



El Dorado County Hazard Mitigation Plan

Public Workshop #1

Date: 27 February 2024
5:30 p.m. – 7:30 p.m. PST

Meeting at: Microsoft Teams Meeting
(see meeting information in the
calendar invite)

Project: County of El Dorado Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) Update
Public Workshop #1

Agenda Topics

1. Introductions

Ms. Juliana Prosperi opened the meeting by introducing the WSP team. Scott Bare then introduced his team at the El Dorado County Office of Emergency Services (OES). Ms. Prosperi proceeded to introduce Slido, a feedback tool employed by WSP to engage participants in virtual meetings.

2. Hazard Mitigation and the Disaster Mitigation Act

Ms. Prosperi introduced the concept of hazard mitigation by explaining the escalating disaster costs in the United States. Taxpayers bear the burden when disaster strike, with FEMA spending over \$59 billion annually on disaster recovery. Mitigation planning, defined as sustained action to reduce long-term risk, emerges as a cost-effective investment, returning six dollars for every dollar spent.

Ms. Prosperi explained that hazard mitigation, a key aspect of emergency management, focuses on minimizing natural hazards, breaking the cycle of high costs. The regulatory context, mandated by the Disaster Mitigation Act (DMA), requires regular updates of Hazard Mitigation Plans (HMPs) for eligibility in federal disaster funding. Adopting the Local Hazard Mitigation Plan (LHMP) into the Safety Element ensures eligibility for state funding through the California Disaster Assistance Act.

3. Role of the Hazard Mitigation Planning Committee

Ms. Prosperi provided a comprehensive overview of the roles and responsibilities within the Hazard Mitigation Planning Committee (HMPC), Local Planning Teams (LPTs), El Dorado County, and the WSP team. She briefly reviewed various stakeholders invited to participate in this plan. Ms. Prosperi concluded this segment by briefly addressing the various levels of stakeholder participation.

4. Public Involvement

Ms. Prosperi outlined the strategies for public and stakeholder engagement. Under federal statute, the MJHMP update must include at least three opportunities for public involvement, including once during the drafting stage, and once prior to approval. The MJHMP process must also describe how a jurisdiction will continue to engage the public after plan implementation. Ms. Prosperi showcased the County's MJHMP webpage, a central hub where upcoming press releases, draft plans, and other pertinent documents



related to the planning process will be posted, offering the public an accessible platform for review. She also reviewed responses received to date on the public survey, which is set to close on March 1st.

Ms. Prosperi initiated the first Slido poll, asking participants, "How can we improve community awareness and preparedness of natural disasters such as earthquakes, floods, or wildfires?" The poll was multiple choice, and the following results were selected by 14 participants:

Response	Percent of Vote
Collaborate with local media for public awareness campaigns	86
Utilize social media and other digital platforms for information dissemination	86
Distribute educational materials through local schools and community centers	64
Host workshops and seminars on disaster preparedness	36
Conduct regular community drills and exercises	36
Implement signage and information boards in high-risk areas	29
Establish a community alert system	29
Other please specify in chat*	7

*Note: While "Other" was selected by a participant, no further information was provided.

5. Planning Process Overview

Ms. Prosperi briefly overviewed FEMA's four phase mitigation planning process, then further discussed the details of each phase, starting with Phase 1: Organize Resources.

Phase 1: Organize Resources

- Determine Planning Area
- Build the Planning Team
- Establish the Hazard Mitigation Planning Team
- Create an Outreach Strategy
- Review Community Capabilities
- Obtain Community Commitment to Mitigation

Phase 2: Conduct a Risk Assessment

- Identify and describe hazards
- Identify assets
- Assess risk
- Summarize vulnerability

After discussing assets and risks, Ms. Prosperi initiated the following Slido poll, "What assets do you consider important to protect from various hazards and potential hazard events?" The poll was open ended and ten participants provided the following responses:

Response	# of Votes
People	4
People! And homes.	2
Water wells	1
Fire stations	1
Roadways	1
Government buildings	1
Water infrastructure	1
The people particularly the most vulnerable who will need help.	1



Natural resources	1
Our natural settings	1
Life is essential	1
Schools	1
Roads/ ingress egress	1
Grocery stores	1
Hospitals	1
Pets	1
Infrastructure	1

Following the hazard risk summary slide, where Ms. Prosperi displayed the results of the risk assessment performed by the planning team, she asked the following questions via Slido, "Do you agree with these ratings? Is there something we missed? Is there anything we should change?" The following open-ended responses were provided via Slido and the meeting chat:

- Cameron Park CSD also has high wildfire risk (per CalFire ratings). Also, I'm not an expert but I would think Georgetown, Cameron Park, and Placerville are not at significant risk of seiches
- Dam flooding - not sure why it is so high in some areas.
- For county yes, can speak to others
- Looking at One-Way access neighborhoods as a part of the vulnerability assessment
- Not sure how a seiche is a risk to anyone but Tahoe?
- One more, debris flow and landslide can happen in Cameron Park (happened last winter)
- why is dam failure viewed as high risk in this county?
- Wondering if City of Placerville extreme heat should be medium
- Yes, I agree.

In response to comments about the hazard risk rating of seiches, Ms. Prosperi clarified that was a clerical error and the risk rating is low.

Phase 3: Develop a Mitigation Strategy

- Review & update plan goals & objectives
- Review mitigation alternatives
- Draft an action plan

Phase 4: Plan Implementation & Maintenance

- Keep the Plan Current
- Review and Adopt the Plan
- Create a Safe and Resilient Community



A participant asked, "Where in the 4 steps are we now?" Ms. Prosperi responded that we are currently at the end of phase 2. The Planning team just had their second HMPC meeting where we covered findings from the Hazard Identification and Risk Assessment (HIRA). The HIRA is the most technical and detailed of the chapters, and the one that we complete and share for review first.

6. Schedule and Next Steps

Ms. Prosperi then reviewed the schedule and next steps, provided below and in the accompanying slides.

Phase/Task	March	April	May	June
Task 4: Implement and Monitor the Plan				
Update Goals	■			
Mitigation Action Plan Update	■ ■			
HMPC Meeting #3	■			
Develop New Mitigation Actions	■ ■			
Phase 3: Develop a Mitigation Strategy				
Draft Plan	■ ■			
Administrative Draft MJHMP		■		
Draft MJHMP + Annexes		■ ■ ■		
21-Day Public Review			■ ■ ■	
Public Workshop #2			■	
Incorporate Public Comments into Final MJHMP			■	
Cal OES 45-Day Review			■ ■ ■ ■ ■	
FEMA 45-Day Review				■ ■ ■ ■ ■
MJHMP Local Adoptions				■
FEMA MJHMP Approval and Grant Closeout				■

7. Questions and Answers

Q: Just FYI, it was extremely hard to find the link for this meeting. The meeting ID and password from the EDSO Facebook page did not work, and the flier was non-clickable. I finally found a working link via El Dorado County Fire's website.

A: Sorry about that! Thanks for letting us know, we'll be sure to make it easier next time.

Q: How often does a mitigation plan need to be updated?

A: Mitigation Plans need to be updated every five years to remain eligible for FEMA grant funding.

Q: Where is loss of life in the last slide of risk (Hazard Profiles)?

A: Loss of life or injuries would generally fall under the "Extent/Magnitude/Severity" subsection of the Hazard Profile/Risk Assessment. Impacts to people is also a stand-alone subsection in the Vulnerability Assessment of each hazard profile.



Q: Are man-made wildfires included as a natural hazard as part of this?

A: Yes, both natural and human-caused wildfires are included.

Q: Where does the Annual Probability of Fire map come from?

A: The data is from CAL FIRE and their Fire and Resource Assessment Program (FRAP) and the map was compiled by WSP.

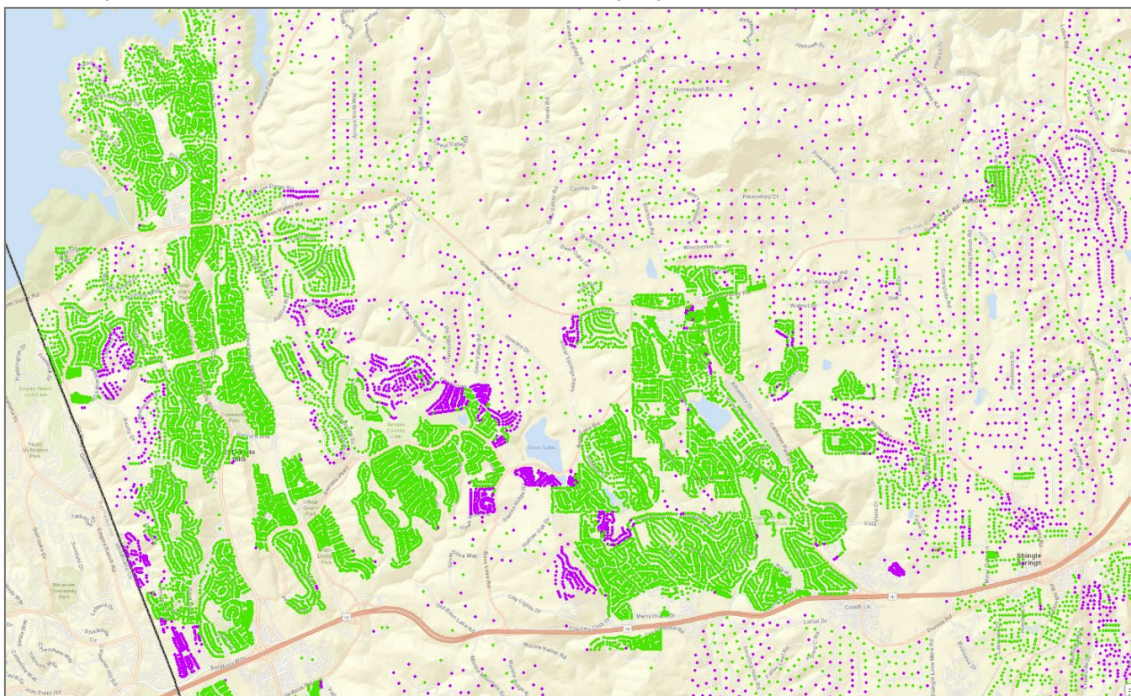
Q: Why is there only 93,000 people at risk to wildfire?

A: The data for this figure was downloaded from the CAL FIRE Fire Threat dataset. Below is an excerpt about this dataset:

"Fire threat provides a measure of fuel conditions and fire potential in the ecosystem, representing the relative likelihood of "damaging" or difficult to control wildfire occurring for a given area. Fire Threat is not a risk assessment by itself, but can be used to assess the potential for impacts on various assets and values susceptible to fire. Impacts are more likely to occur and/or be of increased severity for the higher threat classes.

Fire threat is a combination of two factors: 1) fire probability, or the likelihood of a given area burning, and 2) potential fire behavior (hazard). These two factors are combined to create 5 threat classes ranging from low to extreme."

In addition to the exclusion of the City of South Lake Tahoe from the dataset (because they are not participating in the El Dorado County 2024 MJHMP), many homes in the unincorporated County are clustered in "low threat" zones. The following image which shows residential and multi-residential parcels in and around El Dorado Hills. Each square represents one residential structure, assumed to have the average household size for the unincorporated County, which is estimate at 2.52 residents. Green squares are homes in low threat zones, while purple dots are homes in moderate-to-extreme





threat zones. While the parcels at threat cover a larger portion of land, the parcels at low threat are densely clustered. According to the CAL FIRE data, this works out to about 93,602 individuals in moderate-to-extreme fire threat areas, and 76,258 individuals in low threat areas.

Q: For applicable hazards, will periodic county-wide emergency simulations be conducted for the participating response groups and entities? Will any be done during peak seasons? For example, simulating wildfires blocking the State Route 89 entrance and exit points. Thank you!

A: While simulation in real-time is not a part of the MJHMP update, they can be completed as part of a desktop simulation or modelling exercise. Tabletop exercises are also commonly part of an Emergency Operations Plan. Additionally, EDC OES does multiple drills and simulations for fires and flooding throughout the year, including during peak and non-peak seasons.

Q: I apologize if I missed this explanation earlier but why are there portions of EDC in the Tahoe Basin not included in these maps?

Q: The City of South Lake Tahoe drafted their own LHMP in 2022, so their planning area (city limits) is not included in the MJHMP.

Q: But there are unincorporated areas of EDC in the Tahoe basin; not all of the area is within the City of South Lake Tahoe limits.

A: All unincorporated areas of EDC, including those in the Tahoe Basin outside the South Lake Tahoe city limits, are included in the risk assessment analysis.

Q: To what degree do you review and examine the past issues and failures when doing future planning & mitigation - learn lessons from failures?

A: In the process of drafting the MJHMP, we gather status updates on the mitigation actions included in the existing plan. As part of those updates, we review actions that have been completed, deleted, or carried forward from the previous plan. Through that process, we are able to see what projects are not working, which projects are no longer a priority, and also what projects or actions may be less effective and need to be revised. Additionally, if a mitigation action is unsuccessful, it is hard to prove that it was the action itself which failed, or if there were extenuating circumstances. It is much easier to prove mitigation successes. For example, a well-placed fire break saved a neighborhood during the Caldor Fire, and that is something we can say definitively worked, and those are the kinds of mitigation ideas we can bring into the mitigation planning process.

Q: How does El Dorado Hills have a higher probability of fire than the forest near Highway 88?

A: The following information is provided by CAL FIRE regarding its annual probability of wildfire data:

"This data represents mean projected annual probability (%) of wildfire occurrence for the period 2021-2050. Probability was projected annually through 2099 using each of four climate models (CanESM2, HadGEM2-ES, CNRM-CM5, and MIROC5) under the Representative Concentration Pathway (RCP) 8.5 emissions scenario at 1 km resolution. Predictive models were trained using a GAM framework on a spatially randomized subset of data from 1980-2019, and incorporate predictions of actual evapotranspiration, climatic water deficit, and local housing density, as well as distance to roads and electrical infrastructure, area of cultivated land, and historical fire perimeters. Data presented here represent mean probability of wildfire across all four climate models and over the thirty-year period from 2021-2050. 1 km grid cells with >=50% cultivated land, urban cover, water, or barren/rock were excluded in the model or for purposes of this tool."



In summation, this data included factors such as housing density, distance to roads, and electrical infrastructure, all of which would increase the likelihood of a fire start and all of which are much more common in residential areas than forest lands.

Q: Do hazard disaster response evaluations include concurrent events - say, road construction closure with an out-of-control wildfire?

A: HMPs don't include detailed hazard disaster response evaluations or scenario planning given these plans are updated every 5 years. The Draft Greater Placerville Wildfire Evacuation Preparedness, Community Safety, and Resilience Study does include response evaluations, which assumes routes have been blocked by wildfires.

Q: Question regarding how evacuation is addressed in the Plan. There are the one-way in/out neighborhoods - how do we get input in regarding that and where in the planning phases does this topic fit? (Firewise Action Plans provide mitigation recommendations - these may be a useful data source - might be able to get them from the Office of Wildfire Preparedness and Resilience [OWPR] or CAL FIRE)

A: Legislation regarding evacuation and accessibility can be assessed at different scales and should be incorporated into the County's Safety Element. However, a Countywide Wildfire Evacuation Analysis will be prepared as a supplemental study that will be integrated into the MJHMP risk assessment and mitigation strategy. This analysis will evaluate wildfire scenarios for various communities in the County to comply with legislative requirements associated with Senate Bill 99, Assembly Bill (AB) 747, and AB 1409. Additionally, one-way in/out neighborhood maps are being examined for possible mitigation activities. For example, if a one-way in/out route gets blocked, we are trying to determine safe places for those communities to congregate. If possible, more roads will be added. Some communities are also coming together and adding their own secondary evacuation routes. In addition, education is already underway in these communities, and we are implementing vegetation management projects and defensible space inspections to further support wildfire preparedness and prevention.

Q: When developing EDC's mitigation strategies, are you collaborating with other jurisdictions in EDC that have their own LHMP to ensure the strategies align and/or are complementary?

A: Yes. Other agencies like El Dorado Irrigation District and the City of South Lake Tahoe already have LHMPs in place. They also have representatives participating in the County's Hazard Mitigation Planning Committee for the MJHMP, and as part of this plan update we will review the mitigation strategies in both plans to ensure they align and are mutually-reinforcing.

Q: We have a concern that the County road maps suggest there are evacuation routes that do not exist in the Oak Hill area, and they do not show up as one-way in/out neighborhoods in mapping tools, such as OWPR mapping tool.

A: There is a difference between private and County roads. Some roads that are not regularly maintained simply do not exist anymore, and if they are private roads, we do not have jurisdiction over those roads. However, any County road in poor condition should be reported. Additionally, these maps were created by the CAL FIRE Subdivision Review Program and the County recognizes that some neighborhoods were missed. We have been reporting these areas to CAL FIRE so they can amend their data accordingly.



Meeting adjourned at 7:30 p.m.

