

November 28, 2023



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# California Wildfire Mitigation Program

Home Hardening Initiative

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CWMP Board of Directors Public Meeting

- Call To Order and Roll Call / Quorum Established
- Welcome Message
- Approval of October 17, 2023, Meeting Minutes
- Agenda Review

November 28, 2023



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# California Wildfire Mitigation Program

Home Hardening Initiative

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CWMP Board of Directors Public Meeting

Old Business –

Monthly Program Status Report

# HMA Community Updates

## Updates

- Closing out Advance Assistance Grants to Lake, San Diego, and Shasta.
- Subrecipients are administering projects which include financial record keeping, invoicing, and quarterly reporting

# Budget Update

<b>SB 85 Encumbrances</b>	<b>\$21,924,000</b>
San Diego (25% state match)	\$5,882,150
Shasta (25% state match)	\$5,885,534
Lake (10% state match)	\$2,218,253
Tuolumne (10% match state match)	\$1,965,520
El Dorado (5.14% state match)	\$1,278,166
Siskiyou (100% state funds)	\$3,598,000
Admin	\$1,095,277
<hr/>	
Balance	\$1,100

\*liquidate \$4.8M by 6/30/24 and \$16M by 6/30/25



# Budget Update Cont.

<b>AB 179 Allocation</b>	<b>\$13,000,000</b>
Local Programs TBD	\$12,350,000
Administration (5%)	\$650,000

\*encumbrance, expenditure, or liquidation by 6/30/27

<b>SB 101 Allocation</b>	<b>\$12,000,000</b>
Local Programs TBD	\$11,400,000
Administration (5%)	\$600,000

\*encumbrance, expenditure, or liquidation by 6/30/28

# Budget Update Cont.

## New Major Disaster Declaration for Hurricane Hillary Hazard Mitigation Grant Program (HMGP)

- **DR 4750**

- Funding Amount TBD
- Notices of Interest (NOI) are now being accepted
- Detailed Notice of Funding Opportunity will be released in the next month.
- Sign up for Automated email notification from Cal OES Hazard Mitigation
  - <https://public.govdelivery.com/accounts/CALOES/signup/31457>

# CAL FIRE Update

- 1) Continued review of assessments and scope of work documents.
- 2) Conducted a defensible space scope of work field review for the Whitmore pilot community.
- 3) Received input from our CWMP Assessment App Survey.
- 4) Determining needs and timeframes for our next CWMP Defensible Space and Home Ignition Zone Assessor training.



# CWMP Update: Shasta County Fire Safe Council in Shasta County

## Applications

- 40 Homeowner Applications received to date

## Assessments

- 13 Assessments complete
- Four of the assessments involve 'no issue' properties

## Scopes of Work

- Scopes of work have been completed on three of the four 'no issues' properties

## Program Next Steps

- Community is hosting a defensible space contractor walk thru at a no issue property on November 30<sup>th</sup>. Cal OES and CAL FIRE staff to attend

# CWMP Update: San Diego County Fire Department in San Diego County

## Applications

- 42 Homeowner Applications received to date

## Assessments

- 13 Assessments Complete

## Scopes of Work

- 8 Scopes of Work Complete
- 4 additional in progress

## EHP Review

- 4 properties went to EHP Phase II vendor for further review
- 1 property is on the no-issue list and not further EHP is required

# CWMP Update: Shasta Valley Resource Conservation District in Siskiyou County

## Applications

- 17 Homeowner Applications received to date

## Assessments

- 2 Assessments Complete
- 3 Additional Assessments in QA, pending minor revisions for completion

## Scopes of Work

- Scope of Work Procedures in Development

## Request for Qualifications (RFQ):

- RFQ/Contractor Procurement in Development

# CWMP Update: North Coast Opportunities in Lake County

## Applications

- 17 applications to date

## Assessments

- 16 Assessments Complete

## Scopes of Work

- 1 Scope of Work Complete
- 1 in Progress

## Homeowner Walk Through

- NCO staff have completed the initial walkthrough with their first homeowner to review proposed mitigation measures

# CWMP Update: Tuolumne County

## EHP Phase I

- The winning bid has been selected

## Next Steps

- Contract will be ratified at Board of Directors meeting
- Contractor can begin work on EHP Phase I Deliverables
- Training for program staff will be scheduled near end of EHP Phase I work

# CWMP Update: El Dorado County

## EHP Phase I

- RFP has been completed and submitted to OES review

## Next Steps

- The county is developing duty statements for staff that will support the program
- The Placerville Fire Safe Council was approved as a Firewise community and will support outreach and community education

# End of Report



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# California Wildfire Mitigation Program (CWMP)

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CWMP Board Meeting Presentation  
– Applicant Demographics





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# AB 38 Home Hardening County Prioritization



# CA Govt Code § 8654.6 (2022)

**Designated wildfire hazard areas eligible for financial assistance under the wildfire mitigation program shall include all of the following:**

- (a) Local responsibility areas located within a very high fire hazard severity zone.
- (b) State responsibility areas located within any fire hazard severity zone, as indicated on maps adopted by the Department of Forestry and Fire Protection
- (c) Any other lands designated by the joint powers authority as consistent with the purposes of this article.

# CA Govt Code § 8654.7 (2022)

The joint powers authority shall develop criteria and a scoring methodology to prioritize financial assistance provided under the wildfire mitigation program to areas and communities based upon:

- (1) Area and community vulnerability to wildfire.
- (2) The impact of future climate risk factors on area and community wildfire vulnerability assessments.
- (3) Factors that lead some populations to experience a greater risk to wildfire, adverse health outcomes, or an inhibited ability to respond to a wildfire, including socioeconomic characteristics of the areas or communities that would be protected by financial assistance. “Relevant socioeconomic characteristics” may include, data on **poverty** levels, residents with **disabilities**, **language barriers**, residents **over 65** or **under 5** years of age, and households **without a car**.

# Scoring Criteria

**A total of two scoring “classes” were used:**

**Environment:**

- 4 criteria are environmental (Fire Hazard Severity Zone)

**Socioeconomic:**

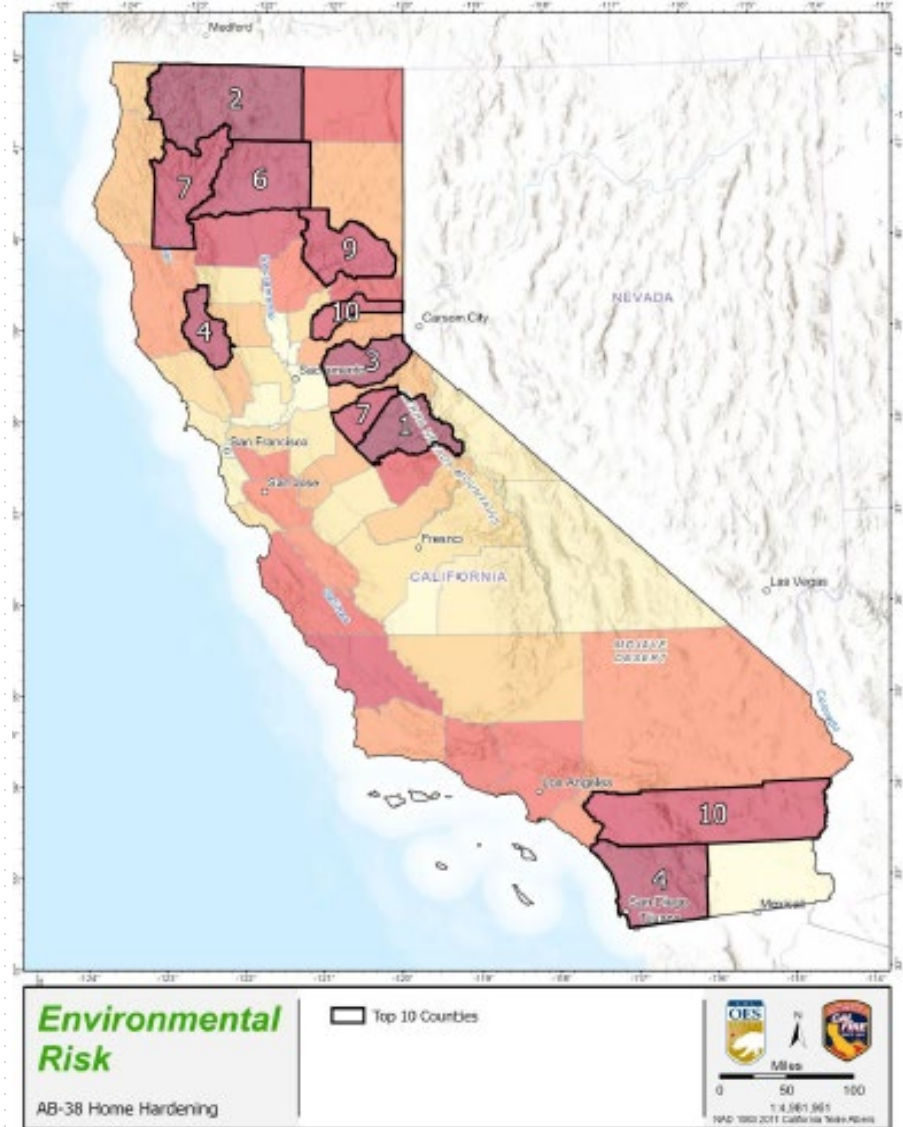
- 10 criteria are socioeconomic

**Final score weighted environmental and socioeconomic criteria equally (50/50)**

# Scoring Criteria: Environmental

- Total parcels in FHSZ
- Percent of parcels in FHSZ out of county total
- Wildfire climate risk in FHSZ
- Fire probability in FHSZ

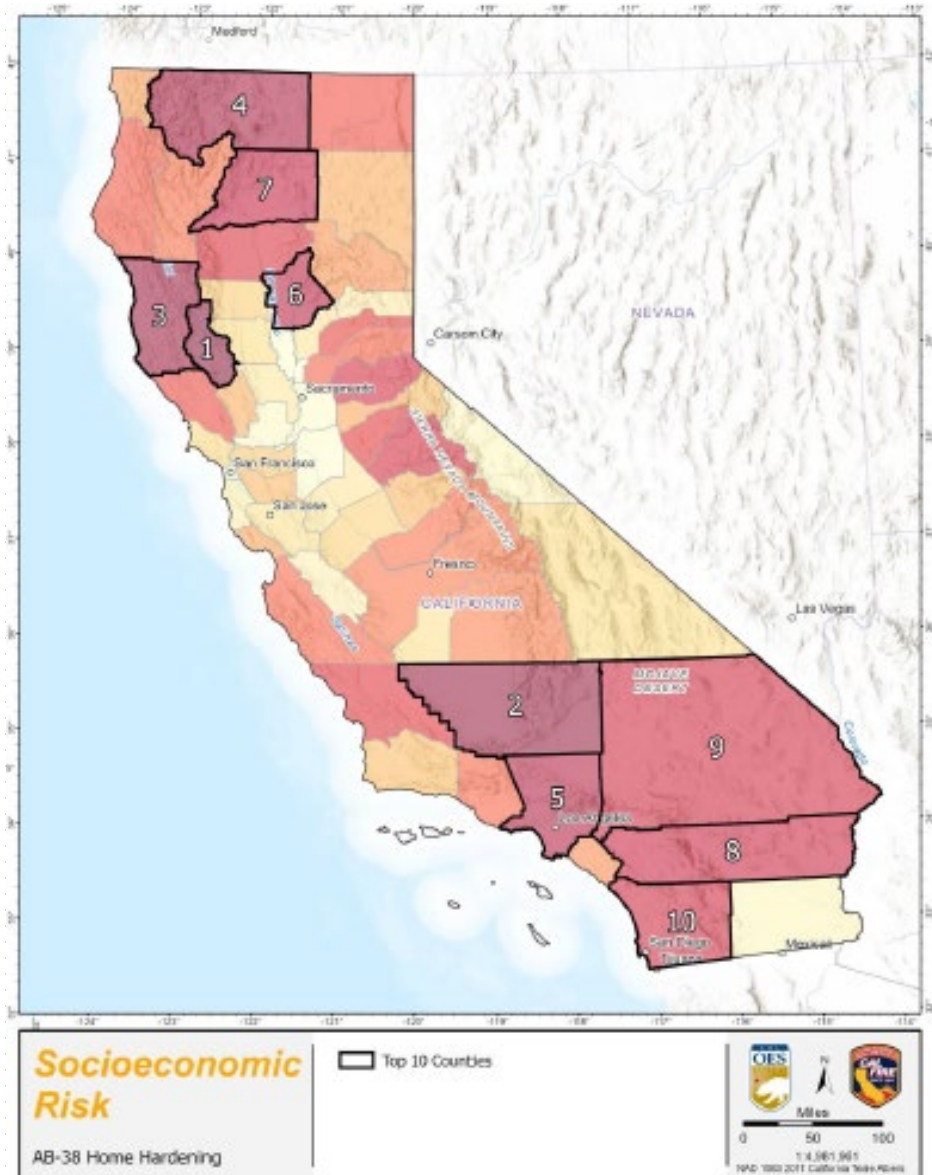
COUNTY	RANK
TUOLUMNE	1
SISKIYOU	2
EL DORADO	3
SAN DIEGO & LAKE	4 (TIE)
SHASTA	6
TRINITY & CALAVERAS	7 (TIE)
PLUMAS	9
RIVERSIDE & NEVADA	10 (TIE)



# Scoring Criteria: Socioeconomical

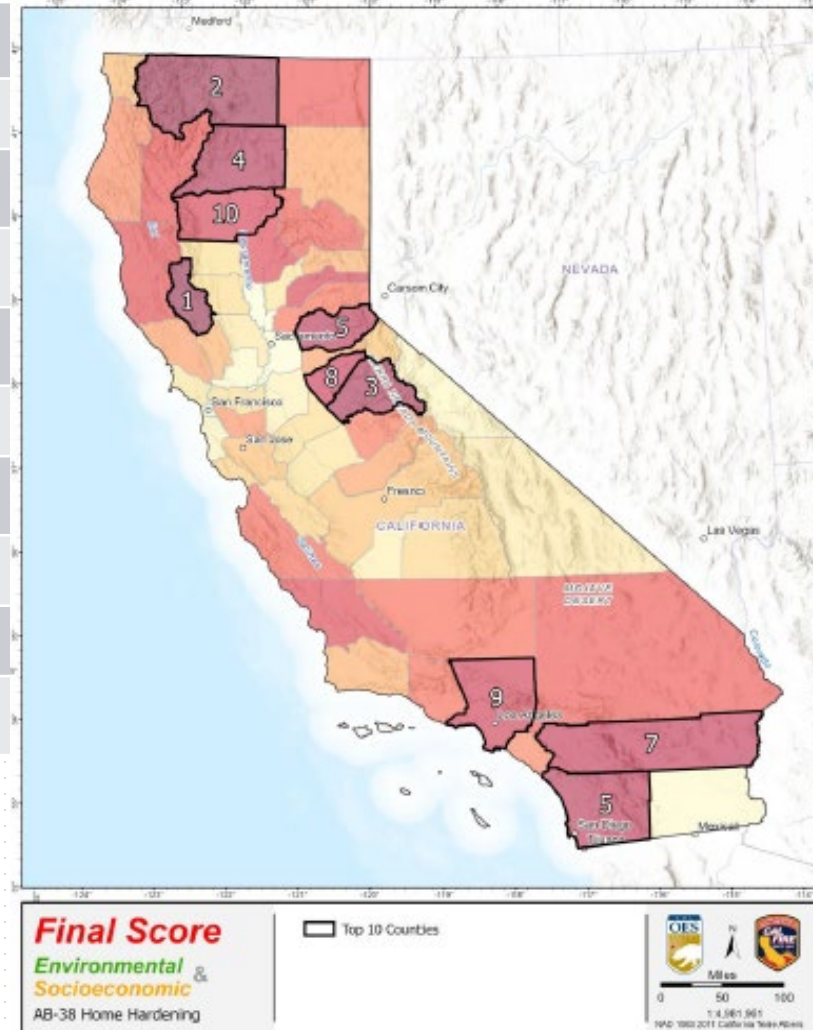
- Poverty
- Disability
- Limited English
- Over 65 and Under 5
- No Vehicle

COUNTY	RANK
LAKE	1
KERN	2
MENDOCINO	3
SISKIYOU	4
LOS ANGELES	5
BUTTE	6
SHASTA	7
RIVERSIDE	8
SAN BERNARDINO	9
SAN DIEGO	10



# Final Score

COUNTY	ENVIRO	SOCIO	FINAL RANK
LAKE	4	1	1
SISKIYOU	2	4	2
TUOLUMNE	1	11	3
SHASTA	6	7	4
SAN DIEGO	4	10	5 (TIE)
EL DORADO	3	11	5 (TIE)
RIVERSIDE	10	8	7
CALAVERAS	7	15	8
LOS ANGELES	19	5	9
TEHAMA	12	13	10



# Current Applicant Demographics

- **Total Applications 120**
- (San Diego, Shasta, Lake, and Siskiyou)
- 13 households 80% AMI or less
- 45 household 80%-120% AMI
- 16 households with person 5 years or younger
- 63 households with person 65 years or older
- 34 households with person with disabilities
- 13 households with person with limited English
- 1 household with no car



# End of Report



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# California Wildfire Mitigation Program (CWMP)

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CWMP Board Meeting Presentation  
– Home Assessment Statistics

# Physical Mechanisms Responsible for Exterior Structural Ignition



Embers



Direct Flame Contact



Radiative and Convective Heating

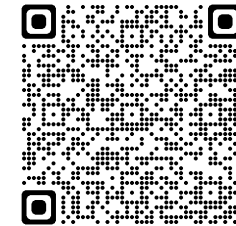
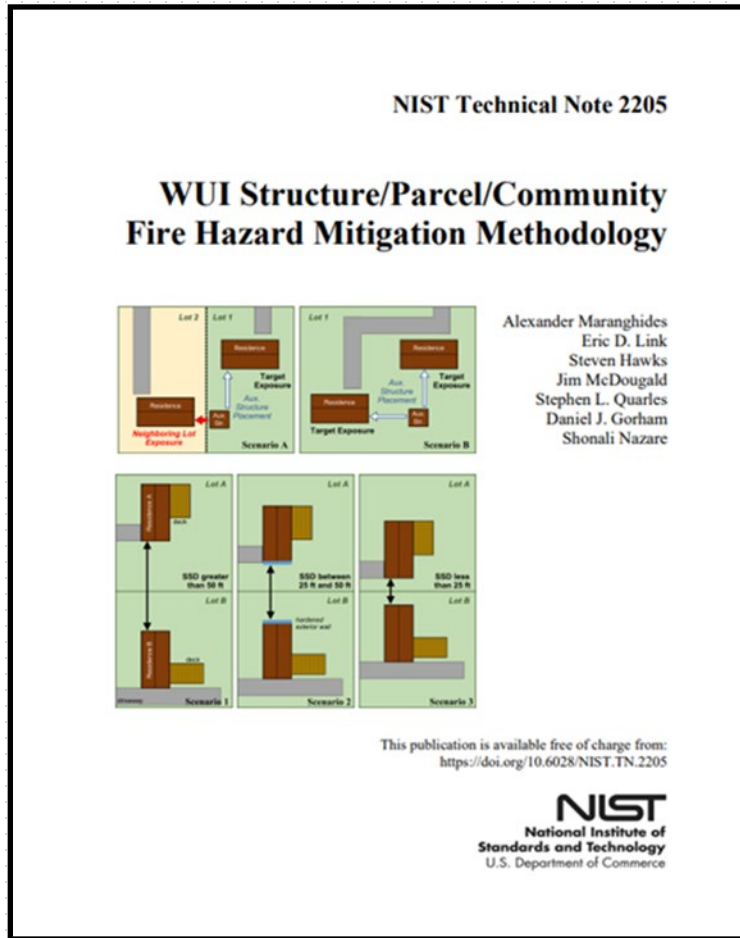


Assessment Vulnerabilities from Embers



Assessment Vulnerabilities from Fire

# Home Hardening Existing Non-Conforming Structures (Retrofitting)



## WUI Fire Hazard Mitigation Methodology (HMM)

The goal is to use the latest laboratory research findings and knowledge from post-wildfire field observations to effectively harden structures.

# Ember Vulnerability Assessment

HMM and the assessment application identifies and evaluates 40 + separate vulnerabilities to exterior structural components from embers.

- Roofing
- Vents
- Exterior Covering
- Exterior Windows & Skylights
- Doors
- Attachments



# Vulnerabilities from Fire Assessments



Wildland  
Vegetation



Ornamental  
Vegetation



Misc.  
Combustibles



Adjacent  
Residences



Vehicles



Accessory  
Buildings



Misc.  
Structures

**Fire Vulnerability is Determined By Evaluating the Combustible Hazards Separation Distance From the Primary Residence**

# Fire Vulnerability Mitigation Assessment

- **Remove the fuel**—this approach removes the exposure all together and is essential when there is limited space for fuel relocation/displacement.
- **Relocate the source**—this approach allows the fuel to remain on the parcel but moves it away from the primary residence to reduce fire exposures.
- **Reduce the fuels**—this approach reduces the number of combustibles and therefore the expected exposures.
- **Harden structures for fire exposure** –targeted hardening to side/s of a primary structure where an unmitigated hazard exists.

# DATA

This analysis utilized data from **39** finalized Home Hardening and Defensible Space assessments conducted in the following communities:

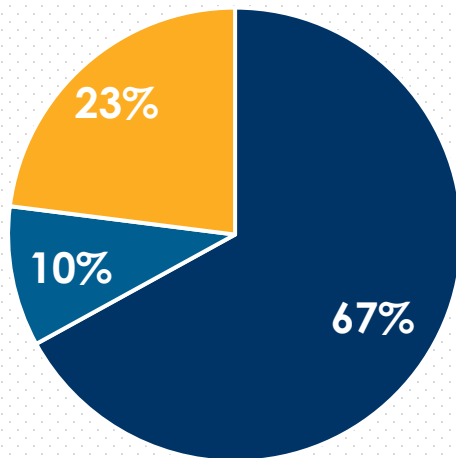
- Dulzura – San Diego County
- Kelseyville Riviera – Lake County
- Whitmore – Shasta County

Average assessment time is approximately **60 -120 minutes** in the field.



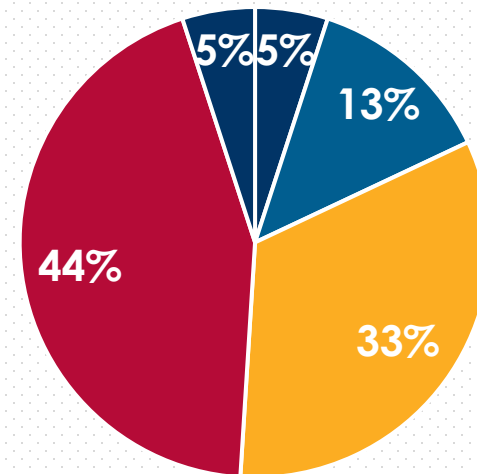
# Structure Type and Construction Year

## Type of Structure



- Single Family Single Story
- Single Family Multi Story
- Manufactured Home

## Year Structure Built

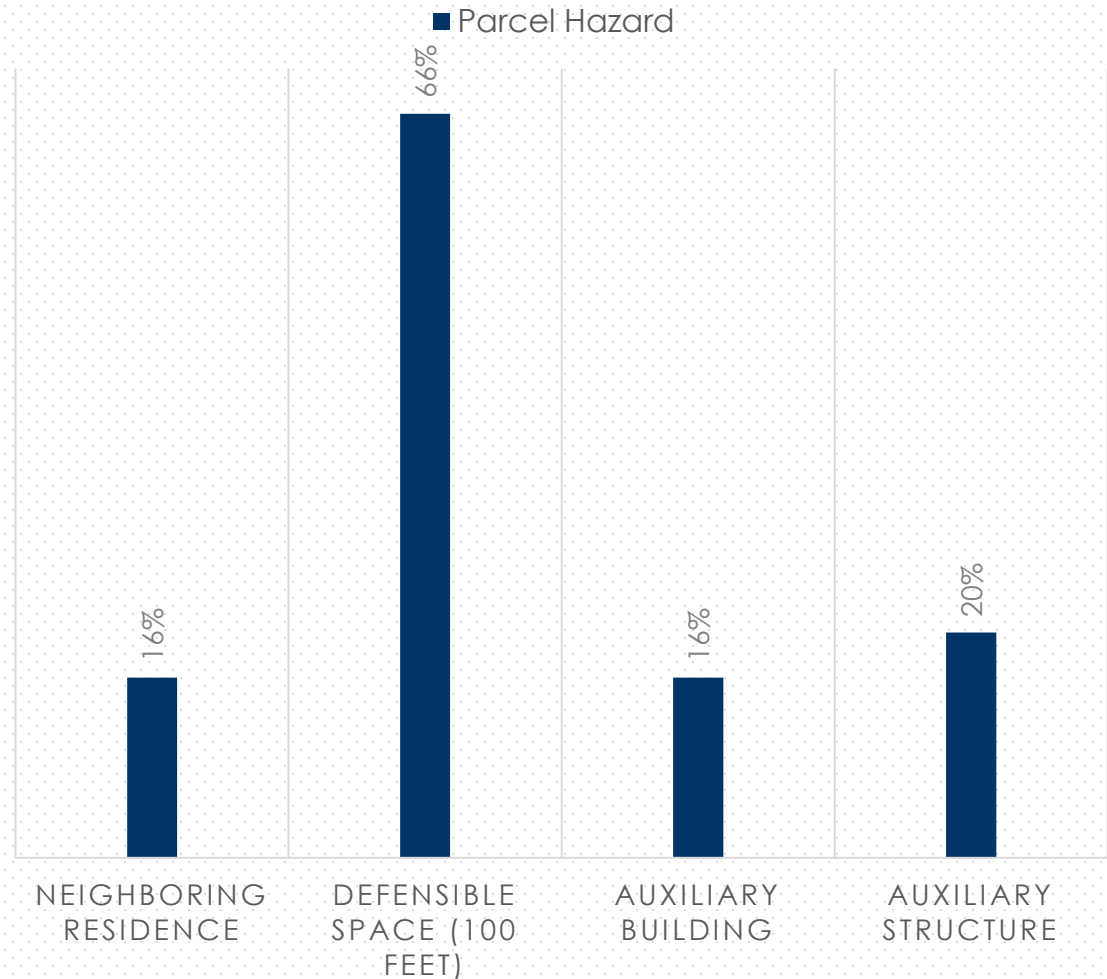


- 1936-1952
- 1953-1969
- 1970-1986
- 1987-2007
- 2008-2011

**28% of residences are 45 years or older**

# Unmitigated Hazards – Hardening for Fire –

- **77%** of properties have at least one hazard that will require additional hardening to side/s.
- Other parcel hazards are identified in the assessment process such as parallel fences. These assessments only identified the four hazards shown that couldn't be mitigated.



# Roof

- **98%** of assessed residences have an existing Class A rated roof.
- **15%** of assessed residences need roof **replacement** due to the coverings condition longer meeting its fire rating.
- **41%** of assessed residences need roof **repair** due to deficiencies with the assembly.



# Gutters

- **58%** of assessed residences will need a gutter cover **retrofit**. Criteria requires retrofit if the gutter cover is combustible or installation if there is no gutter cover present.

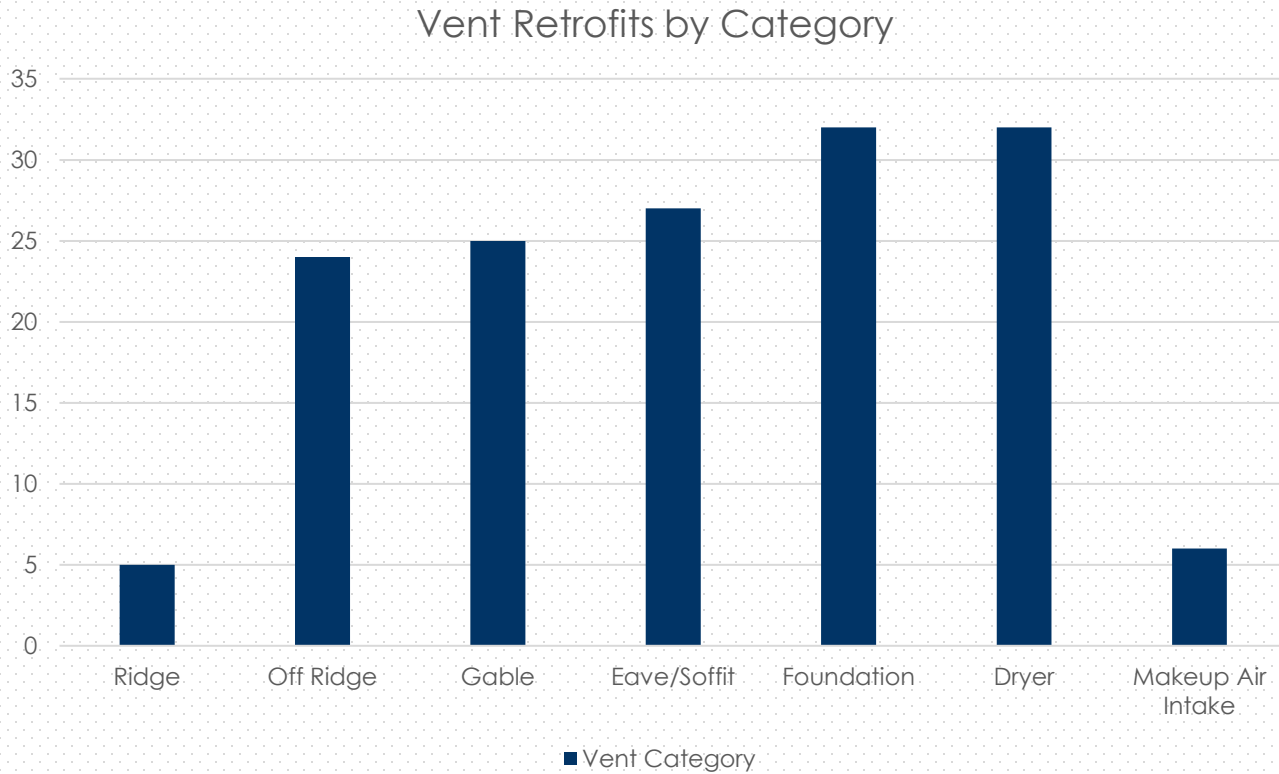


# Vents

- **95%** of the assessed homes had attic ventilation. 100% of those homes will need attic ventilation retrofitting.
- **82%** of the assessed homes had foundation ventilation. 100% of those homes will need foundation vents retrofitting.



# Vents By Category



# Exterior Covering

- **82%** of the assessed homes had a combustible exterior covering within 2 feet from the ground that will need to be **retrofitted** with a CWMP Minimum Quality Standard.
- **66%** of the assessed homes will have at least one side that will require a full exterior covering **retrofit** due to an unmitigated exposure.



# Windows

- **95%** of assessed homes do not have WUI compliant windows.
- **69%** of assessed structures will have at least one side of the structure that will require window **retrofit** due to an unmitigated exposure.





# Doors

- **90%** of assessed homes have wooden frames, threshold, or exterior doors which may require retrofit.



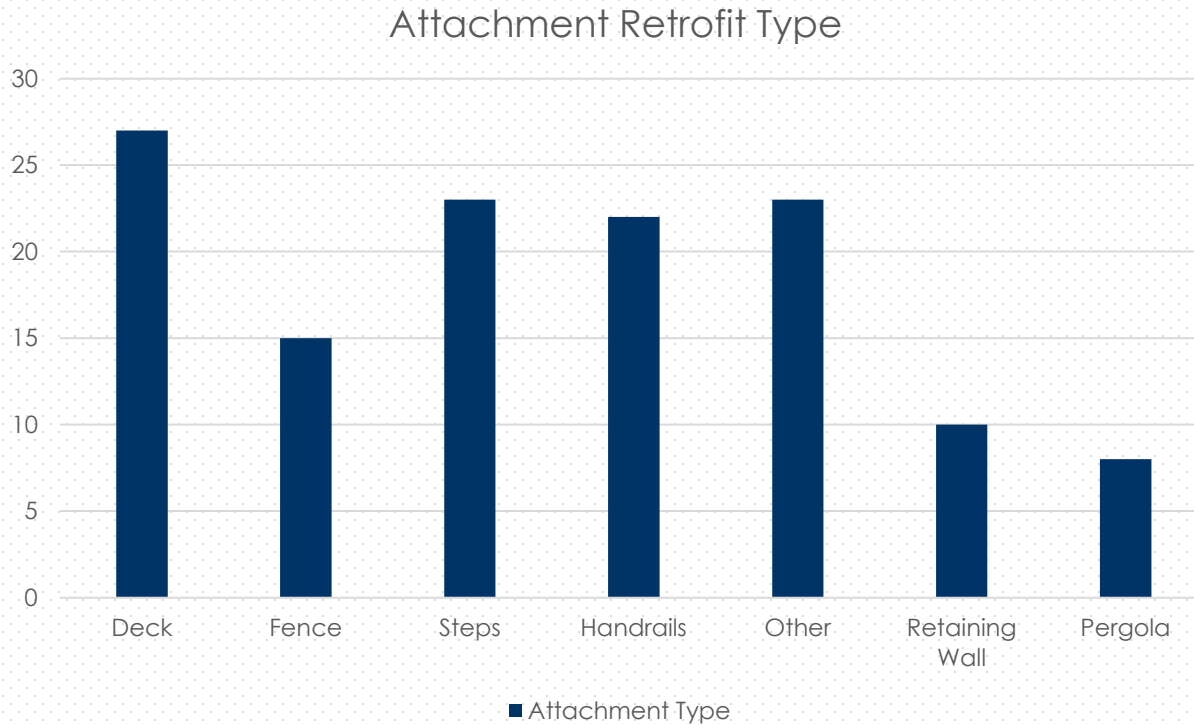
# Garage Door

- **51%** of the assessed parcels have a garage.
- **15%** are wooden garage doors.
- **80%** require retrofits. (gasketing/flashing/penetrations/etc.)



# Attachments

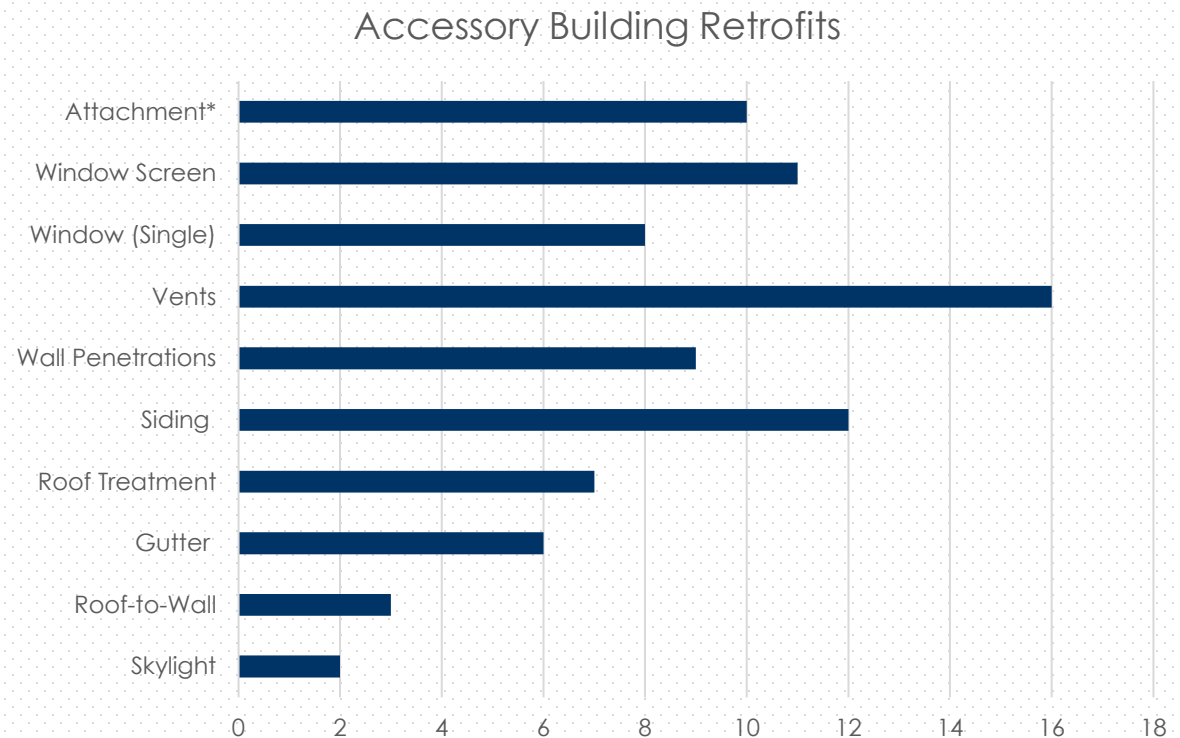
- **95%** of assessed homes have at least one attachment.



**Other:** Carports, porches, lattice, etc.

# Accessory Buildings

- **51%** of assessed residences have an accessory building.
- HMM recommends **remove or relocate** accessory buildings to the recommended separation distance. If unable, then **harden** the structure.



**Attachment\*:** Decks or landings, stairs, steps, retaining walls, or fences.

# End of Report



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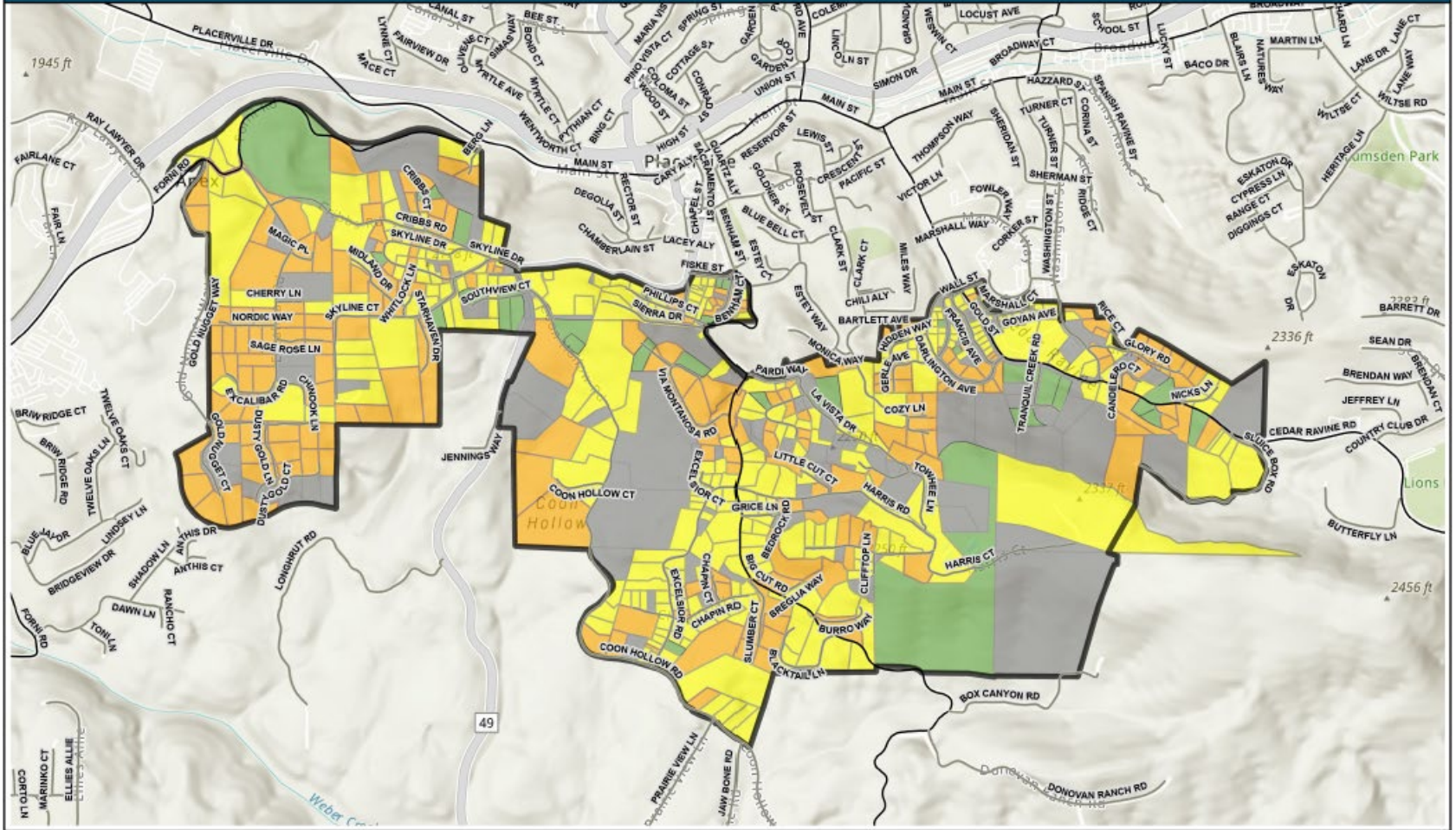
CWMP Board Meeting Presentation  
– No Issue vs. Issue Properties

# Origin of No Issue vs. Issue

- Cal OES and FEMA engaged in a multi-year collaboration to identify opportunities to innovate and streamline the Environmental and Historic Preservation (EHP) Clearance Process for this program.
- Conducted desk analysis of all parcels within project area which have a private residential structure
  - Filtered to remove all homes constructed 45+ years prior.
  - Applied layers for flood, water features, wetlands, critical habitats, nationally registered historic sites, and removed all parcels with intersects.
- The proposed list is submitted to the EHP Phase 1 subject matter experts (SME) to validate the proposed no issue parcel list

# Weber Creek / Texas Hill Subarea

County of El Dorado  
State of California



**DISCLAIMER:**  
THIS DEPICTION WAS COMPILED FROM UNVERIFIED PUBLIC AND PRIVATE SOURCES AND IS ILLUSTRATIVE ONLY. NO REPRESENTATION IS MADE AS TO ACCURACY OF THIS INFORMATION. PARCELS, ROAD NAMES AND PARTICULARLY UNUSUAL PLACES HAVE BEEN USED TO IDENTIFY LOCATIONS AT THEIR OWN RISK.

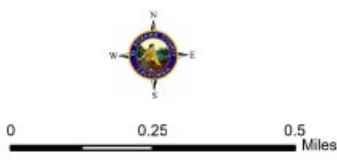
**NOTES:**  
MAP DISPLAYED IN STATE PLANE COORDINATE SYSTEM  
GDA 1983 CALIFORNIA ZONE 2, FEET  
LATEST INFORMATION IS NOT GUARANTEED FOR AREAS OUTSIDE OF THE DISPLAYED AREA.

PREPARED AT THE REQUEST OF: San Joaquin, September 2022

MAP PROVIDED BY: GCS/38

GIS PROJECT ID: WFS Resiliency

© EL DORADO COUNTY FIRE MANAGEMENT DIVISION  
PHONE: (530) 624-7424 | [GIS@elcfd.org](mailto:GIS@elcfd.org)



**Legend**

**Roads CLASS**

- HIGHWAY
- MAJOR
- MINOR

**Parcels**

- Structures built within 20 years
- Structures between 20 and 45 years
- Structures older than 45 years

**Legend**

- Weber Creek / Texas Hill Subarea





# Definitions

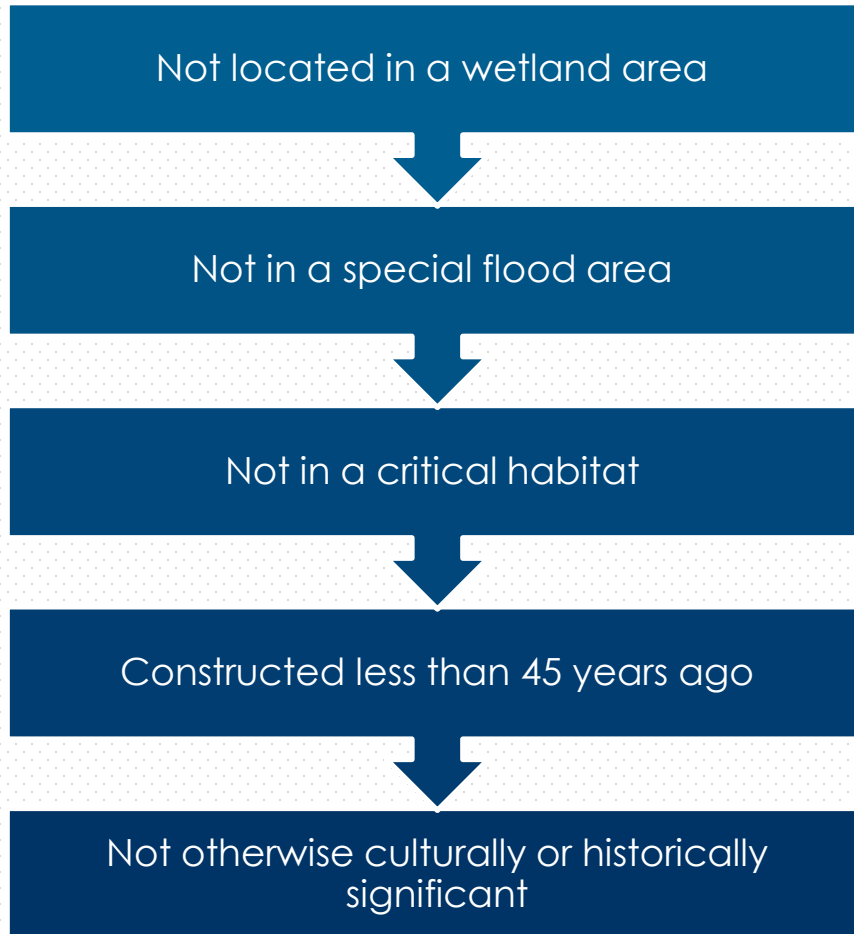
**No Issue** indicates homes that may proceed to site work without additional EHP review



**Issue** refers specifically to parcels that need further EHP review



# No Issue Parcels



Parcels on the **No Issue** list may have issues in the future

- SOW exceeds programmatic allowances
- Work takes place during nesting bird season
- Unforeseen circumstances



# Issue Parcels

Parcels that may have historical and cultural significance to Indigenous Peoples

Parcels that are otherwise culturally or historically significant

Parcels with a home that was built more than 45 years ago

Parcels that contain critical habitats for threatened and endangered species

Parcels that are located near waterways

Parcels located in special flood areas

# Anticipated Common Issues

- Homes older than 45 years
- Nesting bird surveys
  - February to August



It is still early in the process, and we will be able to more accurately spot trends as our data set expands

# Managing Common Issues

California Wildfire Mitigation Program

## SUBJECT MATTER EXPERT PROPERTY REVIEW FORM

CWMP Application #:

Parcel Number:

Property Address:

### HISTORIC ARCHITECT

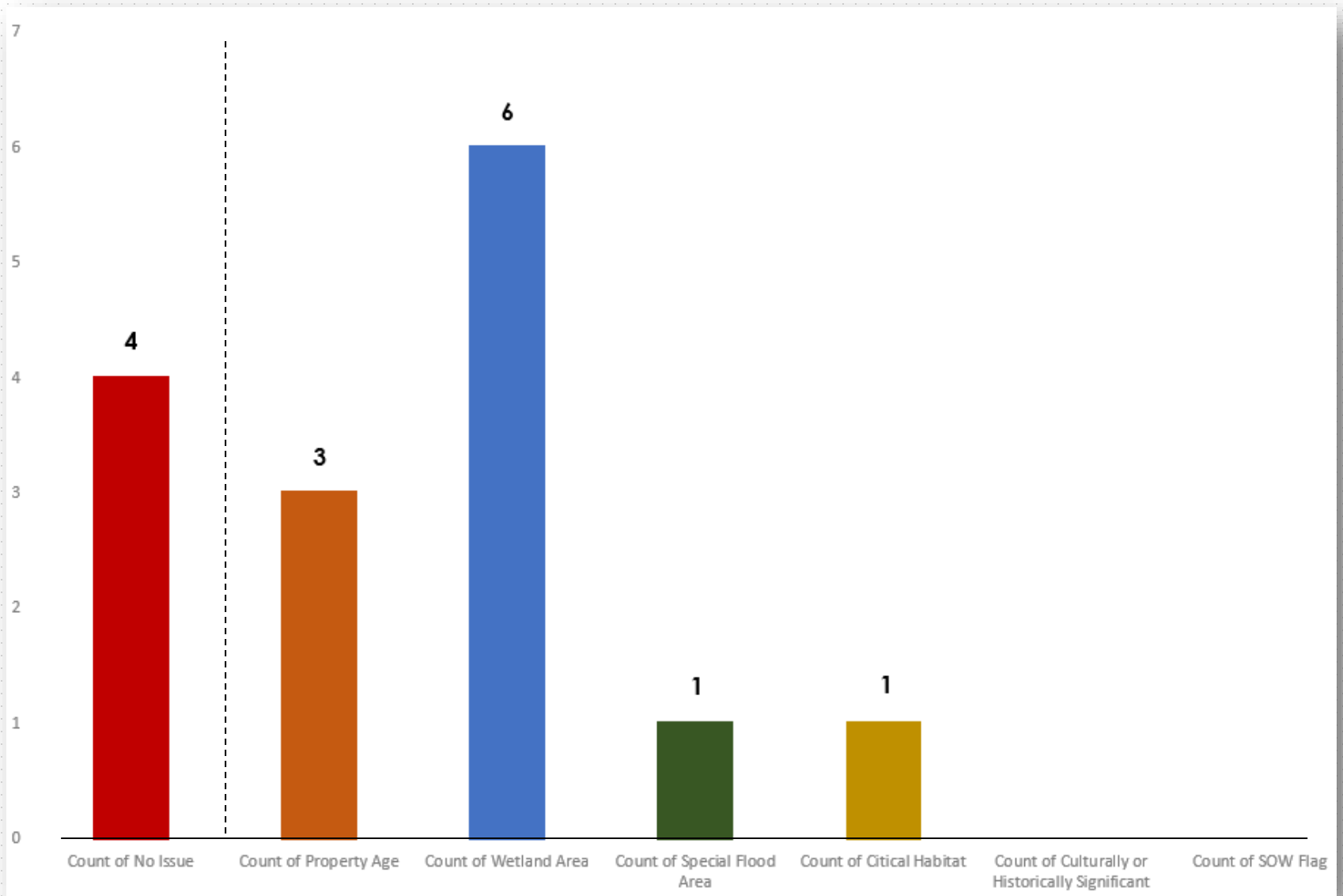
I have reviewed the property and its proximity as it relates to:

- Local, State, or National Registry of Historic Places
- California Built Environment Resources Directory
- California Historic Resources Information System (CHRIS) records
- Mills Act property, as verified by County or other local sources.

I have reviewed the home assessment report, proposed defensible space and/or retrofit measures, and proposed materials to be used on all architectural features (roof, windows, doors, etc – if applicable) to be performed by the program and determined the following:

- No Historic Property Impacted
- Finding of Possible Effect to Historic Property. Attach report or provide recommended materials or methods below.

# Site Specific EHP Issues



# End of Report



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# California Wildfire Mitigation Program (CWMP)



## New Business



# Next steps for the Demonstration Projects

## Defensible Space Material Management

- Generally large amount of firewood and wood chips left in the project area, Hazard if left in place unmanaged, Cost of disposal, etc.

## Options for property owners

- Leave on site with management instructions
- Donate or give away
- Wood utilization
  - Urban Wood Network or Street Tree Survival
- Areas classified as Timberlands, Forest Practice Rules apply
  - If commercial species are sold, Structure Protection Exemption 1038–c, Removal of fire hazard trees from 0 to 150 feet of an Approved and Legally Permitted Structure.
  - FEMA encourages recipients/subrecipients to generate program income to help defray program costs. Program income is gross income received by the recipient/subrecipient directly generated by an award-supported activity or earned only because of the award during the award period of performance. (HMA P&P Guide)
- Discourage waste, encourage wood utilization and carbon sequestration

# Next steps for the Demonstration Projects

## Project sustainability – Community Benefits

- Alignment with:
  - California State Hazard Mitigation Plan
  - Wildfire and Forest Resilience Action Plan, Goal 2. Strengthen Protection of Communities
  - Department of Insurance Safer from Wildfires Program
  - Insurance Institute for Business & Home Safety (IBHS) Wildfire Prepared Home Certification
- Organized and Educated Communities
  - California Fire Safe Council
  - NFPA Firewise
  - BOF&FP Fire Risk Reduction Community List



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# California Wildfire Mitigation Program (CWMP)

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David Nissen, Deputy Chief  
San Diego County Fire Department

# San Diego County Fire Home Hardening



# San Diego County Home Hardening Initiative - *Background*

- Approached by Cal OES/CAL FIRE in Summer 2021 to participate as a demonstration community
  - Locally led by San Diego County Fire Community Risk Reduction Bureau
  - Selected the project areas of Dulzura, Campo, and Potrero based upon fire severity zones, wildland interface areas, burn recurrence interval rates, and socio-economic indicators.
- Began developing HMGP subapplication, including identifying local implementation strategy, staffing capabilities and competency requirements, and recruiting and onboarding the local project team.
  - Established goal to harden 10-25 homes the first year (intentional soft launch recognizing this is a pilot program and there would be many lessons learned before scaling up)
  - Local strategy to begin in Dulzura and expand to the other project areas over the three-year period of performance.
- As the program resources became available (CWMP portal, Mobile Assessment App), began homeowner outreach in Dulzura December of 2021.
  - Home Hardening team attended Dulzura Community Development Center meetings to deliver information regarding the program Bi-Monthly.
  - Attended all community events (Holiday parties, Safety Fairs, monthly community board meetings).
  - Began accepting homeowner applications and completing home assessments – there is enough homeowner interest to meet and exceed the year 1 goal.

# Leveraged Partnerships and Resources

- **Dulzura Community Development Center Board**
  - Invites the home hardening team to attend monthly meetings and deliver program information and updates
  - Allows use of the community center for monthly application sessions for interested homeowners, especially beneficial for the socially vulnerable who may not have access to internet, lack computer skills for online application, do not have transportation to visit the county office to apply, etc.
- **Fire Safe Councils (FSC)**
  - The Dulzura FSC provided the program with the first demonstration home for assessment training.
  - The Dulzura FSC Invited the home hardening team program to attend community events like Community Public Safety Fairs to further promote the program.
- **CAL FIRE Defensible Space Program- DSI inspectors**
- **San Diego County Board of Supervisors, including**
  - Supervisors who signed and approved the program and resolutions that were needed.
  - Department of Planning Development Services- For all permitting needs
  - Department of Purchasing and Contracting which handles all contractor solicitations and contracts.
  - County and State GIS for mapping needs.
  - Public Safety Group
- **Local Schools**
  - Allowed the program to send outreach materials to homes of the student body
- **Other outreach efforts included:**
  - Direct mailers from the board of supervisors, digital signage, etc.
  - Have learned that it takes multiple interactions to engage some homeowners; anticipate that as the community sees homes hardened, demand will increase even more.

# Community Outreach

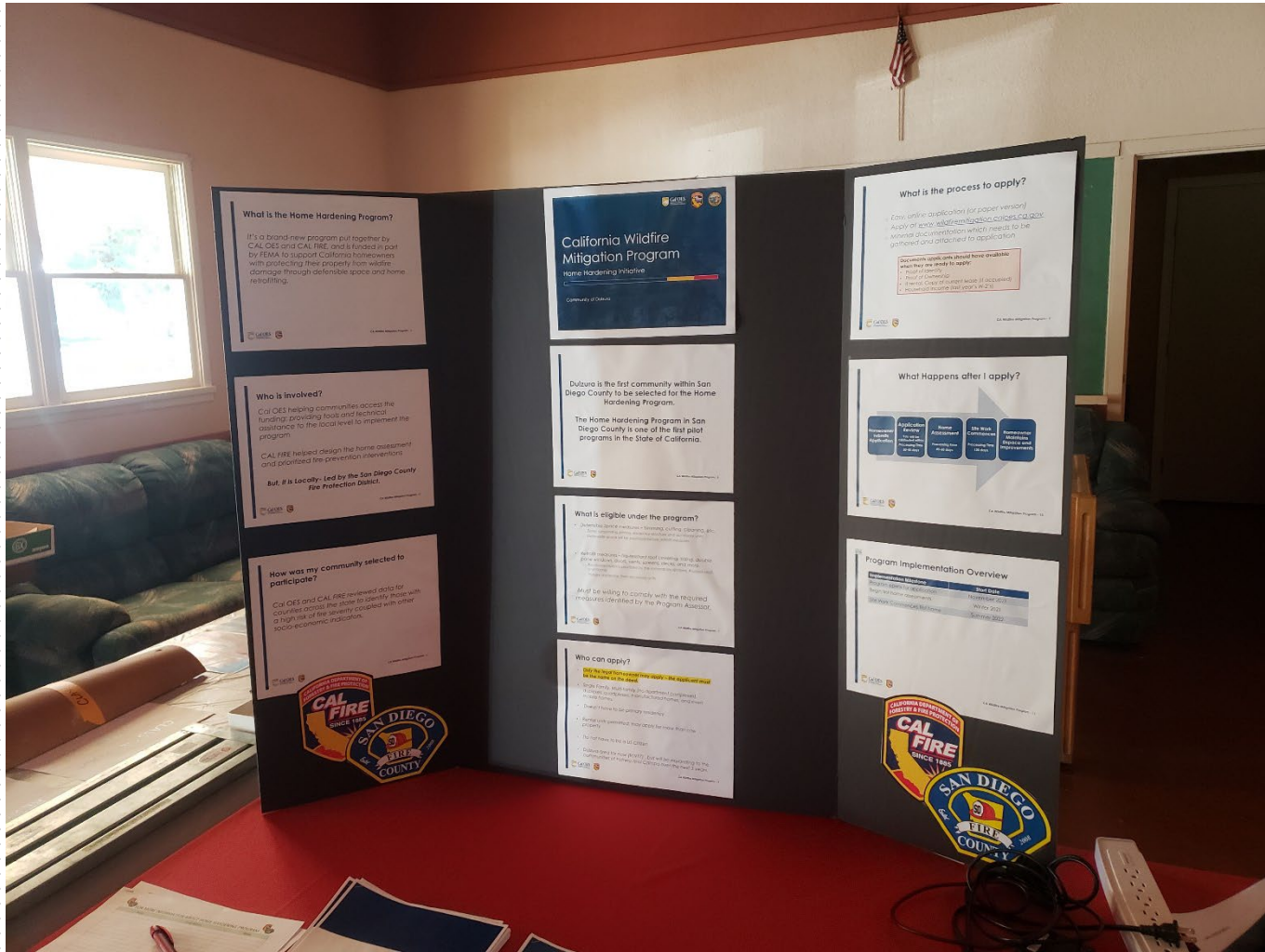


Akilah- Program Lead



Cal- Construction  
Manager/Assessor

# Outreach Display Table





# Outreach Display Table



# County Board of Supervisors Honored DCDC Board for Assisting with the Home Hardening Program.



# Key Accomplishments

- Have engaged enough homeowners to realize the goal of hardening 10 -25 homes during the first year of the HMGP subaward (issued August 2023).
- Have developed strong partnerships and built rapport with interested homeowners.
- Contributed to the refinement of program tools (notably, the mobile assessment app and minimum quality standards), and have helped identify areas in need of additional guidance.
- Have supported CWMP with training new communities as they have come on board assisted in assessment training of new programs that came on board.
- Strived to remain flexible and adaptable since this is a Pilot Program changes are always made along the way, and the Home Hardening team continues to be flexible and adapt.

# Lessons Learned

- When San Diego came on board it was in the earliest stages –
  - Assessment app was still in development,
  - EHP process had not been ironed out with FEMA, etc.
  - Homeowner outreach should have been delayed until more of the program's framework was developed.
- Assessment App/adding 0-5 foot into scope
  - While refinements are positive there are always impacts to San Diego
    - Every time a change was made in the assessment app and MQS we had to redo assessments and change the scopes of work and request for quotes that go out to local contractors.
      - When writing the Minimum Quality of Standards, it is important to become familiar with the local county's codes and ordinances. Often the county's codes exceed state laws.
    - Statement of work for contractors that have already been out for solicitation must be amended.
    - Impacts the Master and tri-Party Agreements causing amendments to be made and the agreements having to go out for signature again.
- Due to low response from Contractors licensed to work on Manufactured/Mobile homes during the initial solicitation for qualified contractors, County Fire had to reopen the solicitation again.
- Tax Implication for homeowners.

# Current Status and Next Steps

- Have developed a list of prequalified contractors who will perform site work (Defensible space, General B licensed Contractor's and Manufactured/Mobile Home (C-47 license).
  - Prepared to send the first home out for bid ~ 4 weeks
  - Solicitation will open quarterly to add additional General B and Manufactured/Mobile Home licensed Contractors onto the established list. The next solicitation will open in January.
- Secured subject matter experts for EHP reviews
  - Finalizing first few issue property packages for FEMA in the next few weeks
  - Currently completing reviews to expand project boundaries to encompass the whole communities of Dulzura, Campo, and Potrero
  - Looking forward to lessons learned from the first few homes
- Compliance Contractors
  - Solicitation for a Compliance Contractor closed recently.
  - Compliance Contractor will monitor activities to ensure workers employed by County Contractors and their subcontractors are hired and paid in compliance with labor standards.



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# California Wildfire Mitigation Program (CWMP)

Closed Session

# Meeting Schedule

- Third Tuesday of each month starting at 10:00 AM and ending at 12:00 PM.
- Next meeting is **January 16, 2024**, 715 P Street, 2nd Floor Conference Room 2-221, Sacramento, CA 95814

- Board Member Comments
- Public Comment
- Adjournment





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# California Wildfire Mitigation Program (CWMP)



Happy Holidays!