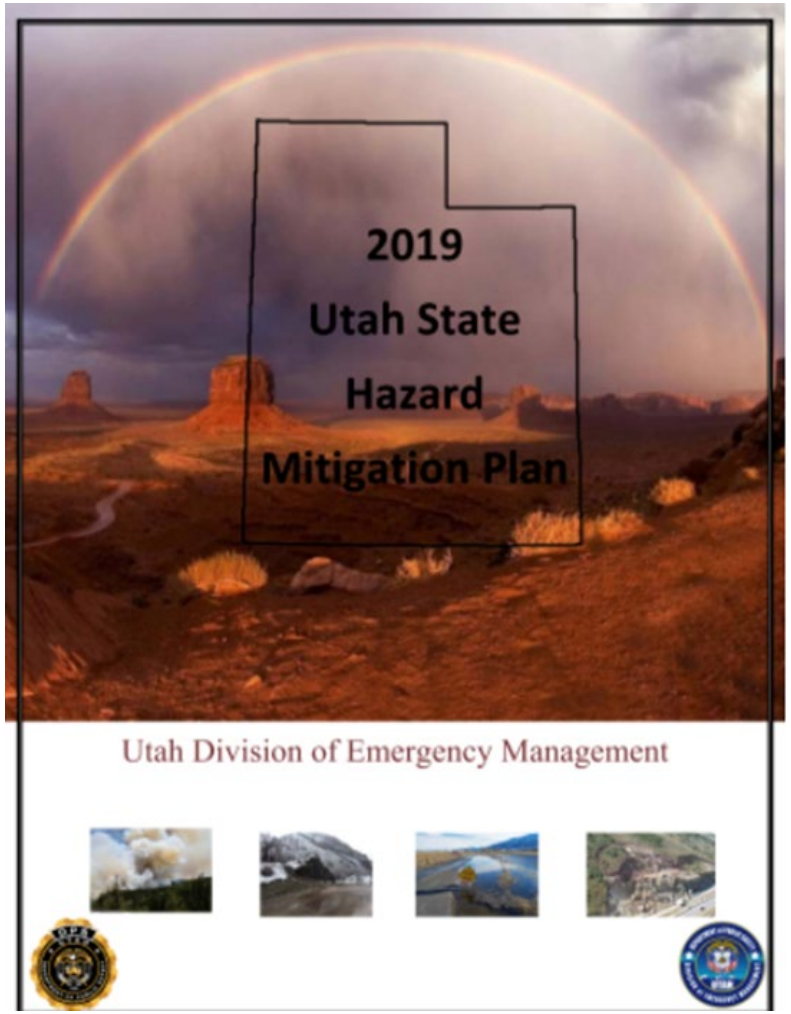
Rank	Year	Fire Name	Location	Acres Burned
1	2007	Milford Flat Fire	Near Milford	363,052
2	2018	Pole Creek Fire	12 miles NE of Nephi	102,190
3	2017	Brian Head Fire	Near Brian Head	71,673
4	2018	Dollar Ridge Fire	8 miles SW of Duchesne	68,869
5	2005	West Side Fire	20 miles NW of St. George	68,264
6	2006	Jarvis Fire	10 miles SW of St. George	50,738
7	2010	Twitchell Canyon Fire	7 miles E of Manderfield	45,126
8	2009	Big Pole Fire	Skull Valley near Grantsville	44,345
9	2007	Neola North Fire	N of Neola	43,806
10	2012	Dallas Canyon Fire	10 miles SW of Delle	43,610



- Protecting communities we serve while providing safe, reliable power, is our highest priority

Utah Hazard Mitigation Plan – Wildfire

- Wildfires in Utah have become a significant problem impacting state and local economies, infrastructure, the environment and private land owners
- Utah Wildland Fire Policy has shifted from fire suppression to risk reduction
- The policy focuses on prevention, preparedness and mitigation



Our Approach

Risk based approach to identify where is most at risk of catastrophic wildfire

Strengthen our system to mitigate wildfires

- Maintaining the safety of our system
- Seeking out new best practices to be even more vigilant

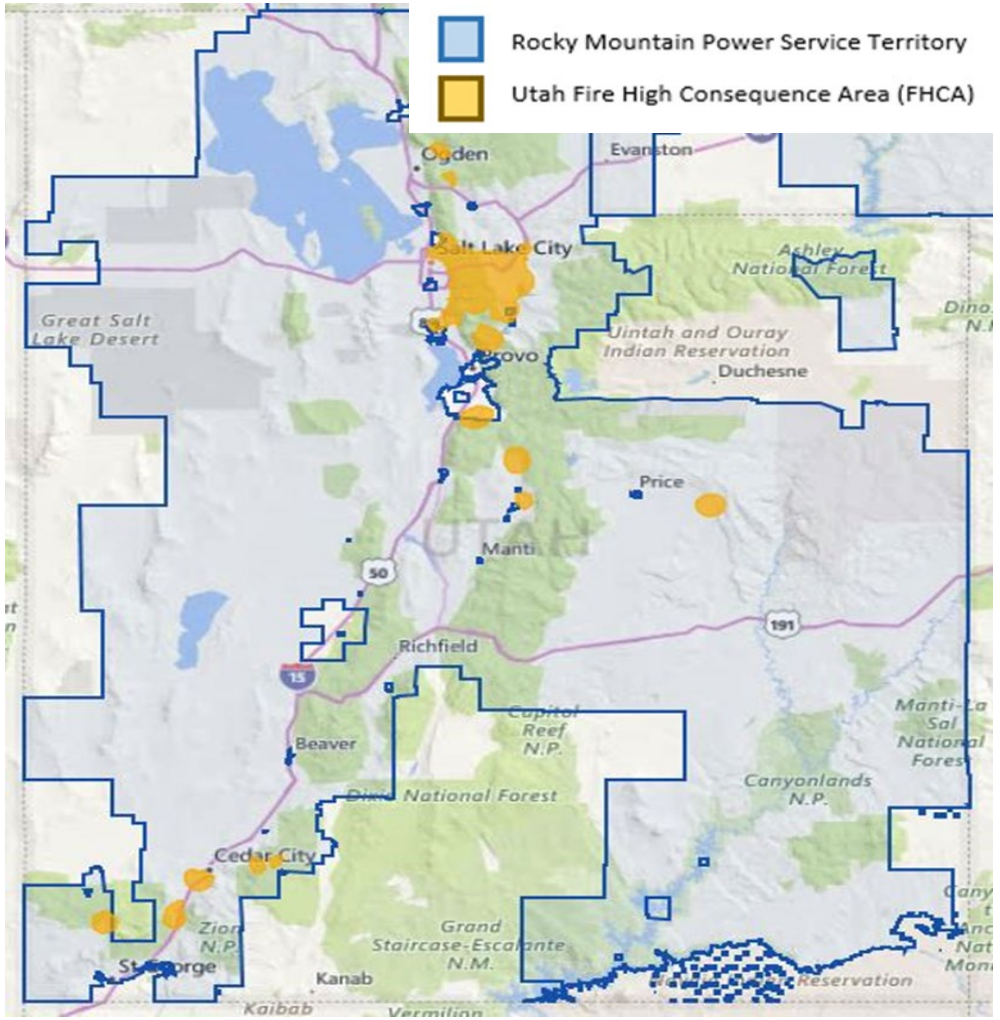
Work hand-in-hand with local community

- Local emergency services, and community leaders
- Expand and enhance existing emergency response plans

WILDFIRE SAFETY

Fire High Consequence Areas Assessment

- Rocky Mountain Power identified areas in their service territory that are at a higher risk of fast-spreading, catastrophic fires
- Followed a systematic and tested process developed through lengthy California rulemaking to identify high fire risk areas
- Used historical data and wildfire risk analysis conducted by a Fire Investigation & Forensic Engineering Company to create a map of Fire High Consequence Areas (FHCA)



Mitigation Steps We Are Taking

We're adding new safety measures and system enhancements, including:

- Enhanced vegetation clearing practices
- Additional inspections
- Investments to improve system resiliency

We're enhancing our situational awareness by:

- Identifying and prioritizing higher risk areas
- Field crews monitoring wildfire risk
- Monitoring weather and fire risk conditions
- Installing local weather stations
- Continuous monitoring of fire threats to utility infrastructure

Vegetation Management

Enhanced vegetation management deployment in Fire High Consequence Areas

- Annual vegetation inspections and correction including removal of high risk trees identified during inspections
- Increase minimum clearance distance for vegetation from distribution lines
- Perform annual vegetation clearing around poles to reduce risk of fire ignition by electrical equipment

Asset Inspections and Corrections

- Increased visual and detailed inspection frequency for overhead distribution and local transmission with focus on fire high consequence areas first
  - Visual inspection involves a brief inspection from a vantage point with reasonable viewing access to identify damage or defects visible from a distance or potential hazards or right-of-way encroachments
  - Detailed inspection involves visiting each structure, inspecting spans between structures to identify nonconformance with standards, infringements, defects, potential safety hazards and deterioration that need correction
- Pole test and treat overhead distribution poles
- Definitive correction timeframe implemented for conditions found
- Fire risk identification within FHCA reduces correction time allowed substantially

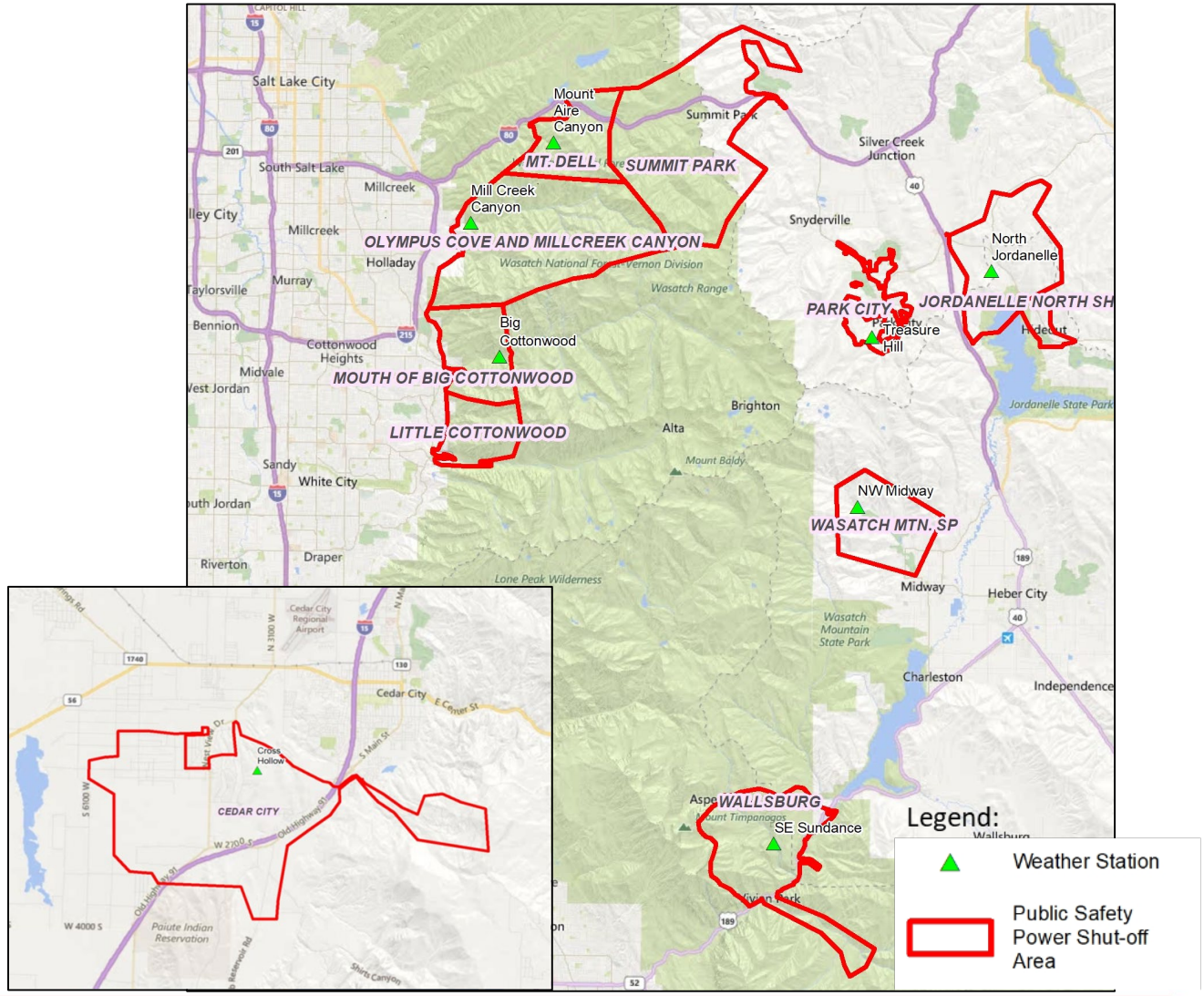
Overhead Distribution	Current Timeframe	Proposed Timeframe for FHCA
Visual	2 years	1 year
Detailed	20 years	5 years
Pole Test & Treat	None	20 years
Overhead Local Transmission	**Current Timeframe**	**Proposed Timeframe for FHCA**
Visual	2 years	1 year
Detailed	10 years	5 years
Pole Test & Treat	10 years	10 years
Overhead Main Grid	**Current Timeframe**	**Proposed Timeframe for FHCA**
Visual	1 year	1 year
Detailed	2 years	2 years
Pole Test & Treat	10 years	10 years

Investments to Improve System Resiliency

- 82 circuits identified in Fire High Consequence Areas
- 18 circuits are in Public Safety Power Shut-off areas
- System hardening work underway in 2019 for circuits at:
  - Summit
  - Olympus
  - Wallsburg
- Additional system hardening work to occur in 2020

Enhanced Situational Awareness

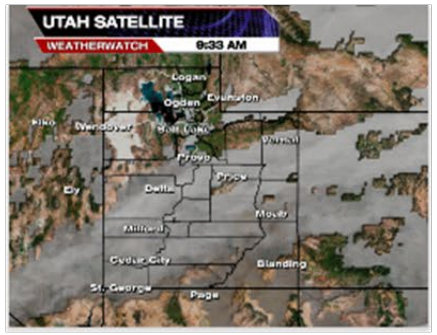
- Providing field crews with fire condition, fire suppression, and communication training
- 24x7 weather monitoring enabled utilizing Western Weather
- Installation of additional eight new local weather stations in-progress
- Collaboration with local agencies



Western Weather – Weather Monitoring

- Hi-Res Data
- Local Weather

Advanced Weather Modeling



- Better Forecasting
- Advanced Warning

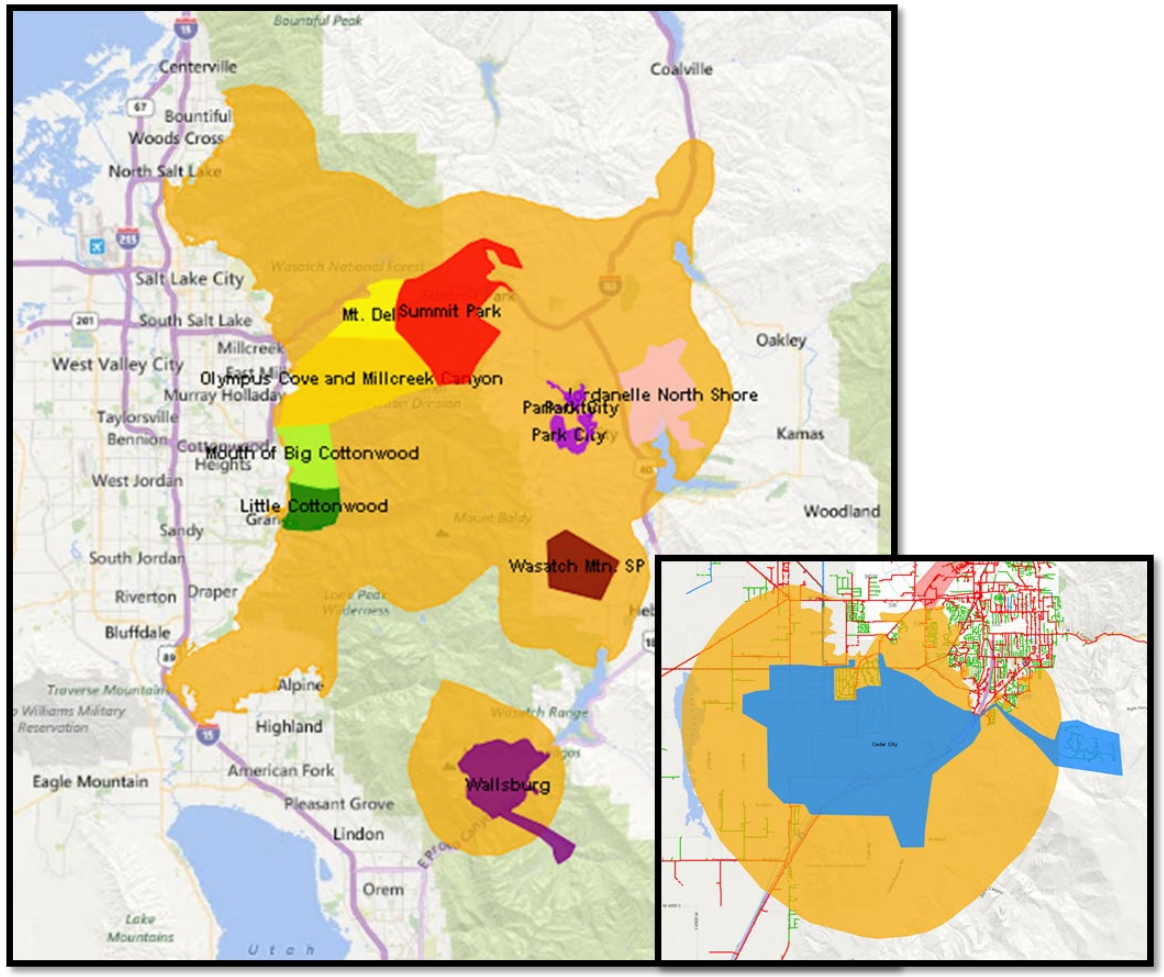
Fire Monitoring Cameras

- High-Definition
- Remote-controlled

Situational Awareness Center

- The Keetch-Byram Drought Index (KBDI) which assesses the risk of fire by representing the net effect of evapotranspiration and precipitation in producing cumulative moisture deficiency.
- Hourly Fosberg Fire Weather Index (FFWI) which uses temperature, relative humidity, 10-minute wind-speed factored into a single weather index which is correlated to influence on fire spread, over a 6 hour period (FFWI6)
- Wind Speeds
- Collaborate with University of Utah to develop tools to better predict wildfire conditions

Public Safety Power Shut-off Assessment



- Further assessment done that determined Public Safety Power Shut-off in areas that had potential for extreme fire conditions
- Total 699 line miles in Rocky Mountain Power Fire High Consequence Area
- Government agencies impacted

Agency Line Miles	BLM	Forest Service	Total
Distribution	9.1	175.5	184.6
Transmission	15.5	35.2	50.7

A New Fire Mitigation Measure

We're adding a new tool to help keep people and communities in high fire risk areas safe – *Public Safety Power Shutoff.*

What is a Public Safety Power Shutoff?

- We proactively shut off power during extreme and dangerous weather conditions that can result in catastrophic wildfires
- Used as a last-resort preventative measure
- Each situation is unique - No single factor drives a Public Safety Power Shutoff
- Anticipated to be infrequent and only used under rare conditions

A New Fire Mitigation Measure

We're adding a new tool to help keep people and communities in high fire risk areas safe – *Public Safety Power Shutoff.*

How does a Public Safety Power Shutoff work?

- Specific area and number of customers depends on forecasted weather and which circuits need to be turned off for public safety
- Coordinate with local leaders and emergency services
- Crews will visually inspect lines, clear debris and make repairs if needed before restoring power
- Will last as long as extreme conditions exist

Public Safety Power Shut-off Factors

We monitor a range of factors before triggering a Public Safety Power Shutoff:

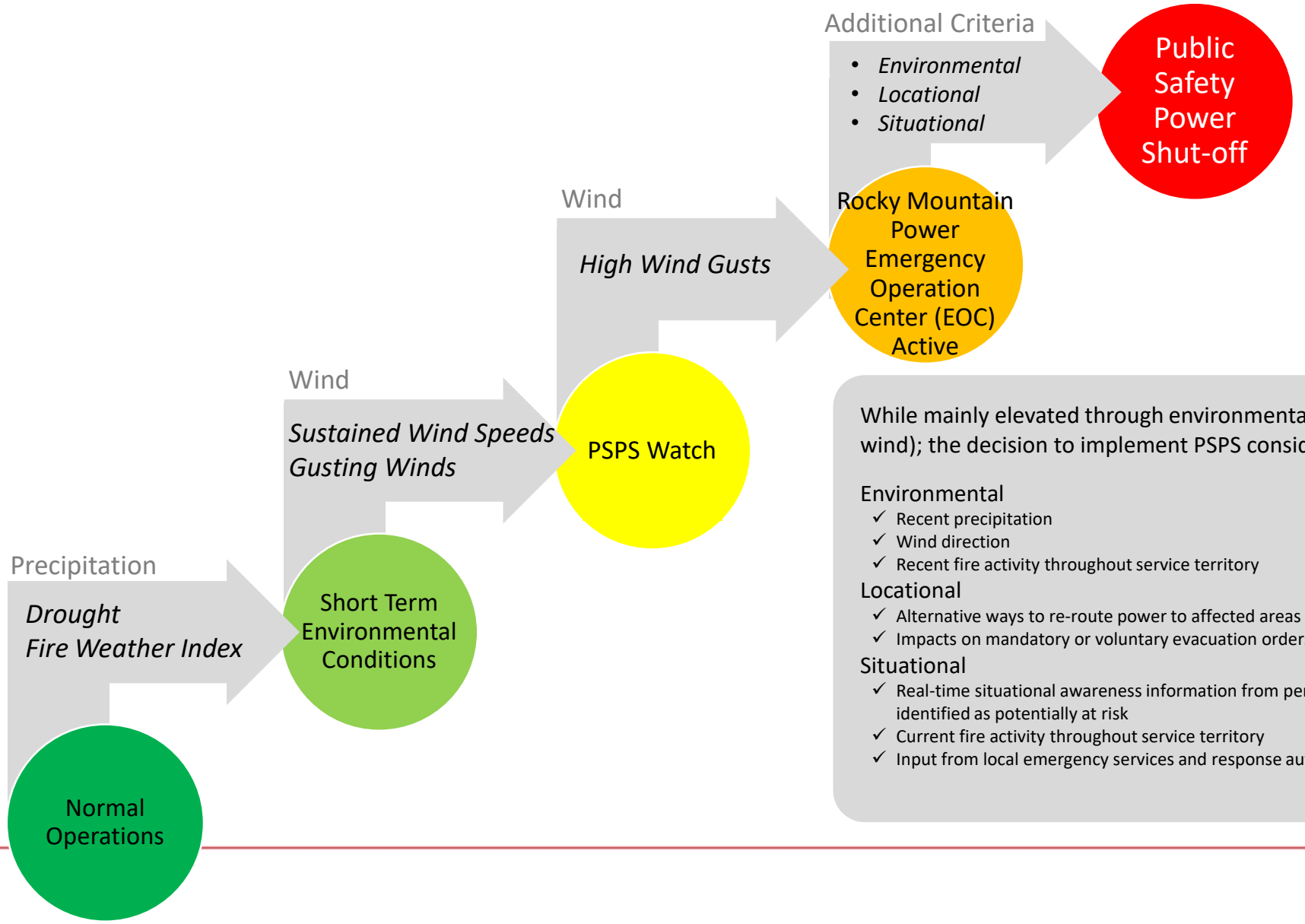
HIGH WINDS

LOW HUMIDITY

DRY VEGETATION

REAL TIME OBSERVATION

Public Safety Power Shut-off Criteria



While mainly elevated through environmental conditions (precipitation and wind); the decision to implement PSPS considers additional criteria:

Environmental
- ✓ Recent precipitation
- ✓ Wind direction
- ✓ Recent fire activity throughout service territory

Locational
- ✓ Alternative ways to re-route power to affected areas
- ✓ Impacts on mandatory or voluntary evacuation orders in place (ingress / egress routes)

Situational
- ✓ Real-time situational awareness information from personnel positioned in the impacted areas identified as potentially at risk
- ✓ Current fire activity throughout service territory
- ✓ Input from local emergency services and response authorities

Public Safety Power Shutoff Notification

- **72 - 48 Hours, Candidate PSPS:** Forecast received. Contact community leaders, emergency management, state regulatory authority, media, social media, customers (according to chosen method).

- **24 Hours, Candidate PSPS:** Monitor and continue to communicate to community leaders, emergency management and customers. All customers receive an outbound call in addition to other methods of notification. All social media platforms updated including website. Begin personal contact of identified life support customers.

- **2 Hours, Imminent PSPS:** Two-hour imminent alert outbound calls placed to all customers. List of uncontacted life support customers is provided to RMP's incident commander. All social media platforms updated including website. Community leaders, emergency management, the media, and community based organizations are updated.

- **1 Hour, Imminent PSPS:** One-hour imminent alert outbound calls placed to all customers. All social media platforms updated including website. Community leaders, emergency management and the media are updated.

- **Event Begins:** Outbound calls are placed to all customers. All social media platforms updated including website. Community leaders, emergency management and the media are updated.

Public Safety Power Shutoff Process

What should community expect?

- Advance warning whenever possible
- Continued updates to keep community impacted informed before during and after
- Communications via phone, text, radio and social media
- Safety inspections to confirm extreme conditions have passed
- Power restoration as soon as possible

Public Safety Power Shutoff Notification

Cancellation

When forecasts change a Public Safety Power shutoff can be cancelled. In this case, we will:

- Call customers to let them know
- Contact community leaders via their Regional Business Manager
- Update our social media channels and notify the media

Power restoration

- Notify customers when restoration begins
- Notify community leaders via their Regional Business Manager
- Notify customers when complete

What Customers Can Do To Prepare

Safety begins at home. Take these steps to prepare:

1. Update your contact information with Rocky Mountain Power
2. Create a defensible space around home
3. Update emergency plan and supplies
4. Plan for any medical needs
5. Visit rockymountainpower.net/wildfiresafety for additional details and resources