

APS Public Safety Power Shutoff

April 23, 2024



April 4, 2024

Arizona Public Service Wildfire Mitigation Update

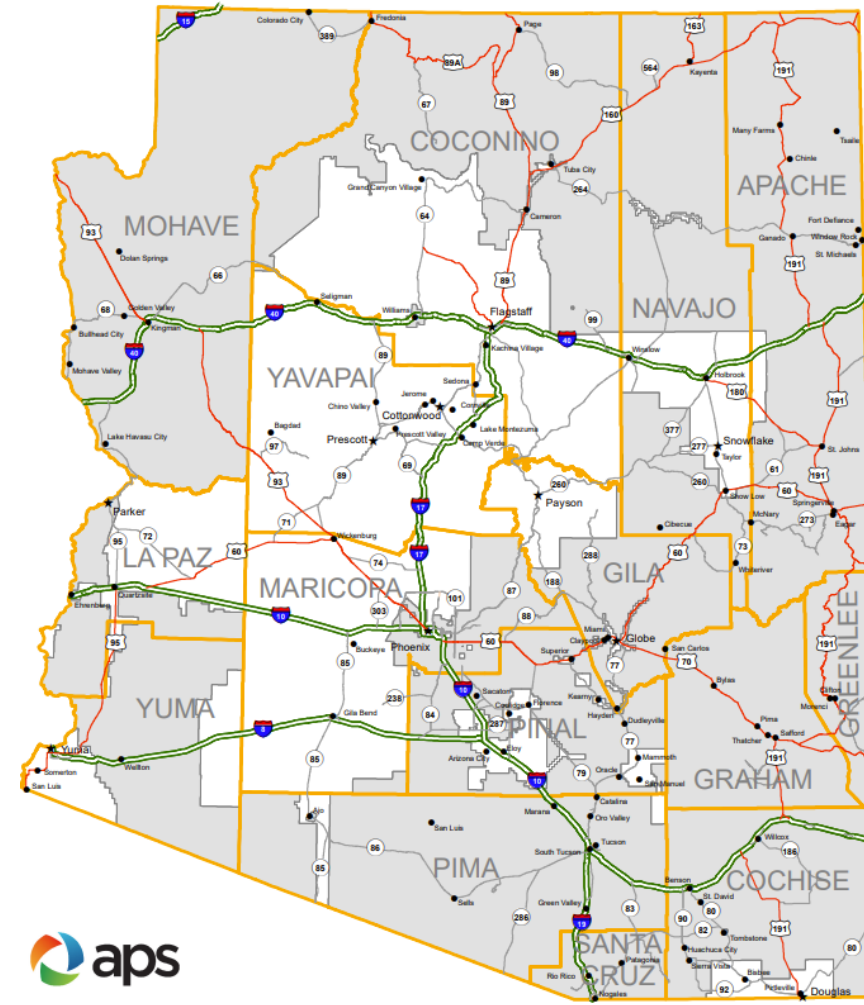


Introductions

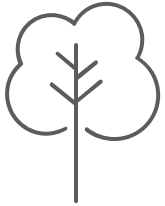
- Janet Dean – Public Affairs Manager
- Wade Ward – Manager, Fire Mitigation
- Joe Weathersby– NE Division Manager

Objectives

- Review our current efforts to mitigate wildfire risk
- Share our newest mitigation tool – Public Safety Power Shutoffs
- Discuss how you can help us prepare for this wildfire season

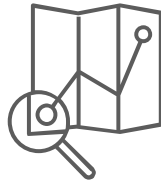


We have a multi-faceted strategy to protect against wildfires



Vegetation management

Trim and remove trees along our lines to minimize risk of tree-strike



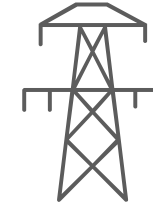
Enhanced inspections

Conduct routine inspections to identify required maintenance to reduce risk



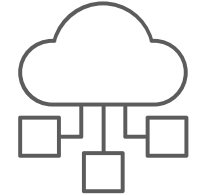
Improved monitoring

Monitor our system to enable early detection and suppression of wildfires



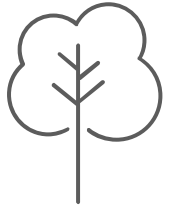
Grid hardening

Upgrade our system to make it more resilient



Risk modeling

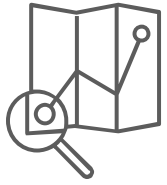
Use advanced tools to identify risk and more effectively plan work



Vegetation management: Robust program in place to manage vegetation around our equipment



- **Tree trimming** and clearing along our distribution lines on set cycles
- **Hazard tree program** to monitor and address issues



Enhanced inspections: Frequent inspections and use of technology to identify risks



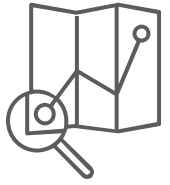
- **Conducting line patrols** to inspect infrastructure
- **Deploying drones** to inspect lines and reach difficult to access parts of our system
- **Using LiDAR and infrared imaging** to more effectively identify potential safety risks



Improved monitoring: Tools in place to identify wildfires early and enable faster suppression



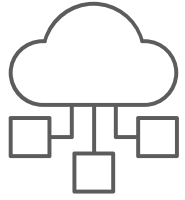
- **Using weather stations** to proactively identify when weather factors increase the risk of ignition
- **Leveraging use of high-definition cameras** to monitor wildfires



Grid hardening: We are continuously upgrading our system to make it more resilient



- **Deploying advanced technology** to better monitor and manage our grid
- **Increasing our investments** to increase resilience, reduce risk, and quickly address issues identified in inspections



Risk modeling: Use advanced tools to proactively identify risks on our system



- **Using risk modeling software** to identify where our system has elevated wildfire risk
- **Risk-informed capital planning** to focus our investments on proactively reducing risk

We are coordinating extensively with agencies and counties to mitigate risk and prepare emergency response

Federal and state partners



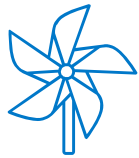
Local counties



+ others

Public Safety Power Shutoffs (PSPS) are another tool we have when the risk of wildfires is extremely high

Conditions that would lead to a power shutoff



High winds



Dry conditions



Extreme heat



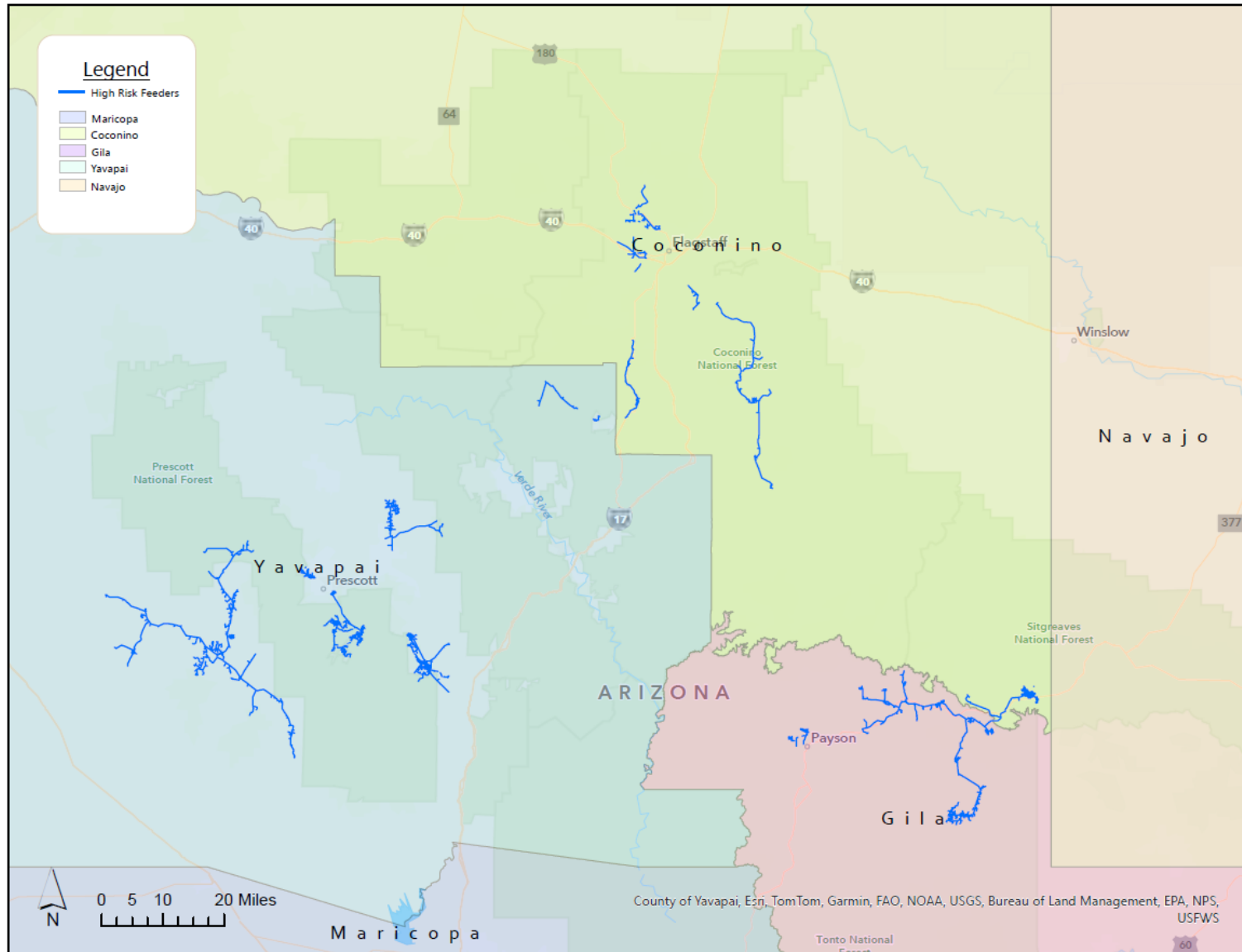
Risk of spread



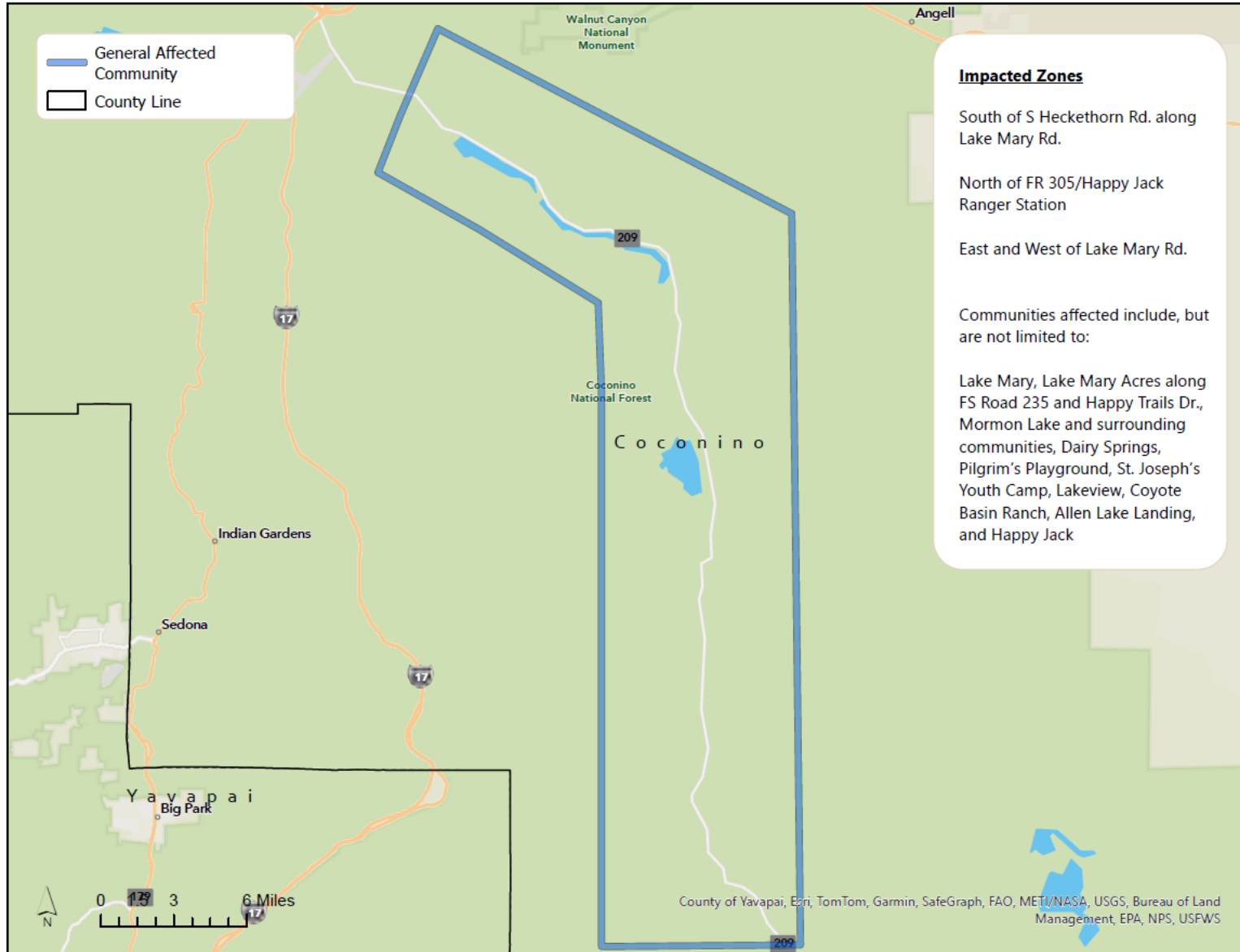
Implications of a public safety power shutoff on our customers

- **Targeted de-energization** of our lines on days of extreme risk
- **Outages lasting up to ~20 hours** while risk is elevated and to enable line inspection before they are re-energized

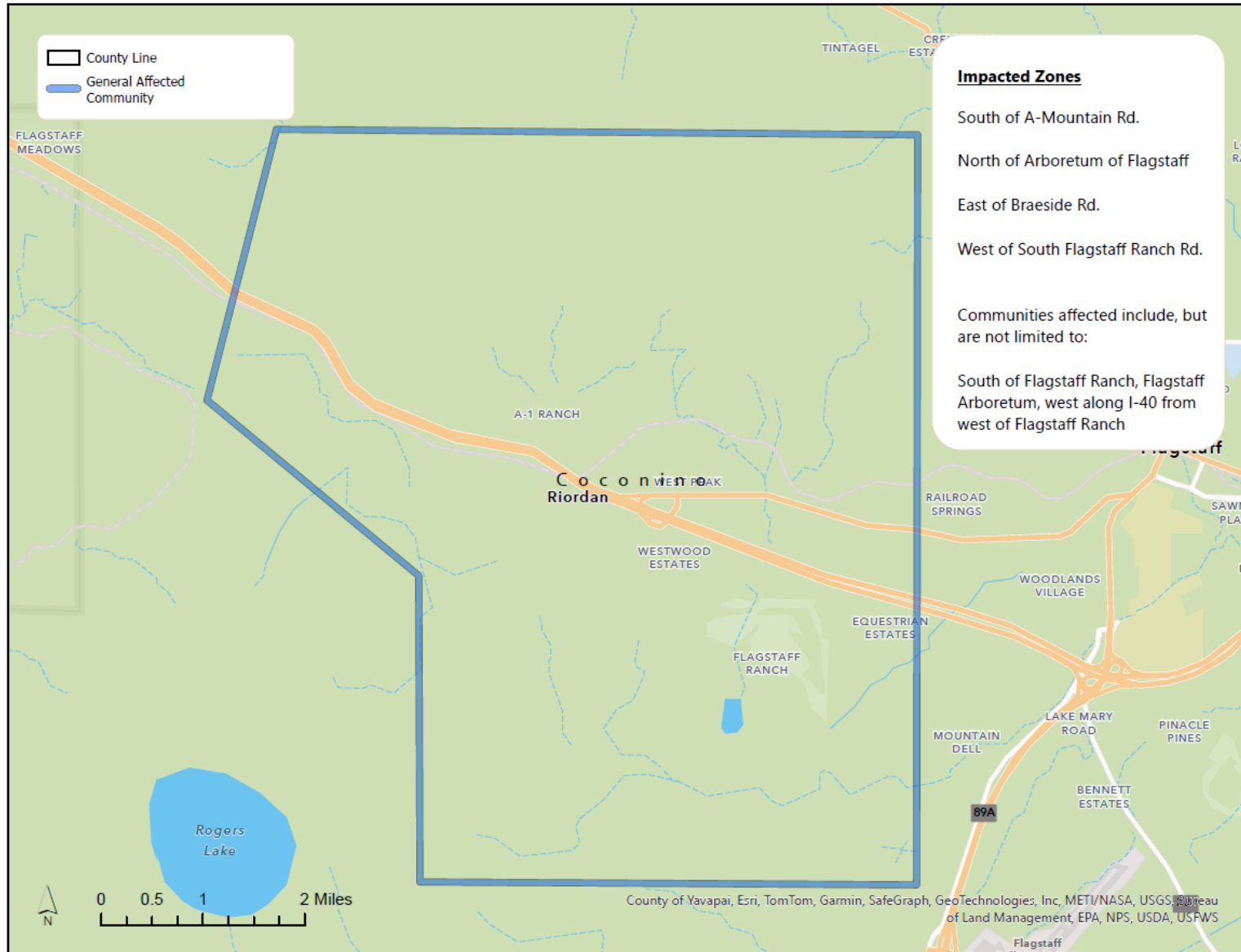
CIRCUIT LOCATIONS – OVERVIEW



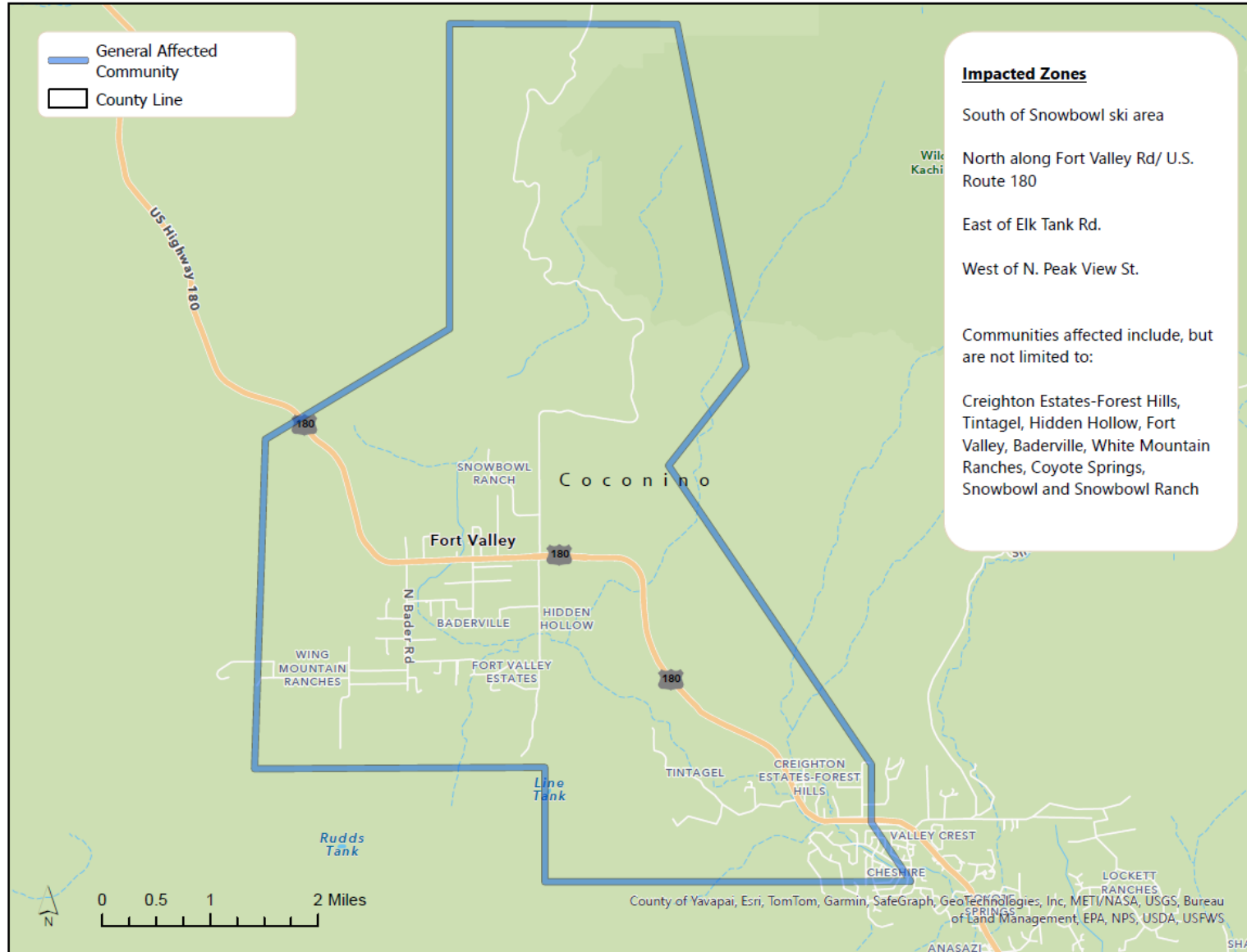
CIRCUIT LOCATIONS – COCONINO



CIRCUIT LOCATIONS – COCONINO



CIRCUIT LOCATIONS – COCONINO



We will communicate with local agencies and customers well in advance of a PSPS event so that they can prepare accordingly

5 days before outage

Initial notification to **emergency agencies**

Starting 4 days before outage

Daily communication with customers about potential outage and how to prepare

During outage

Communication with customers on **progress to restoration**

We'll communicate via multiple channels



Text messages



Email



Phone calls

We are proactively taking steps to prepare for Public Safety Power Shutoffs

PROTECTING YOU & YOUR COMMUNITY FROM WILDFIRE



At APS, our teams work year-round with public safety partners, first responders and wildfire experts in your community to prevent, reduce and respond to wildfires. As part of our efforts, we're reducing the risk of wildfires from our equipment by:

- Inspecting more than 30,000 miles of power lines to clear overgrown vegetation
- Creating defensible space by removing vegetation around poles and substations
- Using advanced technology to troubleshoot issues more quickly, reduce the number of customers impacted and decrease the duration of outages

A NEW TOOL TO REDUCE WILDFIRE RISK

Starting May 2024, we're adding a new way to protect you from wildfire, to be used only during extreme fire risk conditions. It's called **Public Safety Power Shutoff**.

In these conditions, we may shut off power to your area to prevent the electric system from starting or contributing to a wildfire through a downed wire or inadvertent spark. This can include periods of high winds, which can cause trees to contact lines and start a wildfire.

The decision to call a safety shutoff is based on several factors that impact the potential for fire and how fast a fire might grow in the area, such as:

- Available flammable material in the area, such as dense, dry brush
- Terrain that would impact fire direction and growth
- Weather, including high wind speed and gusts

These conditions may be occurring away from your home or business, but near APS power lines that provide you power, so it may not be immediately obvious why there is a safety shutoff.

A TOOL WE EXPECT TO USE RARELY

We recognize safety shutoffs create hardships for our customers and communities. However, we are committed to public safety, and preventing fires is a top priority.



STAY INFORMED IF THERE IS A SAFETY SHUTOFF IN YOUR AREA

We encourage you to create an account online by visiting aps.com/login, or if you already have an account, sign in to be sure your account information is up to date with your email address and cell phone number. You can also update your contact information by calling the APS Customer Experience Center at (800) 253-9405. When your contact information is current, it helps us keep you informed during an outage.



Scan to visit aps.com/login

HOW CAN I STAY SAFE & PREPARED?

- Get emergency alerts in your area and have an emergency plan for your family and pets. [Arizona County: www.arizona.gov](https://www.arizona.gov) [Gila County: www.gila.gov](https://www.gila.gov) [Maricopa County: www.maricopa.gov](https://www.maricopa.gov)
- Store important phone numbers for medical providers, family, friends, and APS in your cell phone or near your home phone.
- Make sure your cell phone is fully charged, and if possible, consider buying a portable charger.
- Keep your APS account number readily available.
- Have resources ready like flashlights, batteries, a radio, non-perishable food items that are easy to prepare without power, including pet and baby food and extra water, at least one gallon per person per day.
- Stock items and basic tools like a non-electric can opener.
- Make sure you have a basic first-aid kit, medications and toiletries.
- Learn to manually open your automatic garage door or security gates.
- During an outage, check aps.com/outage for cooling shelters, community resources and dry ice reimbursements. During an event, resources will be available on our outage map.

MEDICALLY SENSITIVE CUSTOMERS

In the event of an outage, we will make every effort to notify vulnerable customers on our Medical Care Program who depend on electricity for life-saving medical equipment. If you or someone in your household has a life-threatening illness or uses critical medical equipment, we encourage you to apply for the Medical Care Program. You will need to enroll each year. Learn more at aps.com/medical.



WHERE WILL PUBLIC SAFETY POWER SHUTOFFS BE CALLED?

Safety shutoffs could impact customers in the highest fire-risk communities located in northern Arizona. These communities include parts of Coconino, Gila and Yavapai counties.

HOW & WHEN WILL I BE NOTIFIED OF A SAFETY SHUTOFF?

We will communicate with impacted customers often and at regular intervals via email, text or phone call if a safety shutoff is expected or if one occurs. For example, you'll receive:

- Planning notification in advance based on extreme weather and fire condition forecasts
- Updated timing each day leading up to a shutoff
- Safety shutoff cancellation, if weather and fire conditions improve
- Status updates with an estimate of when power will turn back on and/or information on resources available

Please verify your contact information is up to date on your aps.com account. Text and email alerts are the fastest ways for us to reach you.

Note: Extreme weather can be erratic and may impact the exact timing of advance notification.

HOW LONG WILL MY ELECTRICITY BE OUT IF A PUBLIC SAFETY POWER SHUTOFF IS NECESSARY?

The time span of a Public Safety Power Shutoff can depend on how long extreme weather conditions last and extent of damage to electrical lines and equipment. Once extreme fire risk conditions diminish, field crews will inspect the lines that were shut off. If there is no damage, electricity will be restored during daylight hours. In most cases, power will be restored after about 20 hours, but the actual duration will depend on current weather conditions and if any equipment repairs are needed.

HOW CREWS GET POWER BACK ON AFTER A PUBLIC SAFETY POWER SHUTOFF

- Patrol lines and look for damage**
Get eyes on lines via crew or drone; determine what repairs are needed
- Make site safe for repairs**
Redirect traffic; secure job site
- Make repairs**
Remove damaged equipment; trim trees; dig holes; install poles; string power lines; safety checks
- Restore power**
Notify customers; clean up job site

Questions? To learn more about Public Safety Power Shutoff, visit aps.com/safetyshutoff. Our Customer Experience Team is also here to help. Call (800) 253-9405.



Informing customers now on what they can expect and how they can prepare ahead of time

Mailer distributed to customers in April 2024



American Red Cross

Working with County Emergency Managers and the American Red Cross to establish **community shelters** for our customers to use while the power is off

You can help us prepare for Public Safety Power Shutoffs today

1

Update contact and medical information in your APS account so that we know how to contact and support you

2

Enroll in emergency notifications with your county so that you are kept up to date on all developments

3

Learn more about PSPS by visiting aps.com/pmps

City Response to Public Safety Power Shutoffs (PSPS)





Emergency Management (EM)

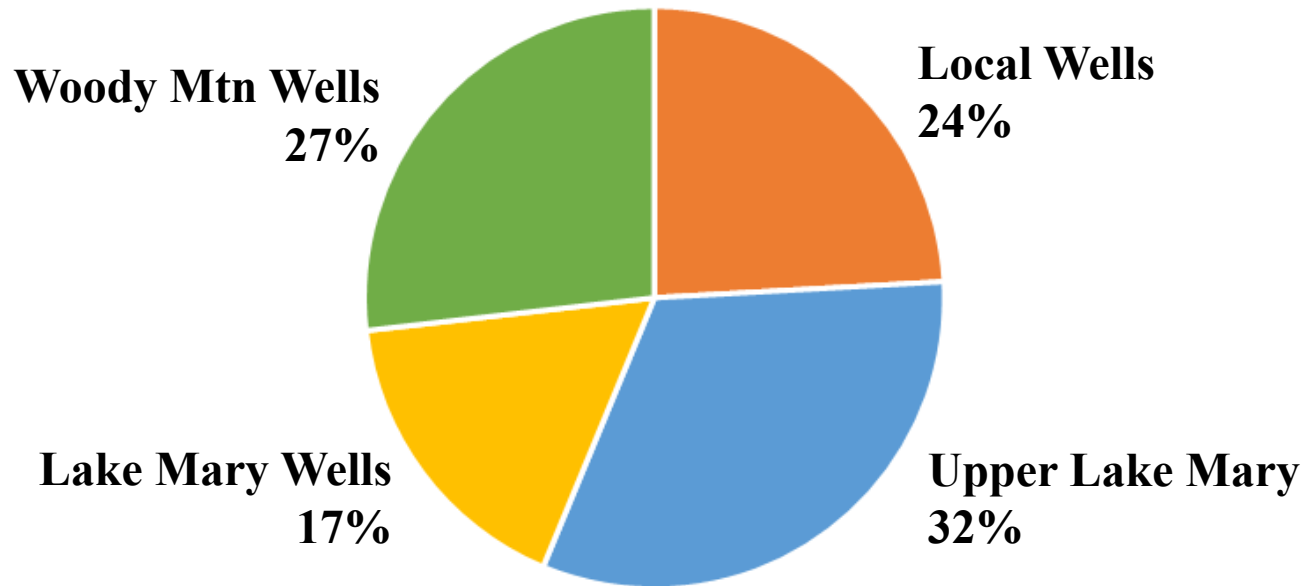
- Formed PSPS Task Force
 - Evaluated potential impacts and have measures in place
- PSPS Event
 - Notification – PSPS TF, senior and elected officials
 - Daily updates
 - Prepared to make resource requests of county and state



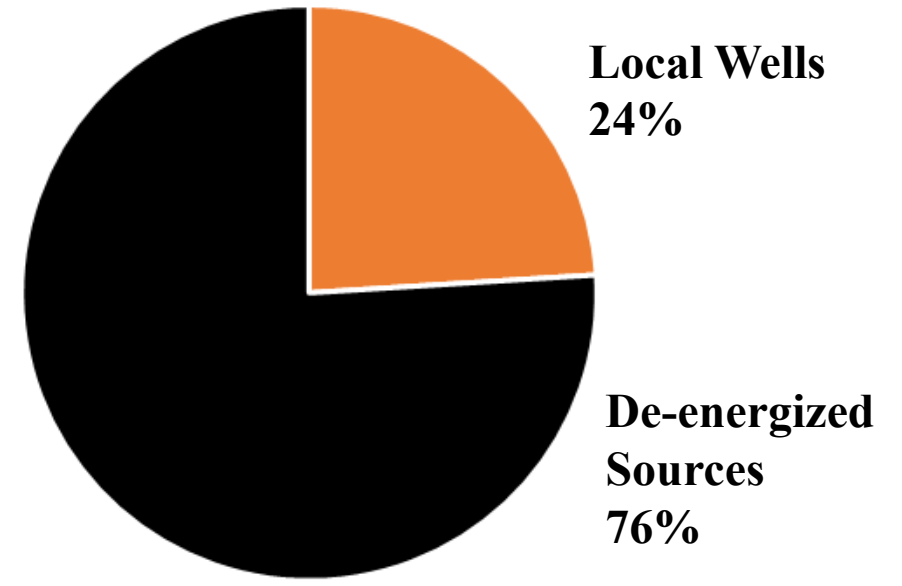
Water Services

A PSPS event will de-energize roughly 75% of Flagstaff's potable water supplies.

Current Potable Water Sources



De-energized Sources



Local Wells will be unaffected by APS PSPS events



Water Services



Tools & strategies available

- Communication with APS
- Increased system storage
 - Historically performed
- Local wells
- Back-up power for surface water production
- Inner Basin
- Public outreach & water conservation strategies
- Additional back-up power for groundwater wells

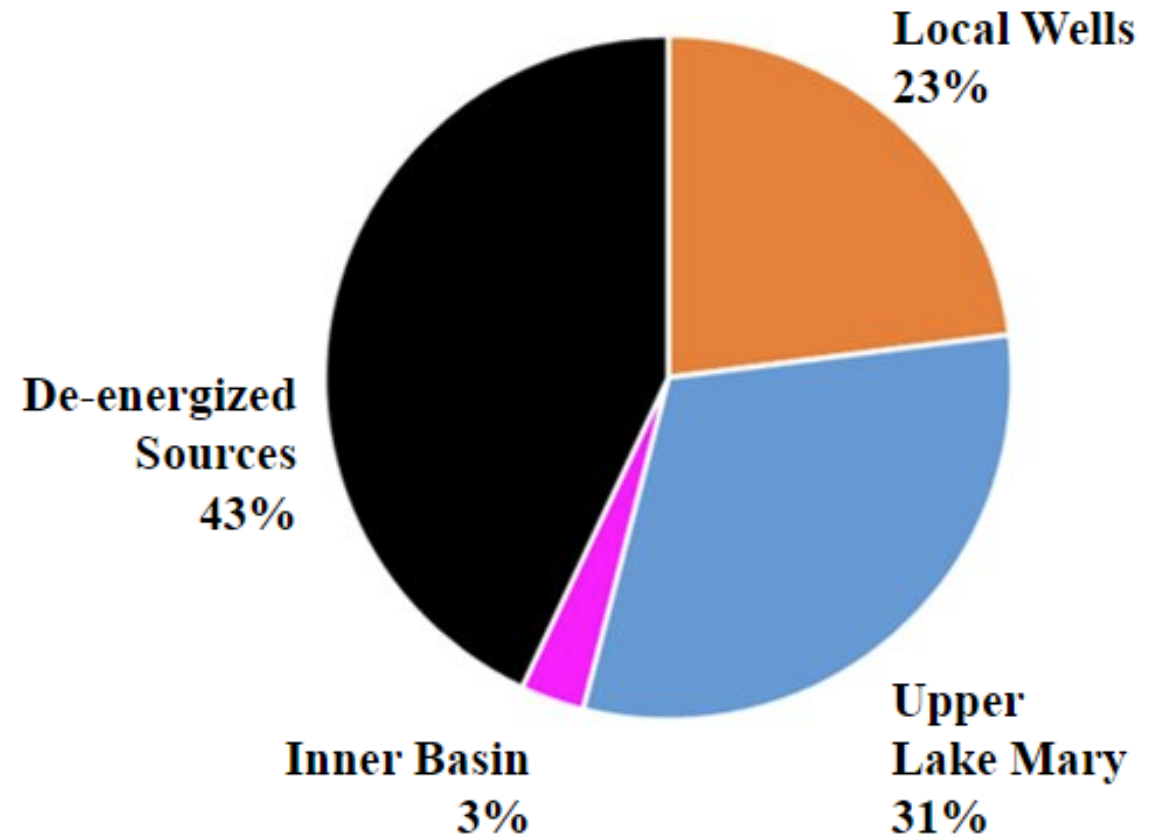


Water Services



Available water sources during a PSPS event

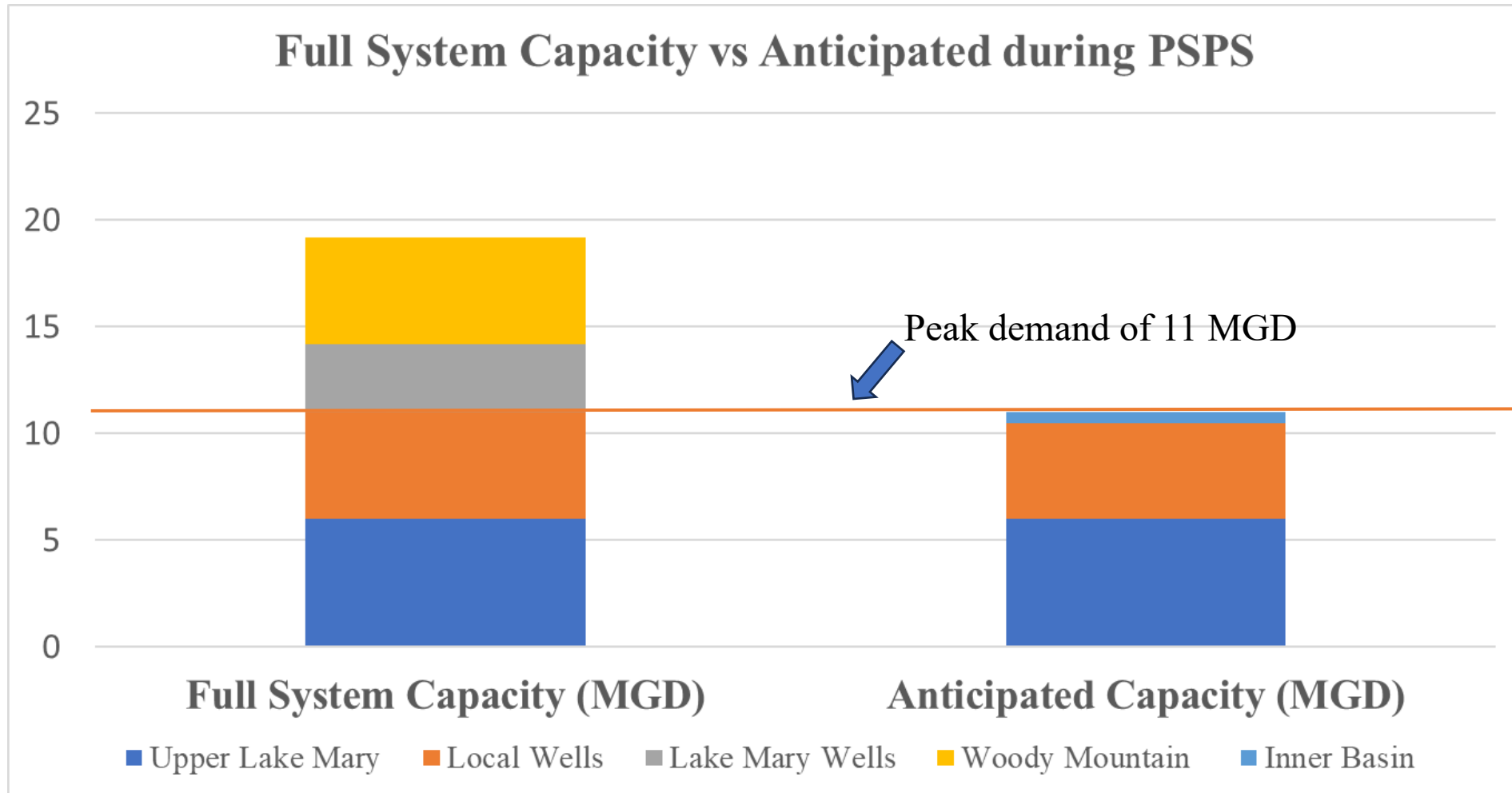
- Local Wells (unaffected by events)
- Surface Water Production with back-up power
 - Established 2020
 - Requiring 24/7 coverage of facilities
 - Generator transport, connection fueling, operation & monitoring.
- Inner Basin Springs & Wells
 - Seasonal source (May-Sept)
 - Repairs underway





Water Services

Anticipated capacity should meet peak demand of 11 million gallons per day



Redundancy will be limited or non-existent with potential for supply unable to meet demand



Water Services



- **Water conservation strategies**

- *Three strategy levels have been in existence since the early 2000's (were last utilized in 2002)*
- Strategy I: Water Awareness
 - Baseline operations, including every other day water based on address, no watering on Mondays or between 9am & 5pm
 - This is in effect when water demand is equal to or less than safe water production capability
 - Safe Production Capability means 90% of the total water resources available



Water Services



- Strategy II: Water Emergency

- In addition to provisions in Strategy I:

- No irrigating, no washing driveways/sidewalks/courts, no vehicle washing except for commercial businesses and public safety, no filling of ponds/pools over 100 gallons, rate increases for tier 3-4 residential and standpipe
 - This is in effect when water demand exceeds safe production capability for five consecutive days

- Strategy III: Water Crisis

- No potable water used outdoors
 - This is in effect when water demand exceeds total production capability, and the amount of water in storage may impair fire protection for the City
 - Water Services will keep updated contact list of top 5 summer users for direct outreach



Fire



- Fire protection during APS initiated power outages
 - Fire flow to be unimpacted for fire hydrants and automatic sprinkler systems
 - Assuming water system production and distribution remains functional
 - Assuming an increase in daily consumption does not occur



Public Messaging

- Once APS starts communicating to the public about a scheduled PSPS event, key City of Flagstaff messages to the community will include:
 - A PSPS event will result in de-energizing some of the City's water sources
 - The City expects to be able to meet water demand during this period
 - The City has established water conservation strategies that can be enacted if conditions change
 - Be on the lookout for updates from the City

Questions?

