



# Evacuation Management for Community Leaders

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**Fire Chief**



**June 20, 2024**  
**16:15 – 17:45**

# History of Program

- Started with 2021 “Ready, Set, Go! for Law Enforcement”
  - Goal to provide Law Enforcement with better tools when responding to wildfires
  - Partnership between International Association of Fire Chiefs (IAFC), National Sheriffs Association (NSA), and International Association of Chiefs of Police (IACP)
- Expanded in 2023 of two-day course
  - Bring law and fire professionals together
  - Deeper dive into preparation and response



# Course Objectives - PREPARE

- Provide a foundation in crisis leadership and decision making.
- Outline key relationships to be built for successful operations.
- Provide a framework for conducting a community assessment and building plans.
- Provide resources for training for all agencies to cooperatively operate in evacuation.



# Course Objectives - RESPOND

- Build notification and evacuation polygons and establish trigger points.
- Work within the Incident Command System (ICS).
- Establish a functional Law Branch with Strike Teams and leadership.
- Apply lessons learned to other large scale, all-hazard responses.





# IAFC Course Modules

Time	Day 1	Notes	Time	Day 2	Notes
08:00	Introduction	- Purpose of course - Introductions - Housekeeping	08:00	Training	- Recommended training courses - Training sources
08:15					
08:30					
08:45					
09:00	Break		09:00	Evacuations	- Planning considerations - Trigger Points - Execution - Expected challenges
09:15	Crisis Leadership	- Leader's intent - Decentralized command - Decision making strategies	09:15		
09:30					
09:45					
10:00	Break		10:00	Break	
10:15	Relationships	- Partners and opportunities - Understanding culture and capabilities	10:15	Response	- Tactics - Notifications How To - Evaluating Watch Out Situations
10:30					
10:45					
11:00					
11:15	Break		11:15	Break	
11:30	Lunch		11:30	Lunch	
11:45					
12:00	Planning	- Case studies and lessons learned - Conducting a community SWOT analysis	12:00	Exercise 2	- Large scale wildfire - Scenario focused on host agency - Emphasis on managing the evacuation - AAR and discussion
12:15					
12:30					
12:45					
13:00					
13:15					
13:30	Break		13:30	Break	
13:45	Incident Command Systems	- ICS overview and intent - Law Branch and format - Interface with fire	13:45	Other Emergencies	- Application to other large-scale emergencies
14:00					
14:15					
14:30					
14:45	Break		14:45	Break	
15:00	Exercise 1	- Small scale, law enforcement centric scenario - Apply topics from Day 1 - AAR and discussion	15:00	Close Out	- Review of objectives - Closing comments
15:15					
15:30					
15:45					
16:00					
16:15					
16:30			16:30		
16:45			16:45		

- Two Day Course
- Includes 10 modules
- Includes two tabletop scenarios
- Attended by Fire & Law



# *CML Course Objectives*



COLORADO  
MUNICIPAL  
LEAGUE

- Review best practices for conducting a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis of a community for review of evacuation preparedness and response.
- Understand planning processes for large-scale evacuations for wildfire and other disasters.
- Recognize response priorities for large-scale evacuations for wildfire and other disasters.



# *Lessons Learned & Conducting a SWOT Analysis*

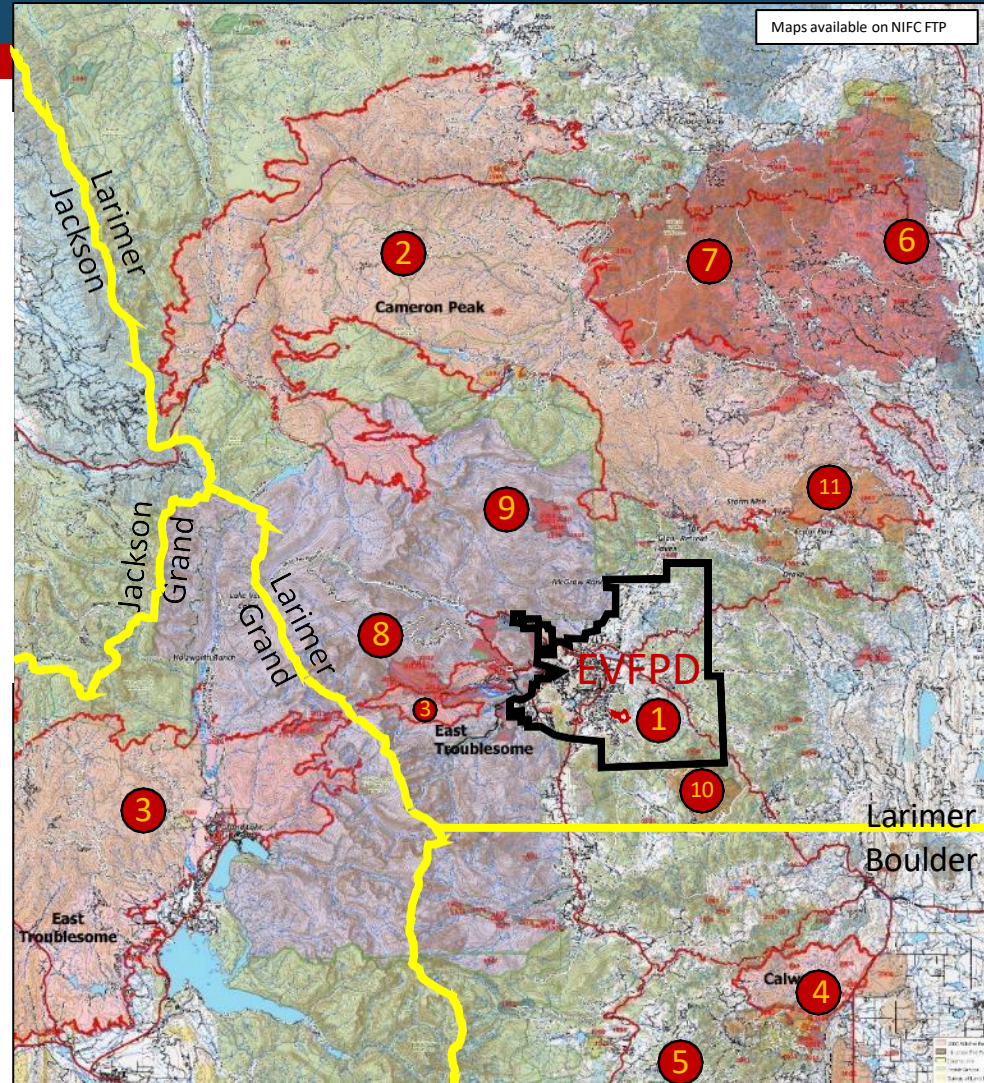


# Northern Colorado Fire History

Maps available on NIFC FTP

<ul style="list-style-type: none"> <li>■ 2021</li> <li>1. Kruger Mountain* 147</li> </ul>	<ul style="list-style-type: none"> <li>■ 2012</li> <li>7. High Park 87,284</li> <li>8. Fern Lake 3,500</li> </ul>
<ul style="list-style-type: none"> <li>■ 2020</li> <li>2. Cameron Peak* 208,663</li> <li>3. East Troublesome* 192,560</li> <li>4. Calwood 460</li> <li>5. Lefthand Canyon 165</li> <li>6. Lewstone</li> </ul>	<ul style="list-style-type: none"> <li>■ 2010</li> <li>9. Cow Creek 1,500</li> <li>■ 2002</li> <li>10. Big Elk* 4,800</li> <li>■ 2000</li> <li>11. Bobcat Ridge 10,599</li> </ul>

\* - Fatalities on these incidents





# *High Park – Lessons Learned*

- Limited accountability
- No organized evac. Plan
- No resources for animal evac.
- Horrible communication plan
- No law and fire coordination



# *Chimney Tops 2, Tennessee (2016)*

- Started within Smokey Mountain National Park
- Sustained by high winds, burned into gateway communities
- 14 Fatalities
- 2,460 structures damaged or destroyed
  
- Common thread: a fire “like they had never seen before”
- Out of the realm of possibilities for locals



# Preparing for What We Have Never Seen Before

- Talk through realities
- Establish common measures of success
- Identify gaps to improve



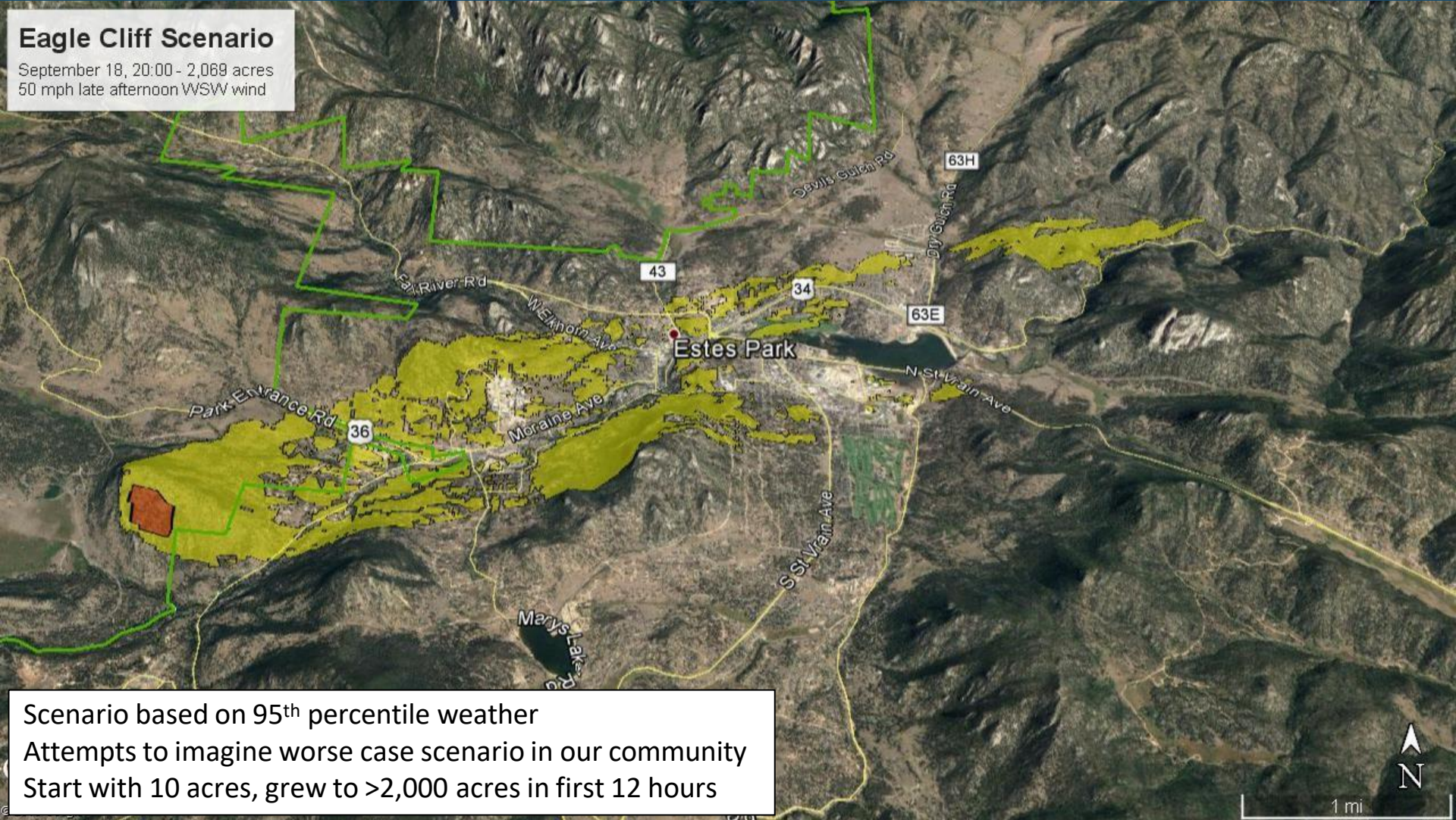
2017





# Eagle Cliff Scenario

September 18, 20:00 - 2,069 acres  
50 mph late afternoon WSW wind



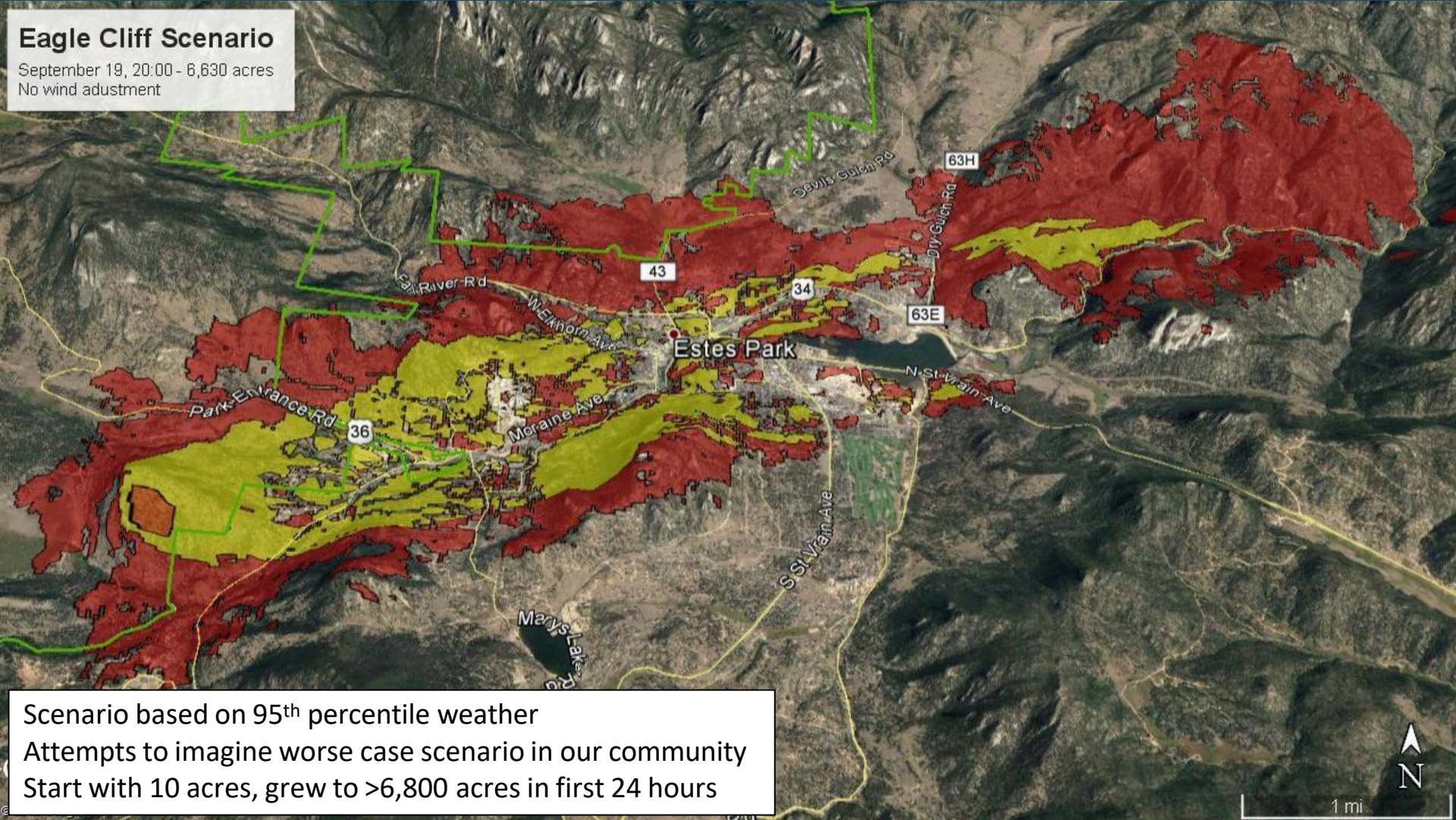
Scenario based on 95<sup>th</sup> percentile weather  
Attempts to imagine worse case scenario in our community  
Start with 10 acres, grew to >2,000 acres in first 12 hours



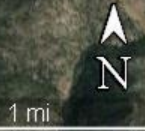


# Eagle Cliff Scenario

September 19, 20:00 - 6,630 acres  
No wind adjustment



Scenario based on 95<sup>th</sup> percentile weather  
Attempts to imagine worse case scenario in our community  
Start with 10 acres, grew to >6,800 acres in first 24 hours



# *2017 Workshop – Key Take Aways*

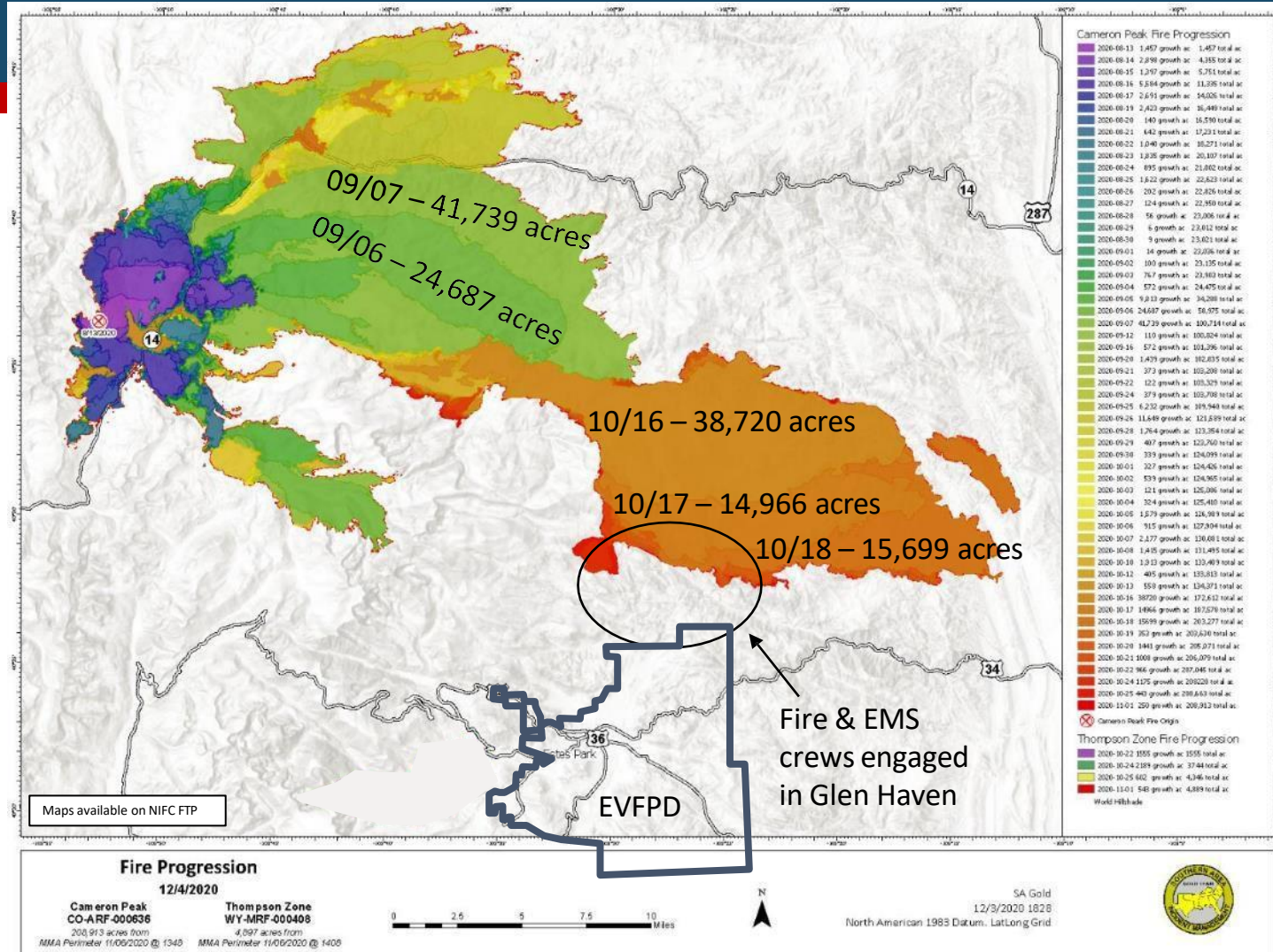
- Need to build notification polygons
- Need to identify trigger points
- Need for a Traffic Management Plan
- Need for a Common Communications Plan
- Need to Protection for Radio Systems
- Need to Provide Protection for Hospital





# Cameron Peak

- 208,913 acres
- Active for 112 days
- August 13 start
- Fully contained on December 2
- 469 structures destroyed
- 10 Federal IMTs
- 85 days of evacuations impacting 43,000 souls



# *Cameron Peak Fire – Lessons Learned*

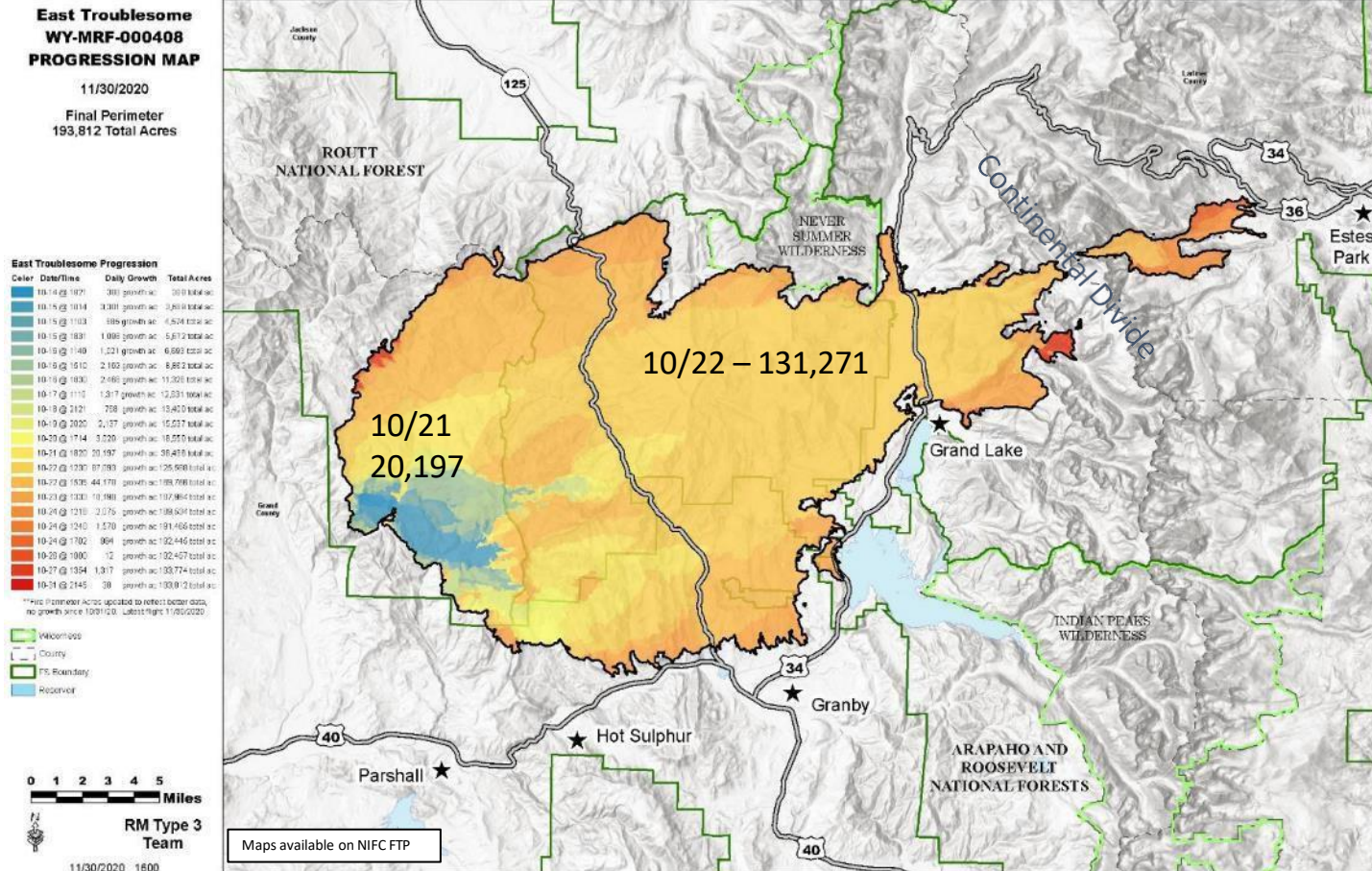
- Incident length and complexity
- Multiple major fire runs / phases
- Evacuation management (multiple communities)
- Communications / channels
- Crews operating in their own back yard





# East Troublesome, Colorado (2020)

- 193,812 acres
- Started October 14
- Jumped 1.5 miles of tundra over Continental Divide
- 580 structures destroyed
- 2 fatalities



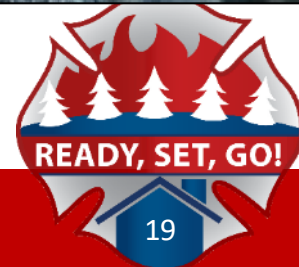
# *East Troublesome Fire – Lessons Learned*

- Fire growth speed / size
- Evacuation management (Grand & Estes)
- Resource tracking and accountability
- Resource management, leader's intent working groups
- Communications / channels
- Crews operating in their own back yard



# *Marshall Fire, Colorado (2021)*

- December 30, 2021
- Started 11:00 am
- 2 Fatalities
- Wind gusts up to 115 mph
- 1084 structures destroyed
- 149 structures damaged



# *Marshall Fire – Lessons Learned*

- Resource ordering / mobilization
- Resource tracking and accountability
- Resource management, leader's intent working groups
- Communications / channels
- Logistics (fuel, food)





# *Community SWOT Analysis*

- Strengths – What do we do well, right now? Let's keep this up.
- Weaknesses – What are we not good at that we should be?
- Opportunities – How can we improve and get better? What should we invest time and resources into over coming weeks/months/years?
- Threats – What are the known unknowns that we don't directly control or manage that could derail us?



# *Community SWOT Analysis*

- Be critical
- Be honest
- Develop realistic timelines

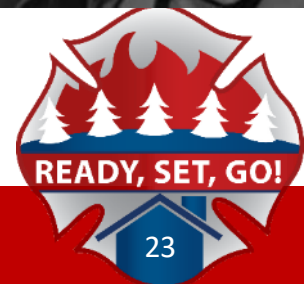


# How Bad Could It Be?

- Learn from the other incidents around the country
  - Every one thought “that wouldn’t happen here” or “if it happens, it won’t be as bad as that other fire”
- Develop relationships and partners
- Start.

In preparing for battle, I have always found that plans are useless but planning is indispensable.

– Dwight D. Eisenhower



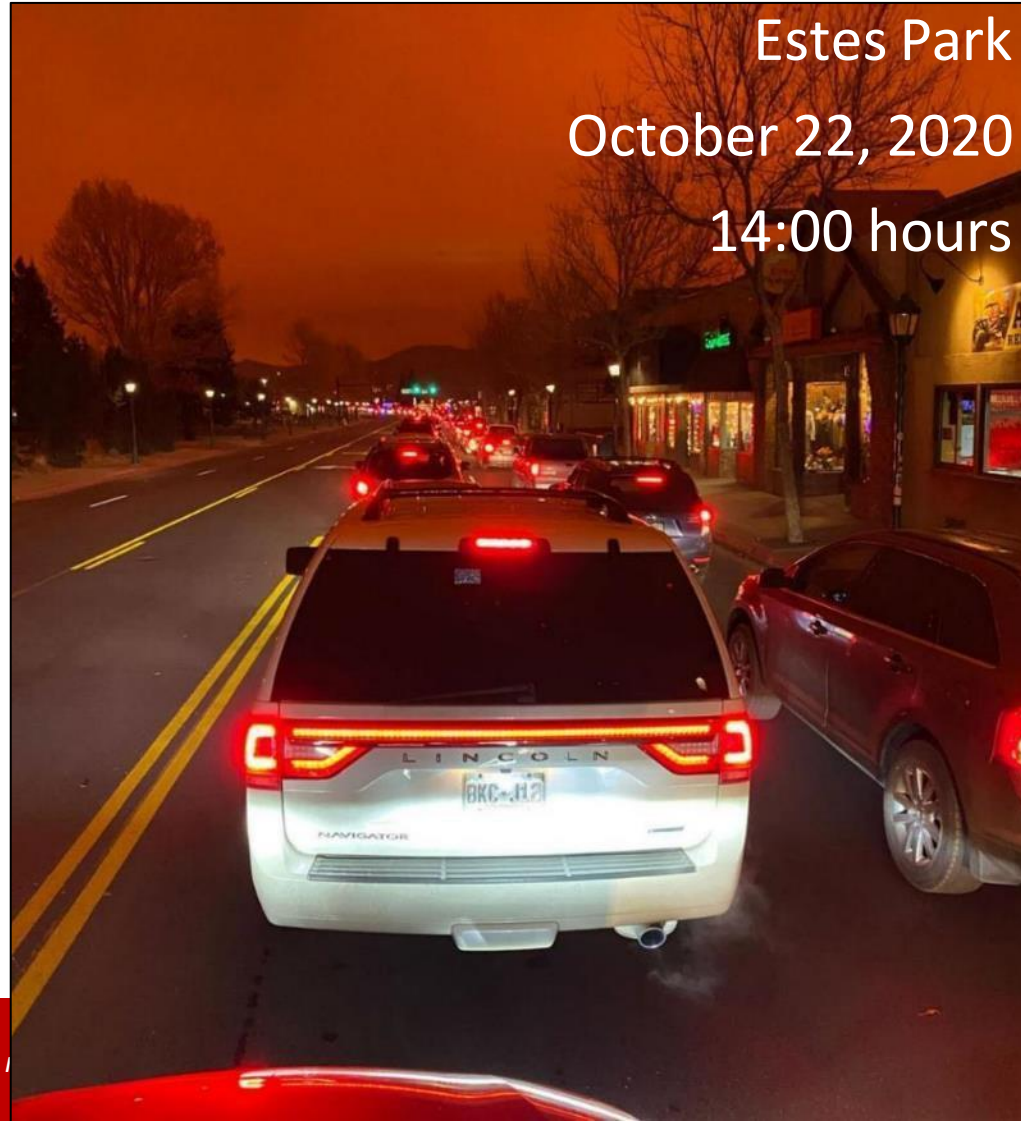


# *Evacuation Planning*



# Evacuations Overview

- How to prepare for potential evacuations
- What are the considerations in planning?
- How do we successfully execute?
- What is a realistic measure of success?



# Why do we evacuate?

- Goal: Minimize loss of life
- Current threat vs. expected threat
  - Weather, wind changes?
- Evacuation Times
  - Studies find 1000 people / hour / lane of travel (assumes 5 mph)





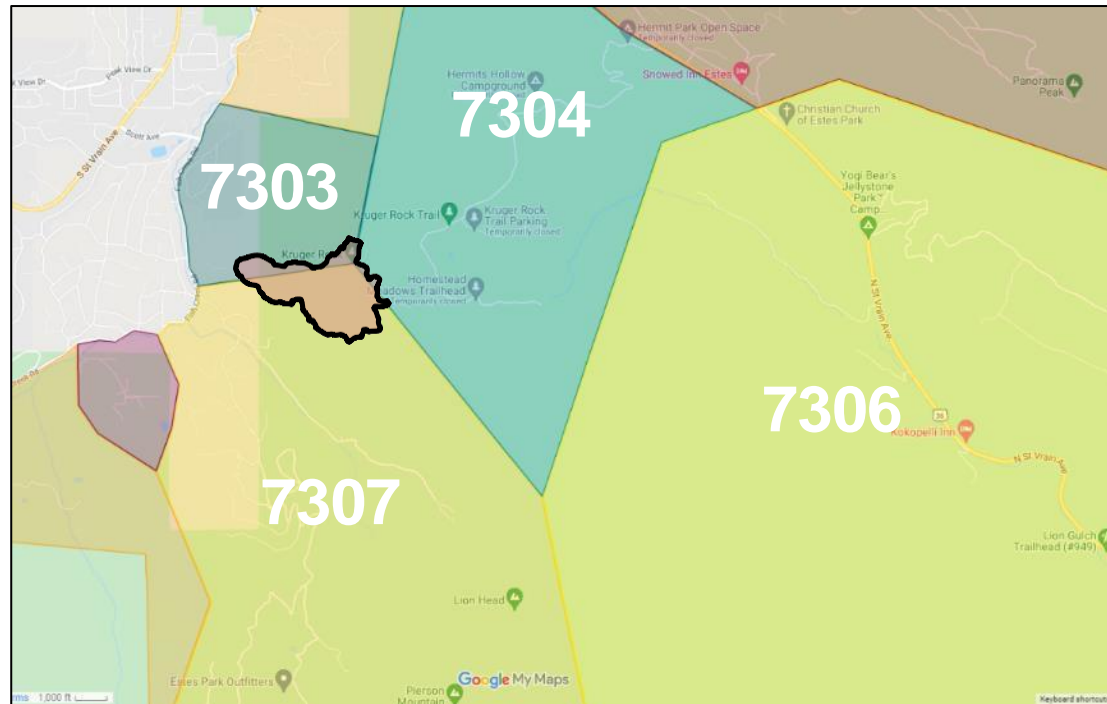
# Questions to be answered

- Who
  - Who can order the evacuation?
  - Who needs to be evacuated
  - Who will do the evacuation
- What
  - Voluntary vs. Mandatory
- Where
  - Where should be evacuated
  - Where should they go
- When
  - How soon
  - Pros and cons of going big



# Who Needs to Be Evacuated?

- What areas do we expect to be impacted by the fire before it can be contained?
- Weather (especially wind), fuels, topography, evacuation routes



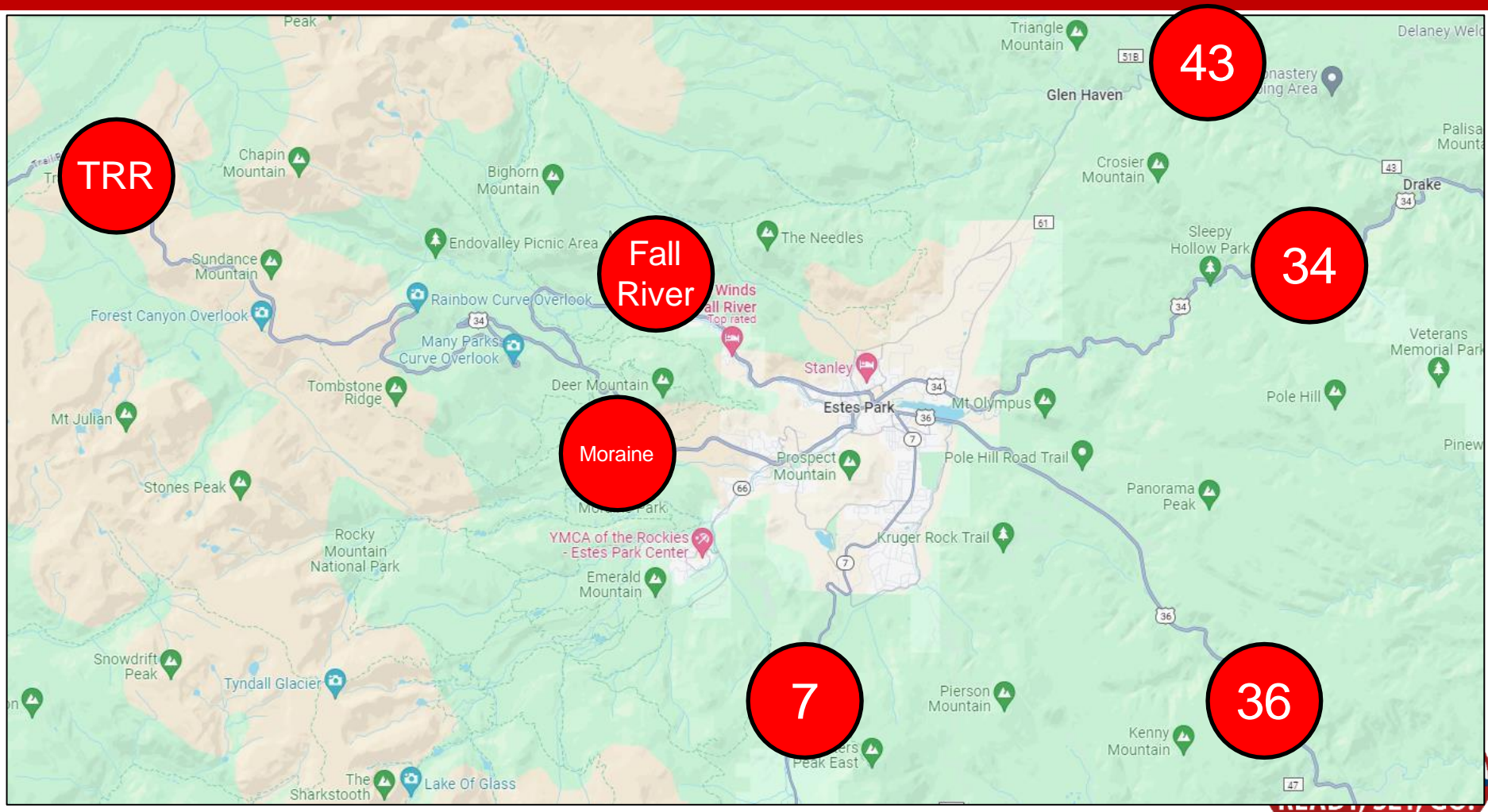
# *Building Notification Polygons – Considerations*

- Build the system based on how you plan to use it (pre-built for all incidents, or pieced together)
- The group that should be notified together for a fire may be different than during a flood
- How will the system work for various scale incidents? (10 acres vs. 1000 acres)
- Build manually or use generation software?

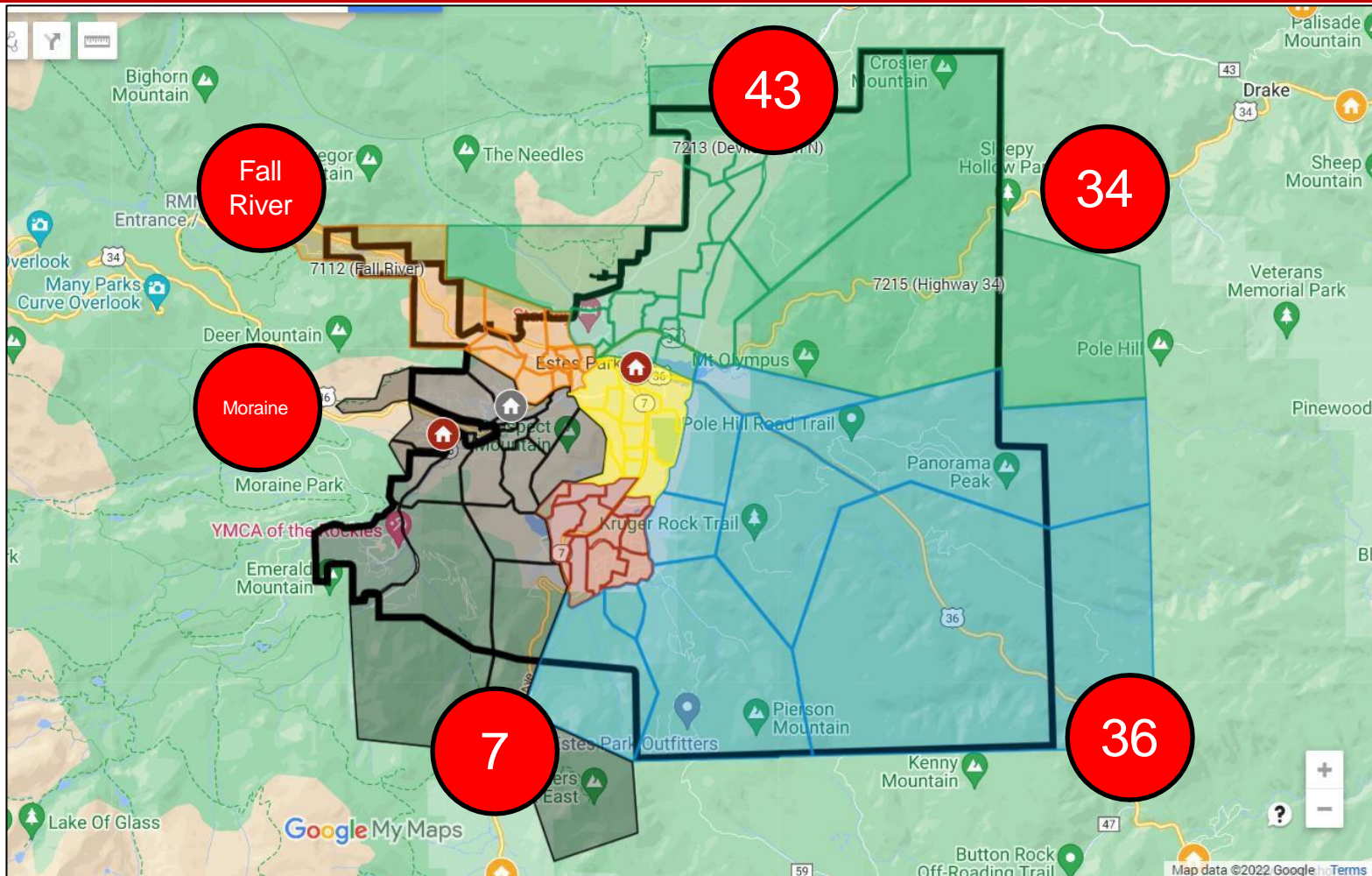




# Step 1: How will people escape?



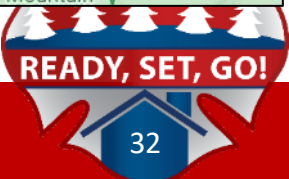
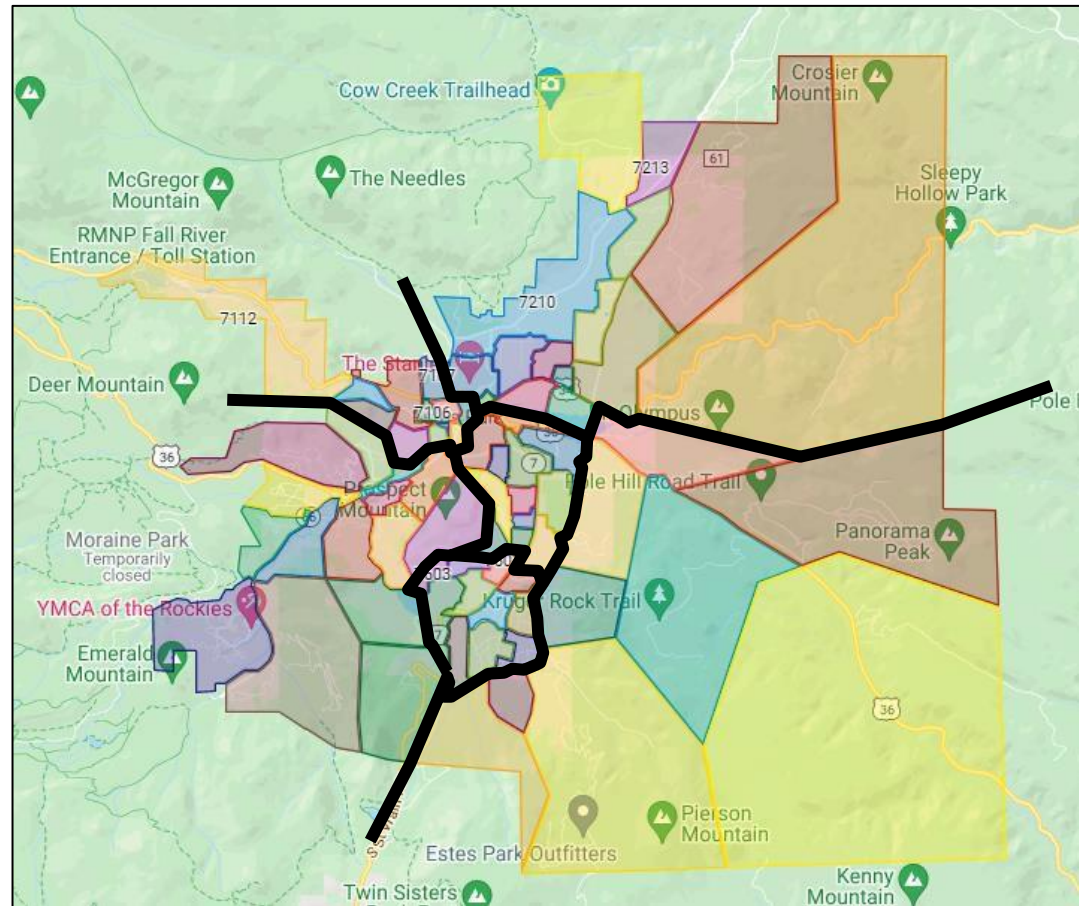
# Build Zones Around Evacuation Routes





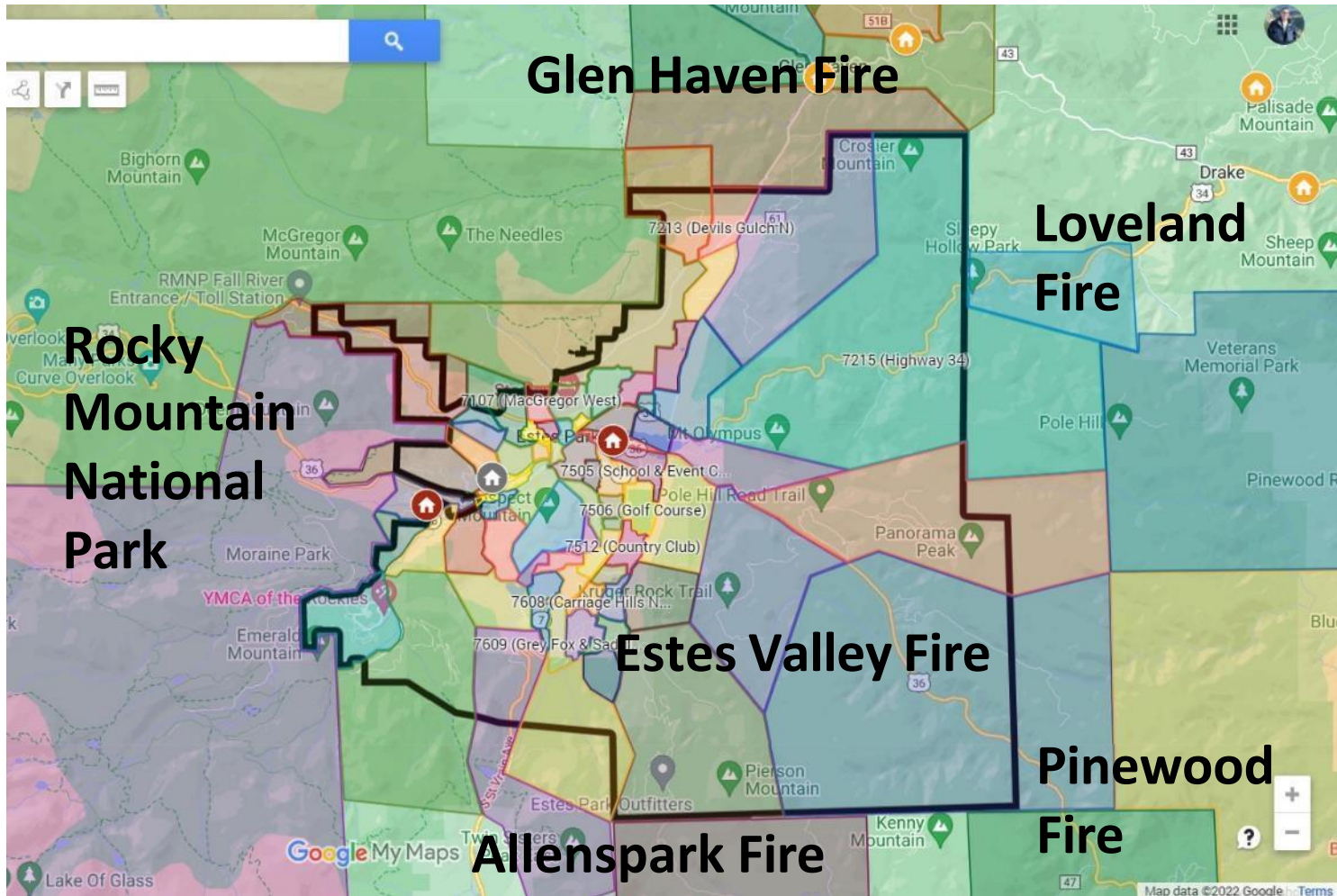
# Break Zones into Smaller Polygons

- Polygon boundaries based on who needs the same information at the same time
- Consider limitations of technology, such as how many numbers can be called at once

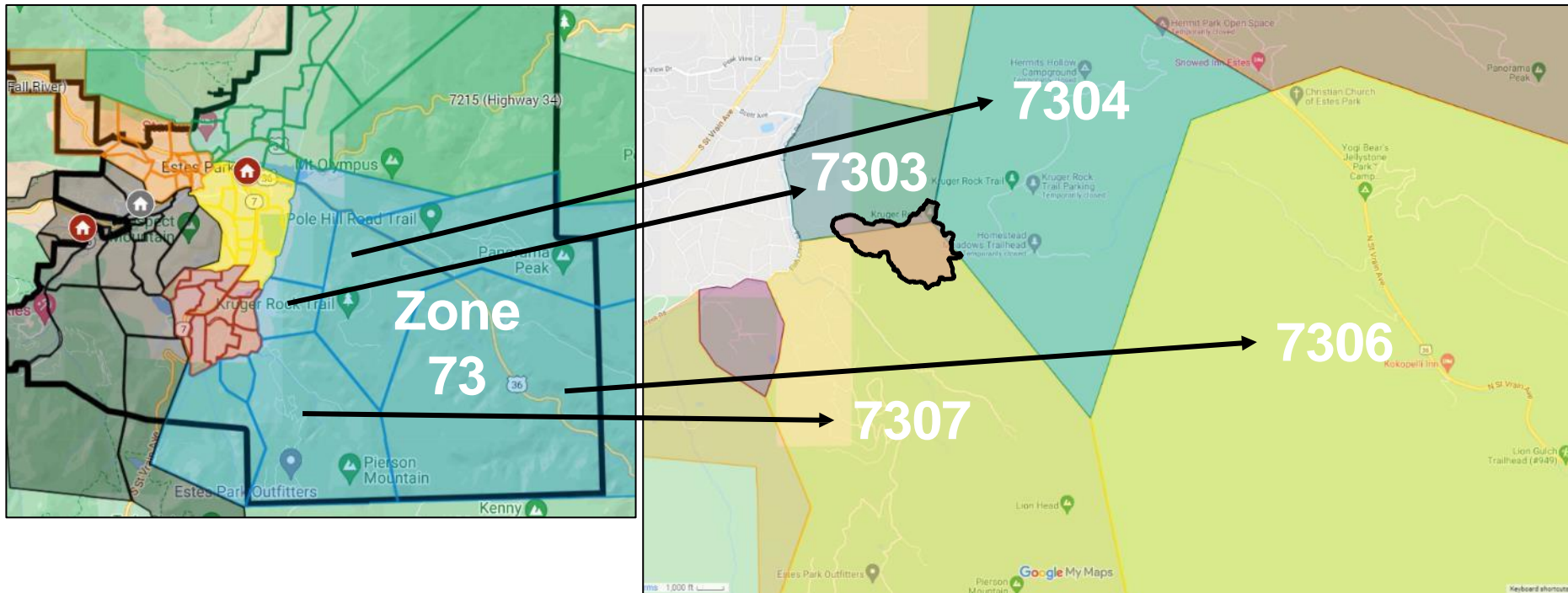




# Partner with Neighbors – Disasters Ignore Borders

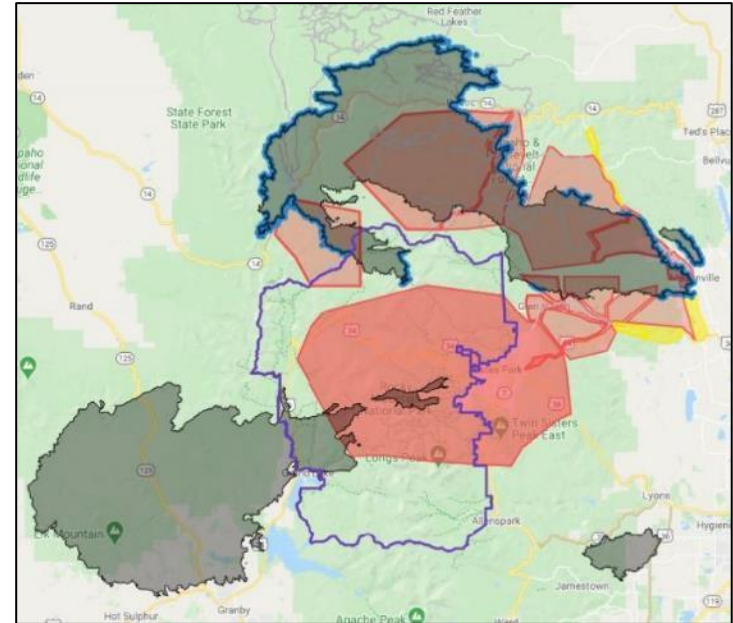


# Pre-Built and Easily Communicated



# Notification Systems – How will you notify?

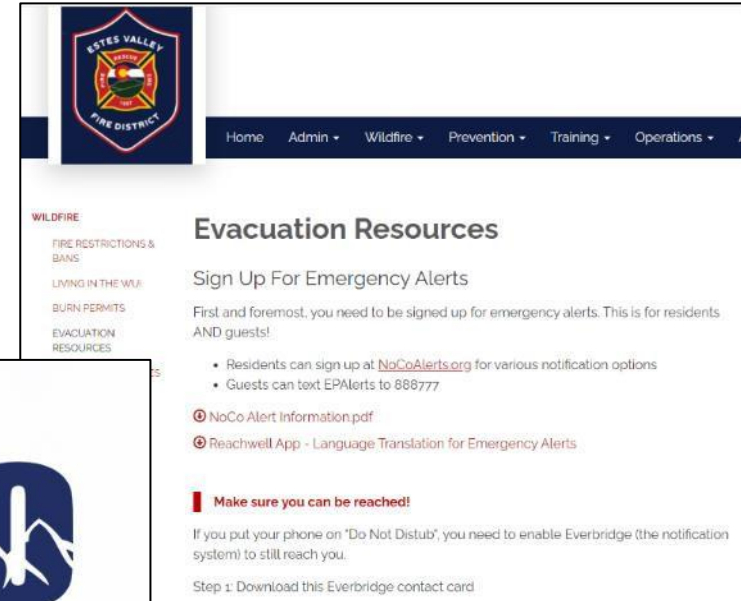
- Door to door notifications
- Social Media
- Radio
- Reverse 911
- Wireless Emergency Alerts (WEA)
  
- Depending on community, need a plan to use more than one
- Need to anticipate issues with systems during disaster





# Opt In vs. Opt Out

- Some systems (Everbridge, Code Red) require users to “opt in” to receive the alerts
- How will you promote use of the system?
- How will you care for those visiting without connection to the system?





# *Notification Polygons – Maintaining*

- Who will be responsible to build and maintain?
  - Local Fire Agencies
  - Local Law Enforcement
  - Sheriff's Office
  - Office of Emergency Management
  
- Training
  - How will you make sure field units and dispatch all know?



# Who Will Do The Evacuation?

- Who can order?
  - Fire Incident Commander
  - Law Enforcement
  - Review your local statutes
  - Are personnel empowered to make this call?



- Who will execute?
  - Typically law enforcement (Law Branch)



# Where Will They Go?

- Shelter locations & back up locations
- Reunification plan & locations
- Small & large animal evacuation plan



# Communications – Before

- Evacuation Planning
- Ensuring all understand risk
- Ensuring all have access to notifications
- Where to find valid information
- Education & Outreach
- How will you get the word out?

## Go Kits & Preparing for Evacuation Resources

We never hope to evacuate the community, but know we must be prepared for the possibility. There are steps you can take to be ready.

- 📄 EVFPD Information Guide-Assembling a Go Kit.pdf
- 📄 EVFPD IG Spanish-Assembling a Go Kit.pdf
- 📄 EVFPD Information Guide-Preparing for Evacuation.pdf
- 📄 EVFPD IG Spanish-Preparing for Evacuation.pdf

### Assemble a basic Go Kit-

For more information on emergency supplies visit [redcross.org/get-help](https://www.redcross.org/get-help) or [ready.gov](https://www.ready.gov).

- 3-day supply of food & water (1 gallon per person, per day).
- First aid kit and sanitation supplies, including toilet paper and baby wipes, extra COVID-19 masks, etc.
- Flashlight, battery-powered radio, extra batteries, cell phone chargers, etc.
- An extra set of car keys, credit cards, cash, etc.
- Extra eye glasses, contact lenses, prescription medications, etc.
- Important documents, contact numbers, insurance documents.
- A printed map marked with evacuation routes in the event that your cell phone battery expires.
- Easily carried valuables and irreplaceable items.
- Personal electronic devices and chargers.
- Clothes, shoes, a flashlight and a copy of your checklist & plan should you need to quickly evacuate.
- Park your car for a quick departure and with a full tank of gas.





# *Communications – During*

- What is the risk
- What is the desired action
  - Go N,S,E,W?
  - Seek higher ground?
- What is the urgency
  - How much time do they have?

## The 8 P's

- People
- Pets
- Pictures
- PCs
- Prescriptions & Medications
- Plastics-  
Credit Cards
- Personal  
Devices  
(Phones, etc.)
- Passports & IDs

# *Communications – During*

- Situational Awareness
  - The problem here (here)
  - The problem is moving (here)
  - What routes are available? Unavailable?
  
- Alternative Routes?
  
- Goal: Escape the threat, not arrive in a particular location



# *Communications – During*

- Levels of Evacuation
  - Voluntary vs. Mandatory
  - Pre-Evac
  
- What if they didn't receive a notification?



# *Communications – After*

- Situational Awareness:
  - Where can they get valid information updates?
  - NOTE: Others WILL fill this void, so post early and often
- When can they come back?
- How long of an evacuation should they be prepared for?
- Who is available to help them for this?





# *Anticipated Challenges*

- Challenging Populations:
  - Visitors
  - Hospitals
  - Jails
  - Nursing homes
  - College Campuses
  - Schools
  - Mountain Camps
  - Camping locations or Dispersed Camping
  - Backcountry hikers
  - Homeless Populations
  - Sovereign Citizens
- Variations in seasonal population / visitation
- Incidents within an incident (IWI)
- Your day job doesn't stop!



# Resource Management

- Accountability and Tracking
  - How will you know who is working?
  - How will you know where they are?
  - How often do you expect check ins?
- Timeframes / Operational Periods
  - How long are they equipped to work?
  - How long can they work before they are operationally at risk?
  - How far were you into the current shift when incident started?



# *Regional Questions*

- How does local Incident Command (Type 5 / 4) integrate into groups from higher levels (4/3/2/1)?
- What statues outline authority? What about delegation/transfer?
- How does the ICS integrate with the EOC / EM?
- How does it integrate with County / State / Federal (jurisdiction)?



# *Other Emergencies*





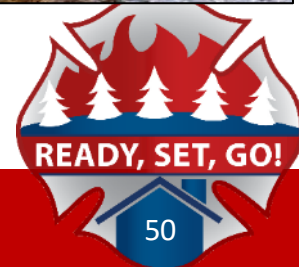
# *Other Emergencies - Overview*

- The skills and techniques covered for wildfire can be covered for other types of major disasters
- Natural: Earthquake, Flood, Tsunami
- Manmade: Active Shooter, Bomb Threat



# Considerations – Impacts to People

- Lost lives
- Lost homes
- Disruptions





# Considerations – Impacts to Infrastructure

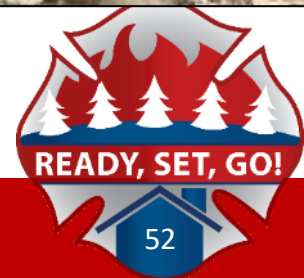


- Roads
- Utilities
- Businesses
- Sanitation



# Considerations – Impact to Travel

- Impacted roadways
- Increased traffic





# Evacuation Planning – Other Emergencies

- Situational Awareness
  - What roads are open or closed?  
*(see Estes, October 2020)*
- What is the emergency?
  - Consider how this impacts evacuation routes
  - Run from fire, climb from floods, stay home from winter storms
- Consider alternate routes
  - Your goal is to escape the threat, not to reach a particular destination



# *Evacuation Polygons – Considerations*

- May be different than fire polygons
- Floods – drainages of concern?
- Different evacuation routes may be appropriate



# *Disruptions over Disasters – Planning*

- Example Disasters:
  - Wildfire
  - Flood
  - Winter Storm
  - Earthquake
- Example Disruptions
  - Loss of Power
  - Loss of Heat
  - Access to Food
  - Access to School
- Every disaster is a combination of disruptions
- If you have a plan for disruptions, it won't matter what disaster occurs



# *Summary*





# *Relationships*

- Incidents of this size/scale will NOT be tackled alone
- Review WHO, WHY, and WHEN of building and maintaining relationships



# *Organizational Capabilities*

- What is the organization's mission / vision / values
- What resources can they bring to bear?
  - Are the resources' availability dependent? On what?
  - What's the competency and reliability of those resources?
- Opportunities for collaboration and cooperation?
  - Communications (systems, channels)
  - Operating Guidelines and Policies (complementary or conflict)



# *Take Away Messages*

- Communities should be critical of their evacuation planning and capabilities
- Develop partnerships to better prepare and execute large-scale evacuations
- Evacuation planning should consider range of emergencies, maintain similarities when possible but accept differences
- Full course available to regions (currently grant funded)



# *Funding Acknowledgement*

- IAFC Wildland Fire Programs are funded through DHS/FEMA/AFG/FP&S grants awarded FY2018 (EMW-2018-FP-00279) and FY2019 (EMW-2019-FP-00412) and in cooperation with the USDA Forest Service



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