



## MWPA OPERATIONS COMMITTEE AGENDA

Thursday December 3, 2020

3:00 pm

<https://zoom.us/j/98758685383>

Webinar ID: 987 5868 5383

Phone: 669-900-6833

For those joining by phone use: \*9 to "raise your hand" and \*6 to mute/unmute

**ATTENTION:** This will be a virtual meeting of the Operations Committee of the Marin Wildfire Prevention Authority pursuant to Executive Order N-29-20 issued by the Governor of the State of California. There will not be a public location for participating in this meeting, but any interested member of the public can participate telephonically by utilizing the dial-in information printed on this agenda. If any member of the public has a request for a reasonable modification or accommodation for accessing this meeting due to a disability, they should contact Jason Weber at [jweber@marincounty.org](mailto:jweber@marincounty.org)

### 1. Call to order.

### 2. Roll Call

George Kraukauer  
Darin White  
Dan Schwarz  
Jason Weber  
Jim Fox  
Mark Pomi

Chris Gove  
Bill Tyler  
Rich Shortall  
Chris Tubbs  
Eric Dreikosen  
Alan Piombo

Kenny Stevens  
Todd Cusimano  
Garrett Toy  
Joe Chinn  
Dave Donery

### 3. Agenda Adjustments.

4. **Open time for public expression.** *The public is welcome to address the Operations Committee at this time on matters not on the agenda that are within the jurisdiction of the Committee. Please be advised that pursuant to Government Code Section 54954.2, the Board is not permitted to discuss or take action on any matter not on the agenda. Comments may be no longer than three minutes*

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and should be respectful to the community. **Please silence your cell phones during the meeting / mute your microphone when not reporting out.**

**5. Executive Officers Report – Verbal Report.**

*Information Only, topics to be addressed include: Executive, Finance and Citizens' Oversight Committees Update and Environmental Review Update.*

**6. Consent Calendar.**

*The opportunity for public comment on consent agenda items will occur prior to the Committee's discussion of the consent agenda. The Committee may approve the entire consent agenda with one action. In the alternative, items on the consent agenda may be removed by any Committee or staff member, for separate discussion and vote.*

- a. Approve September 24, 2020 MWPA Operations Committee meeting minutes.  
*Recommendation: That the Committee approves the Consent Calendar.*

**7. Old Business.**

- a. **Evacuation Plan Study** – Update from sub-committee on draft RFP/RFQ, Operations Committee Members to provide feedback on RFP/RFQ.
- b. **Community Wildfire Protection Plan** – An update on the 2020 CWPP refresh.
- c. **2021 Program of work** – Update from Sub-Committee on development of the processes and timeline of the 2021 program of work.
- d. **2020 Workplan Update.**  
*Recommendation: The Committee receives an update on the 2020 workplan.*
- e. **FIRESafe Marin Workplan Update.**  
*Recommendation: The Committee receives an update on the 2020 workplan.*

**8. New Business.**

- a. **Advisory/Technical Committee Orientation** – Update from Operations Committee Member Chief Tyler on the scheduled A/T C orientation.
- b. **Chair/Vice Chair Positions** – Discuss the terms of the positions of Chair and Vice Chair and determine the need to nominate a new Chair and Vice Chair.

**9. Information Items.**

**10. Committee Members Request Future Agenda Items**

**AGENDAS & STAFF REPORTS ON-LINE [www.marinwildfire.org](http://www.marinwildfire.org)**

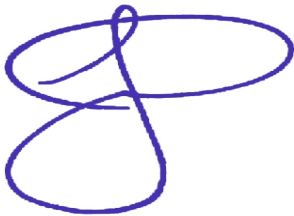
## 11. Adjourn.

***In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the MWPA at 415-539-MWPA (6972). Notification at least 48 hours prior to the meeting will enable the Agency to make reasonable accommodation to help insure accessibility to this meeting.***

*Any writings or documents provided to a majority of the Committee Members regarding any item on this agenda after the distribution of the original packet will be made available for public inspection at 28 Liberty Ship Way Sausalito, CA 94965 \*note as of 4/30/20 offices are closed to the public documents will be made available upon request and will be available online at [www.marinwildfire.org](http://www.marinwildfire.org)*

*Notice is hereby given that the Operations Committee may discuss and/or take action on any or all of the items listed on this agenda. If any of these matters above are challenged in Court, you may be limited to raising only those issues you or someone else raised at any public hearing described on this agenda, or in written correspondence delivered at, or prior to, this meeting. Judicial review of an administrative decision of the Operations Committee must be filed with the Court not later than the 90<sup>th</sup> day following the date of the Operations Committee meeting decision (Code of Civil Procedure Section 1094.6)*

*I certify that this agenda was posted on Public Notice Bulletin Board on or before Monday, November 30, 2020 at 3:00 pm.*



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Jason Weber, Committee Chair

THE MARIN WILDFIRE PREVENTION AUTHORITY  
OPERATIONS COMMITTEE

Held a meeting:

3:00 p.m. Thursday, September 24, 2020

Via teleconference due to Coronavirus (COVID-19)

1. Call to Order- Chair Weber called the meeting to order at 3:00 p.m.
2. Roll Call  
Committee Member Attendance: Joe Chinn (Ross), Todd Cusimano (Corte Madera), Eric Dreikosen (Marinwood), Dave Donery (San Anselmo), Jim Fox (Inverness Fire), Chris Gove (Muir Beach Fire), George Kraukauer (Bollinas Fire), Al Piombo (Mill Valley Fire), Mark Pomi (Kentfield Fire), Jim Schutz (San Rafael), Dan Schwarz (Larkspur), Rich Shortall (Sleepy Hollow Fire District), Kenny Stevens (Stinson Beach Fire), Bill Tyler (Novato Fire), Garrett Toy (Fairfax), Chris Tubbs (Southern Marin Fire), Jason Weber (Marin County Fire)  
Staff Attendance: Interim Executive Officer Jean Bonander, Executive Officer Brown

Chair Weber stated the public will have an opportunity to address the committee by using the “raise your hand” function.

3. Agenda Adjustments

There were no adjustments to the agenda.

4. Open Time for Public Expression

Ms. Carolyn Longstreth, representing the California Native Plants Society and the Fire and Environment Resilience Network (FERN), thanked everyone involved with the great work done on the Woodward Fire. She gave a “shout-out” to FIRESafe Marin for the Webinar regarding evacuation orders and warnings. She reported the Goat Grazing Project in the Elliott Nature Preserve in Fairfax was poorly planned. It appears to have caused harm to the environment as opposed to improving wildfire safety. She did not see this project on the MWPA Workplan.

5. Interim Executive Officer’s Report

Interim Executive Officer Bonander reported she has been working with the Board subcommittee on the formation of the Citizen’s Oversight Committee (COC). The application period closed yesterday at 5:00 p.m. There are multiple applicants for all nine seats (five geographic seats and four seats for specific organization areas). The subcommittee will be sorting through the applications and making a recommendation at the October 15, 2020 Board meeting. At the September 17, 2020 meeting the Board adopted its ByLaws and created the Executive Committee and the Finance Committee, two new standing committees. The Executive Committee is comprised of five Board members with geographic representation.

The Finance Committee is made up of five Board members with two slots available for Operations (OPS) Committee members. She stated the OPS Committee should consider making appointments at its next meeting. Both of these standing committees will be subject to the Brown Act. At the September 17<sup>th</sup> meeting the Board also appointed Mr. Mark Brown as the permanent Executive Officer. The transition process has started and she has been meeting with Executive Officer Brown to try to get the underlying foundation of this organization established. At the September 17<sup>th</sup> Board meeting she presented a Draft Business Plan for the administrative and finance functions thorough the end of December. The intent is to give Executive Officer Brown a structure from which to work on the tasks that are progressing through the system. Terms and conditions were approved by the Board for FIRESafe Marin's programmatic efforts. She will be drafting the agreements for Committee member Shortall's review. Board President Goines has the authority to sign the agreement if all the terms and conditions are met.

Chair Weber opened the meeting to public comments.

There were no comments.

Chair Weber closed the meeting to public comments.

Chair Weber stated the last thirty days have demonstrated the need for what the MWPA is doing. The holistic approach the MWPA is taking towards wildfire prevention is being looked at across the State of California.

#### 6. Consent Calendar

- a. Approve June 4, 2020 MWPA Operations Committee meeting minutes

Chair Weber opened the meeting to public comments.

There were no comments.

Chair Weber closed the meeting to public comments.

M/s, Cusimano/Schutz, to approve the June 4, 2020 MWPA Operations Committee meeting minutes as submitted.

Ayes: 16, 99.7 % of population (through a roll call vote)

#### 7. Old Business

- a. 2020 Workplan Update

Chair Weber presented the staff report. The 2020 Workplan consisted of two funding sources- the 20% allocated to the defensible space program and the second 20% to wildfire prevention mitigation on the local level. Agencies were asked to compile a list of potential projects with estimate costs. These were ultimately compiled into the 2020 Workplan and adopted by the Board on June 18, 2020. The funding source will not be available from a cash flow perspective until later in the year. Some projects are in the planning phase and awaiting that funding

source. Other projects are being funded locally by the agency as a “stop gap”. He noted the packet includes the status of each project. Items in the “planning” phase are going through environmental compliance review, project monitoring or scoping, or looking for bids. For the most part, projects are moving along. A lot of progress has been made in a short period of time. He noted the San Rafael Fire Department has submitted an amendment to the Workplan to add some items.

Committee member Tyler stated it was important to come up with a tool for tracking progress. They will need to come up with a way to fast-forward some of these projects. There will be some additional changes.

Chair Weber opened the meeting to public comments.

Ms. Barbara Salzman, representing the Marin Audubon Society and FERN, stated she reviewed the list and it would be helpful to have an understanding of the species that are being impacted by some of the projects as well as the acreage. She asked if many of the projects were in the planning phase due to CEQA issues. The Audubon Society and FERN are willing to help in any way possible.

Chair Weber closed the meeting to public comments.

#### b. FIRESafe Marin Workplan Update

Committee member Shortall presented the report. Things are moving very fast. He discussed some of the changes going on and some projects on the operational side. Next Tuesday’s Webinar will be on Neighborhood Community Organizing and the ESP Project. The group has postponed the community workshops. They have a meeting this week with the Northern California Landscape Contractor Association regarding a certification process through that association. FIRESafe Marin will also be meeting with Home Hardening Contractors. The Educational Planning Committee is meeting tomorrow. The “Get Ready Fifth Grade” Program is on a fast-track and could be coming to the school districts sooner rather than later. Another big area of progress for the group pertains to bilingual materials. They plan to translate the Evacuation Checklist into Spanish and will doing some video training in Spanish for the Red Flag Warning Project. There are three projects on the operational side of things. The first is the NOA Weather Radios Pilot Project. The group has a meeting with a vendor tomorrow and the plan is to purchase over twenty-five hundred radios. This will be a challenging project that will need a lot of feedback and monitoring. The group has been meeting with stakeholders to discuss the Red Flag Warning Program. Fire Chiefs would make the determination on when to post the warning signs. There are many options on how they will look and they will all have the same color scheme, wording, and print style. There will be a system of notification through the Office of Emergency Services (OES) and a system of accountability for non-public agencies. The Chipper Program has been very successful with over 1,000 curbside pick-ups. The Board recently approved expanding the program through November. They are almost fully booked! It is not too soon to think about next year and how this program could be integrated with the Inspection Programs. Committee member Tyler stated one way to expand the service is to schedule according to evacuation zones.

Chair Weber opened the meeting to public comments.

There were no comments.

Chair Weber closed the meeting to public comments.

c. MWPA Administrative and Financial Support Update

Committee member Tubbs presented a report. He and his SMFD staff have been meeting regularly with Interim Executive Officer Bonander working through a variety of issues. The Administrative Assistant has taken on the task of producing the Board agendas and packets and will soon do the same for the OPS Committee, the Technical Advisory Committee, and the Citizen's Oversight Committee. The SMFD provides an office and supporting materials for Executive Officer Brown. On Tuesday he and his staff will meet with Interim Executive Officer Bonander, Executive Officer Brown, and Board President Goines to discuss the status of a number of transition items. On the financial side, staff is researching payroll options. Staff has two bids for an auditing firm and is soliciting for a third. He met with Mr. Tim Bush of Marin IT regarding cyber security with respect to the financial systems. He provided the report to the Board. He is meeting with Executive Officer Brown next week to get bank signature cards. He is waiting for receipts from the County of Marin that have already been paid on the MWPA's behalf so they can issue them a check.

Chair Weber opened the meeting to public comments.

There were no comments.

Chair Weber closed the meeting to public comments.

8. New Business

a. Evacuation Plan Study

Mr. Todd Lando, Hazard Mitigation Specialist with the Central Marin Fire Department, gave a report. Mr. Lando stated they submitted a grant application to CalTrans last year for funding in the amount of \$750,000. They were not awarded the grant for a variety of reasons. The grant would have funded a study of evacuation needs including routes, notification systems, how to assist those in the community with functional needs, etc. There was a specific focus on transportation and road infrastructure. He noted they need to create an assessment of the entire evacuation system in the County and a unified plan. There were discussions about the MWPA funding this study if the CalTrans grant did not come through. He stated it was his understanding that the MWPA would form an ad hoc committee to look at this request.

Chief Weber stated the Evacuation Plan Study will be a guiding document that would help prioritize the Workplan for years to come. The study will use census data, demographics, vegetation modeling, fuel modeling, etc. It could serve as a template for other jurisdictions.

Chief Weber stated there were concerns expressed by the public at the last Board meeting about transparency with respect to the ad hoc committees. There are ways to open it up to the public to see the dialogue and debate. He noted whatever comes out of those committees comes back to the OPS Committee and ultimately the Board. The public processes are in place.

Committee Co-Chair Schwarz stated there is an inference that these ad hoc committees are doing something beyond the power given to them by the Board. This is simply not the case. One way to assure the public would be to ask the ad hoc committee to report out on its activities at the OPS Committee and Board meetings.

Chair Weber opened the meeting to public comments.

Mr. Bruce Bartel stated he brought up the issue of transparency at the Board meeting. It is important for the public to see the process as well as the outcome. These meetings should be announced, open, and viewable. It is important for the public to see what is going on behind the scenes.

Chair Weber closed the meeting to public comments.

Chair Weber asked for volunteers for an ad hoc committee for the Evacuation Plan Study from the five geographic areas. The following members volunteered: Committee member Tyler (Novato area); Committee member Dreikosen (San Rafael area); Committee member Kraukauer (West Marin); Committee member Tubbs (Southern Marin). Chair Weber stated he would ask Mr. Todd Lando to serve on this ad hoc committee and perhaps members of the Technical Advisory Committee. The ad hoc committee will get assistance from the City Managers when preparing the Request for Proposals (RFP) along with SME's to assist in developing the plan.

b. Preparation for 2021 Program of Work

Committee member Tyler presented the report. He displayed the evacuation zone maps for the Novato Fire District. There are thirty five neighborhoods and five mitigation specialists that will be doing home evaluations, written reports, and defensible space evaluations. They will be responsible for all the grant work and coordination of Chipper Days. The GIS data will be submitted to the chipper contractors. He discussed a specific project that is included in the current Workplan that includes evaluation and assessment, clearing and chipping, CEQA review on the parcels, and a fuel break on the back side of the homes. The plan is to take this on a neighborhood by neighborhood.

Chief Weber stated this was a good example of how to create the processes to develop the 2021 Work Plan. He is asking for the formation of an ad hoc committee that would accomplish this effort.

Chair Weber opened the meeting to public comments.



There were no comments.

Chair Weber closed the meeting to public comments.

Chair Weber asked for volunteers for the ad hoc committee to create the processes to develop the 2021 Work Plan. The following members volunteered: Committee member Tyler (Novato); Committee member Schutz (San Rafael and Marinwood); Committee member Shortall and Committee member Cuisamano (Central Marin and Ross Valley); Committee member Tubbs (Southern Marin); Chief Weber (West Marin). Chief Weber stated this is an opportunity to work with the ESP partners, Citizen's for Wildfire Preparedness, and others.

#### c. Grant Program Options

Chief Weber presented the report. The Board asked the OPS Committee to look grant options. A subcommittee, chaired by Committee member Shortall, had come up with some guidelines. The subcommittee concluded that it would be challenging to run a grant program without staff. The item was tabled. Local agencies have the ability to run their own grant programs. He recommended the MWPA hold off on trying to run a grant program without sufficient staff to do it. It is very labor and time intensive.

Committee member Shortall stated the subcommittee did a lot of work on this and considered a number of options. It really should be a policy discussion for the full Board. He agreed that grant programs were fairly complicated and very labor intensive.

Chair Weber opened the meeting to public comments.

There were no comments.

Chair Weber closed the meeting to public comments.

Chair Weber stated he would formulate a response to the Board based on the work done by the subcommittee and the recommendation that the Board take this up as a policy item. The Board could include this in the next fiscal year.

#### 9. Informational Items

Chief Weber reported a lot of residents are getting inundated with questions from insurance companies and vendors about the use of a retardant/gel formula on his or her house. County Fire Prevention Officers are formulating a response. He stated the home hardening and defensible space measures advocated by the MWPA are much more important than spraying a retardant on vegetation or homes. He encouraged residents to contact his or her local fire agency with any questions.

#### 10. Committee Members Request for Future Agenda Items

Committee member Tubbs asked that the following be placed on an upcoming agenda:  
Selection of two OPS Committee members to the Finance Committee.

Chair Weber stated the OPS Committee had selected the third Thursday of the month as its meeting date. This could be a conflict with the Board of Directors meeting so he will check on this potential conflict and come up with alternative dates. Committee member Dreikosen stated they had talked about meeting in July, October, January, and April (first month of each quarter).

11. Adjournment- Chair Weber adjourned the meeting at 4:17 p.m.

Respectfully submitted,

Toni DeFrancis,  
Recording Secretary



## MARIN WILDFIRE PREVENTION AUTHORITY

For the Meeting of December 3, 2020

To: Marin Wildfire Prevention Authority Operations Committee

From: Jason Weber

Subject: Evacuation Planning Study

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### **RECOMMENDATION:**

Receive verbal report on progress of RFP/RFQ for the Evacuation Planning Study. Provide feedback on attached draft to prepare final draft to be presented to MWPA Board at their 12/17/20 Board meeting.

### **BACKGROUND:**

A primary concern of residents and fire professionals following the last 5 years of critical wildland fire frequency and behavior is the ability to rapidly warn and evacuate people in front of a rapid moving fire. Additionally, primary objectives of the MWPA are to save lives, protect homes/property and create a landscape tolerable to lower intensity fire.

This study will provide the information needed to make informed strategic priorities related to the work of MWPA. It will serve as a foundational document informing member agencies, the public, the Board and subsequent committees of the risks and priorities related to work of the MWPA.

### **FISCAL IMPACT:**

The review and any proposed changes to the RFP/RFQ have no direct cost to the MWPA.

Marin Wildfire Prevention Authority (MWPA)  
28 Liberty Ship Way, Suite 2800  
Sausalito CA 94965  
415-539-6972

REQUEST FOR QUALIFICATIONS & PROPOSALS  
(RFQ / RFP)  
for a

WILDFIRE EVACUATION  
RISK ASSESSMENT AND MANAGEMENT  
APPLICATION SOFTWARE

Release date:

**December 21, 2020**

PROPOSALS DUE:

**FEBRUARY 1ST, 2021**

**by 5:00 PM**

Qualifications and Proposals accepted as  
**a single PDF document only**  
by email to [mbrown@marinwildfire.org](mailto:mbrown@marinwildfire.org)

## I. OVERVIEW

The Marin Wildfire Protection Authority (hereafter MWPA) is a newly formed 17-member Joint Powers Authority (JPA) created with the support of Marin County residents who passed Measure C in March 2020 with 70.8% voter approval. The MWPA was formed to develop and implement comprehensive wildfire prevention, mitigation and emergency preparedness activities throughout almost all of Marin County, in coordination with its 17 local member agencies. One key element of MWPA's mission includes the improvement of evacuation routes for safe and orderly evacuation, which grounds the need for this Risk Assessment.

The MWPA requests statements of qualifications and proposals from consultants experienced in developing detailed traffic simulations, evacuation modeling and fire risk assessments. Led by MWPA and member agencies, with cooperation from the Marin Office of Emergency Services (OES), first responders, law enforcement, County and local public works professionals, the requested application software will identify and assess Risk Factors that affect the safety, efficiency, and success of a fire evacuation, and help manage real-time evacuation events.

Using a variety of on-going evacuation planning efforts, the project will compile, analyze and simulate the effect of different Risk Factors as they would impact wildfire evacuation, for each road and roadway served by the MWPA member agencies. The expected final product will create a rating system of roads, presenting a detailed and composite risk assessment of the County's roadways at specified levels of aggregation (geographic areas and / or evacuation zones). The envisioned final product is a cloud-based application software that will allow registered users to identify highest Risk Factors in specific areas, periodically re-evaluate the scoring of each Risk Factor as improvements are completed, and manage real-time evacuation events. The final product should remain functional for the end-user in case of a loss of connectivity.

The Risk Factors to be considered include, but are not limited to, topography, assets at risk, intersection functionality, roadway capacity, other traffic impediments, presence of vulnerable populations, vegetation impacts to roadways, defensible space conditions, structural vulnerability, temporary refuge areas, and other relevant factors. Consultants' experience in analyzing and simulating these and other Risk Factors affecting fire response is one of the selection criteria of this RFQ / RFP.

The final deliverable is not expected to include recommendations on how to lower the overall fire evacuation risk, but should be sufficiently detailed and quantified to allow MWPA and other public safety agencies to identify, prioritize and implement specific, targeted and quantifiable risk reduction measures for each road, if and when appropriate. The final deliverable should be sufficiently easy to use to allow registered users to change Risk Factors scoring as improvements are completed in a manner that is minimally subjective. Ideally the final product would also allow for evacuation training and real-time evacuation management.

## II. PROJECT BACKGROUND

More than 260,000 people live in Marin County, served by cities, towns, the County of Marin, and fire district agencies. Marin's wildlands, natural vegetation, and climate make our neighborhoods beautiful and desirable places to live, but also leave residents and visitors vulnerable to wildfire. Marin has significant portions of the County included in moderate, high and very high wildfire severity zones as outlined in [CAL Fire's fire hazard severity maps](#), and locally identified [Wildland Urban Interface Areas](#).

Most of Marin is built-out with little room to expand roadways. Its terrain makes for a beautiful environment, attracting many visitors and outdoor enthusiasts. It is this same natural environment that contributes to the extreme fire and the challenge of evacuations. In many cases, roads laid out more than a century ago were not designed to handle today's traffic and mass evacuations may be impeded by narrow and steep routes with little interconnectedness.

We learned important lessons about evacuations from the 1991 Oakland Hills fire, 1995 Vision Fire in Inverness, the recent North Bay wildfires (2017, Napa, Sonoma) and Camp Fire (2018, Butte County). Getting people out of neighborhoods and getting firefighting vehicles to locations to battle the blazes were severely hampered by clogged narrow streets, in some places worsened by parked or abandoned cars. Recent PG&E Public Safety Power Shutdowns have compounded challenges around early alert and warning capabilities. Tragically, lives were lost while people attempted to evacuate in these other communities. The implications of failing to evaluate and study ways to improve Marin's evacuation routes may impact the safety and health of Marin County residents, as well as the economy and housing.

Fire officials currently lack a comprehensive assessment of the dynamic Risk Factors that would affect a wildfire evacuation, and therefore must focus fire prevention efforts without a clear indication of their impact on facilitating evacuations. This Risk

Assessment will identify and quantify Risk Factors for each road and roadway in Marin County, and create a composite risk score at different levels of aggregation, using recognized roadway rating practices. Absent a comprehensive evacuation risk assessment, the ability to prioritize efforts and funding to implement risk-mitigating improvements is difficult.

Upon the delivery of this Risk Assessment application software, planned outcomes include development of a range of targeted and deliverable risk-mitigating improvements by area (near term and longer term), prioritization of proposed improvements, and evacuation trainings.

With increasing intensity and frequency of wildfires, it is essential to make improvements to Marin's constrained evacuation corridors as soon as possible to avoid significantly jeopardizing the mobility, public safety, and the regional economy.

### III. SCOPE OF WORK

Using wildfire scenarios identified in the Marin Countywide Community Wildfire Protection Plan, a variety of local studies and data sources, and evacuation planning efforts, the consultant will create a cloud-based application software that will:

1. Compile, analyze and simulate the effect of different Risk Factors as they would impact wildfire evacuation, for each road and roadway served by the MWPA member agencies. The expected final product will present a detailed and composite risk assessment of the County's roadways at specified levels of aggregation (geographic areas and / or evacuation zones). Registered users should be able to easily identify highest Risk Factors in specific areas, and periodically re-evaluate the scoring of each Risk Factor in an objective manner.
2. During a real-time evacuation event, analyze and model the effects of various solutions on traffic and circulation along primary, secondary, and tertiary evacuation routes, and fire apparatus ingress routes, during scenarios predicted by wildfire modeling, observed wildfire history, and provided by first responders. Certain key aspects of the application must remain functional to the end user in case of a loss of connectivity.

Overall Project Milestones:

**1. Review and evaluate existing data and studies**

Collect and review existing documents, data, maps and studies. Identify the need for additional data gathering or collection efforts, if any.

Table 1 is a non-exhaustive list of the data sources that should be reviewed and evaluated to inform the Risk Factor Inventory.

Table 1: Existing Risk Assessment Data Sources:

Agency or Organization	Data source(s)	Related risk factor(s)
Marin County Fire Department	Community Wildfire Protection Plan and data sources used within	Topography Vegetation and Fuels characteristics Assets at risk and areas of concerns Weather and climate variability Fire History Ignition History County-level Fire hazard assessment Parcel-level Fire hazard assessment
Federal Highway Administration	FHWA manual for using roadways during evacuation	Roads and Traffic
Marin Land Management Agencies	Lidar data	Vegetation and Fuels characteristics
Transportation Authority of Marin		Public Transportation
SMART		Public Transportation
Golden Gate Transit		Public Transportation
Golden Gate Paratransit Coordinating Committee		Vulnerable populations
Caltrans		Public Transportation



Marin Mobility Consortium		Vulnerable populations
Marin Center for Independent Living		Vulnerable populations
Marin County Disability Access		Vulnerable Populations
Marin County DPW and other local DPWs	Road data, street light data, location type and effect of traffic calming devices, park locations	Roads and Traffic, obstructions or delays to timely evacuations
School Districts	Recreation fields and parking lots that can serve as temporary areas of refuge	Areas of temporary safe refuge
Local Law Enforcement & Fire Agencies	Traffic Division Staff & Fire Prevention Staff	Areas with chronic parking challenges

## 2. Prepare Risk Factor Inventory

Using recognized best practices, established wildfire simulations and a review of recent years' civilian fatalities and casualties, prepare an inventory of all Risk Factors to be included in the composite Risk Assessment. The County is currently updating its Community Wildfire Prevention Plan, which includes many, but not all, of the Risk Factors to be considered. The final Risk Factor Inventory must be approved by MWPA before continuing to the next project milestone. The application software should allow for the future inclusion of other Risk Factors not originally programmed, if necessary.

The following is a non-exhaustive, preliminary list of Risk Factors that should be included in the Assessment:

### A. Roads and traffic:

- Roadway capacity and conditions: Width, ownership and maintenance responsibilities (public or private), lanes, signage, physical constraints, roadway clearance and roadside vegetation, bridges and structures with weight limitations, parking constraints, traffic calming devices (speed bumps) access points (on-ramps and of-ramps), tunnels, etc
- Predicted traffic (number of vehicles, passengers, etc) based on census data

- Intersection functionality: Signalized intersections (lanes, signal functions and controls, battery life) and non-signalized traffic intersections (controls, constraints)
  - Other traffic impediments and “pinch-points”, critical access points from a fire response perspective (One-way In, One-way Out)
  - Roads greater than 800 feet without effective turnouts & emergency vehicle turnarounds
  - Roadways that could be good candidates for contra flow considerations
  - Steps, Lanes and Paths
- B. Topography (chimneys, chutes, saddles, etc.)
- C. Vegetation and Fuels characteristics
- D. Assets at risk and areas of concerns
- E. Weather (spring, typical summer and extreme summer, winter) and climate variability
- F. Fire History
- G. Ignition History
- H. County-level Fire hazard assessment for average, peak and extreme conditions
- I. Parcel-level Fire hazard assessment
- J. Presence of vulnerable population(s) and related impact(s) on traffic
- K. Animal presence (livestock, horses) and related impact(s) on traffic
- L. Public Transportation: Local, regional and private bus and train transit providers’ inventory of assets, driver availability, fueling capacity, maintenance and vehicle storage location, transit-dependent ridership
- M. Temporary refuge areas
- N. Any other factors that contributed to civilian fatalities and casualties during recent years’ fire events
- O. Additional Risk Factors TBD to be programmed in the final deliverable.

### 3. **Risk Factors scoring and weight:**

For each Risk Factor in the final inventory, create a detailed scoring system. The scoring standard for each Risk Factor should be sufficiently descriptive to allow future re-assessment by registered users in an objective manner. The weight of each Risk Factor in relation to other Risk Factors should be taken into consideration, so that a composite score at different levels of aggregation (evacuation zones, [Mutual Threat Zones](#), geographic areas and others) can be meaningful.

### 4. **Current Conditions Risk Assessment:**

For each road and roadway in Marin County, score each Risk Factor according to current conditions. (see non-exhaustive list in Point III.2.A-O above)

## 5. **Final Composite Risk Assessment:**

The final composite Risk Assessment should be easy to understand. A color-coded map or simulation should be readily available immediately after any changes to fire conditions, Risk Factors or Risk Factor scores, at different levels of aggregation (evacuation zones, Mutual Threat zones, geographic and and others).

## 6. **Risk Assessment and real-time evacuation training**

Upon completion of the Risk Assessment, user training will be necessary for both the Risk Assessment aspect and the real-time evacuation management aspect of the software application. Formal training for Fire and Law Enforcement, and proper documentation of the software application's features and capabilities are expected.

### Final deliverable

The envisioned final deliverable is a cloud-based application software capable of aggregating Risk Factors scores by evacuation zones, geographic areas and other. For each road and roadway, all of the Risk Factors are inventoried and scored according to 2021 conditions. For each Risk Factor, a detailed description of the risk as it affects wildfire evacuation, and its scoring scale should be easily accessible. Registered users should be able to change the scoring of any Risk Factor in an objective manner, and any change should be reflected in the overall composite Risk Assessment by area. The application should allow users to add additional Risk Factors if needed. The software application should produce a map or visual simulation of the composite Risk Assessment at different levels of aggregation. The application's main functionalities should remain available to the end-user in the event of a loss of connectivity. It should include a training / simulation mode, as well as real-time evacuation management capabilities.

## IV. SCHEDULE

**DECEMBER 21ST, 2021** - Release of Notice inviting Request for Qualifications & Proposals

**FEBRUARY 1st, 2021 BY 5:00 PM** –Qualifications and Proposals due by email, as a single PDF document addressed to mbrown@marinwildfire.org

**MARCH, 2021** – Consultant selection approved by MWPA Board of Directors and Notice to Proceed

## V. QUALIFICATIONS & SELECTION CRITERIA

Primary consideration will be given to consultants and proposals that demonstrate the highest qualifications in terms of past experience, understanding of the project scope, and software capabilities as they address the needs outlined above. Consultants submitting proposals should meet the following criteria and provide information acknowledging such compliance:

- Have dedicated staffing, equipment, technical and financial resources to perform the work and a demonstrated ability to obtain such resources as required during performance;
- Have experience providing consulting services to public agencies;
- Have the ability to cooperatively interact with and provide timely responses to MWPA staff, committees' and subcommittees' members, and project manager;
- Have experience with traffic simulation for natural disasters and wildfire response;
- Be otherwise qualified and eligible to receive a contract award under applicable laws and regulations.

## VI. RESPONDENT SUBMITTAL REVIEW REQUIREMENTS

The selected consultant will demonstrate and describe how their experience qualifies them to be selected to provide the requested services, and include a proposal for the requested work. The RFQ/RFP submittal package shall include:

1. A letter of transmittal.
2. Description of the company, its competencies and experience.
3. Description of the team that will be dedicated to this project, including resumés of each team member, emphasizing experience and skills relevant to this project, and in particular any experience analyzing and quantifying fire evacuation risk factors, and performing wildfire simulations. Identify the project lead and provide brief descriptions of similar projects completed by the team.
4. Provide relevant samples of previous work. Indicate which team member, if any, contributed to each sample. Examples of previously used or created simulation applications or programs are encouraged. Please provide a website and credentials for virtual demonstrations.
5. Include an explanation of the consultant's understanding of the MWPA's needs related to this project, as outlined in the Scope of Work, including a

detailed description of the proposed methodology, approach and specific tasks.

6. Provide a timeline for the completion of each milestone identified in Section III - Scope of Work
7. A cost estimate for each of the milestones outlined in Section III - Scope of Work, and all services included in this proposal.
8. Provide a timeline for the completion of each milestone identified in Section III - Scope of Work
9. A description of the features that allow for real-time evacuation management, and examples of previous uses, with references of local fire and law enforcement authorities involved in real-time evacuation where the software application was used.
10. Provide a relevant list of project references. A minimum of three references should be included in an appendix to the proposal, as follows:
  - Project type (public/private, size, location, etc.)
  - Project description, including a description of the final deliverable
  - List public/private contact by agency/company and individual contact along with address, phone number and email address (if available)
11. A commitment to negotiate in good faith and a Professional Services Agreement (see attached Standard Agreement) for completion of the tasks outlined in the scope of work, including a not-to-exceed compensation total for expenses and reimbursables.

Responsive submittals shall include a complete description of qualifications and a proposal, including all pertinent information and references as requested, **in a single PDF document, submitted as an email attachment** to [mbrown@marinwildfire.org](mailto:mbrown@marinwildfire.org). Submissions containing more than one attachment will not be considered. The PDF document shall be comprehensive, well-organized, concise and limited in size. Samples of documents and photographs that the respondent has prepared for similar projects should be included in the same PDF document for submission. Paper copies and hard cover binders will not be accepted.

## VII. GENERAL TERMS AND CONDITIONS

1. **Public Records.** All submittals become the property of the MWPA, regardless of whether the MWPA enters into a contract with the consultant, and no submittals will

be returned to a consultant. In accordance with California law relating to access to public records, the MWPA may be required to publicly disclose all submitted information and materials to third parties requesting such information. At the MWPA's sole discretion, it may delay disclosure of submittals until negotiations with the selected consultant(s) has concluded, if such disclosure would compromise the MWPA's negotiating position. If the submitting consultant claims that any submitted information constitutes a trade secret or is proprietary, the consultant shall identify the trade secret or proprietary information in the submittal. Hourly rates and pricing are not considered a trade secret or proprietary information. All reports and pertinent data and/or materials shall be the sole property of the MWPA and may not be used or reproduced in any form without the explicit written permission of the Authority.

2. **No Contract.** This RFQ / RFP and the selection process shall in no way be deemed to create a binding contract, agreement or offer of any kind between MWPA and a submitting consultant. If MWPA selects a consultant(s) pursuant to this RFP, any legal rights and obligations between the successful firm(s), if any, and MWPA will come into existence only when a written contract is fully executed by the parties, and the legal rights and obligations of each party shall at the time be only those rights and obligations which are set forth in the contract and any other documents specifically referred to in that contract.

3. **Award.** This RFP does not commit the MWPA to award a contract, to pay any costs incurred in the preparation of the proposal response to this RFQ / RFP, or to produce or contract for services or supplies. The MWPA reserves the right to accept or reject any or all proposals received as a result of this RFP, to negotiate with any qualified source, or to cancel in part or in its entirety this RFP if it is in the best interest of the MWPA to do so. The MWPA may require the selected consultant to participate in negotiations and to submit such price and technical or other revisions to their proposals, as may result from negotiations.

4. **MWPA Standard Agreement.** A sample of the standard MWPA professional services agreement is attached as Attachment A. By submitting a response to this RFP, the consultant represents that it is willing and able to execute the standard MWPA professional services agreement, including but not limited to, the applicable insurance requirements. The agreement will not be executed by the MWPA until after the consultant is selected and the appropriate insurance certificates are received and approved by the MWPA.

5. **Federal, State and Local Laws.** Any consultant executing a professional services agreement with MWPA will be required to comply with all applicable federal, state and

local laws. All proposers are hereby notified that, during any prospective performance, consultant must agree to provide Equal Employment Opportunity and shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age, marital status, national origin, sexual orientation or HIV positive findings. Such actions shall include but are not limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rate of pay or other forms of compensation, and selection for training, including apprenticeships.

**6. Errors and Omissions.** Consultants are responsible for reviewing all portions of this RFP. Consultants are to promptly notify MWPA, in writing, if the consultant discovers any ambiguity, discrepancy, omission or other error in this request. ANY such notification should be directed to the MWPA contact person listed on the final page promptly after discovery, but in no event, later than five (5) working days prior to the date for receipt of submittals.

**7. Additional Questions.** Any questions regarding this RFP must be submitted in writing to the MWPA staff contact person listed on the final page at least ten (10) working days prior to the submittal deadline. MWPA may share the question(s) and its response(s) with all known consultants who are considering a response to this RFP.

**8. Addendum.** MWPA may revise this RFP prior to the submittal deadline. MWPA will communicate modifications to this RFP by issuing an addendum. MWPA may extend the submittal deadline at its sole discretion.

**9. Additional Information.** In MWPA's sole discretion, it may contact any, all or no consultant to seek additional information about a submittal.

## VIII. FILING AND SELECTION PROCESS

The MWPA Operations Sub-committee for this project will evaluate all proposals according to the demonstrated technical competence and suitability of the prospective consultant. The selection process may involve narrowing the total number of interested parties to a short list. These consultants may be interviewed and demonstrations might be requested, with one consultant being recommended for selection by the MWPA Board of Directors, which will make the final selection and award the contract.

The MWPA reserves the right to disqualify submissions based on insufficient response to this Request for Qualifications and Proposals. The MWPA also reserves the right to negotiate specific requirements and costs.

**All proposals must be received by:**

**5:00 p.m. on FEBRUARY 1ST, 2021**

Please direct all questions, correspondence, and proposals to:

**Mark Brown, Executive Officer**  
[mbrown@marinwildfire.org](mailto:mbrown@marinwildfire.org)

**Attachment A: MWPA Standard Professional Services Agreement**

For further background information, please visit the MWPA's website at:  
<http://marinwildfire.org>.





## MARIN WILDFIRE PREVENTION AUTHORITY

For the Meeting of December 3, 2020

To: Marin Wildfire Prevention Authority Operations Committee  
From: Christie Neill, Battalion Chief  
Subject: Community Wildfire Protection Plan (CWPP) 2020 Update

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### **RECOMMENDATION:**

Receive verbal report on 2020 CWPP update.

### **BACKGROUND:**

The Marin County Community Wildfire Protection Plan (CWPP) provides a scientifically based assessment of wildfire hazard and threat to homes in the wildland urban interface (WUI) of Marin County, California. The last version of the Marin CWPP was published in 2016 and has recently been updated. The updated version of the CWPP was developed through a collaborative process involving Marin County fire agencies, county officials, county, state, and federal land management agencies, and community members.

The purpose of the CWPP is to provide fire agencies, land managers, and other stakeholders in Marin County with guidance and strategies to reduce fire hazard and the risk of catastrophic wildfires in the WUI, while promoting the protection and enhancement of the county's economic assets and ecological resources.

The North Bay fires of 2017 raised awareness of the potential vulnerabilities and fire hazard in Marin. In 2017, the Marin County Board of Supervisors published a report that discussed the lessons learned from the 2017 North Bay fires. In 2019, the Marin Civil Grand Jury published a report entitled Wildfire Preparedness: A New Approach, that described a more proactive and consistent approach to public education, wildfire preparedness, and vegetation management for Marin County. Following the

Grand Jury report, in March 2020, tax Measure C was passed. The measure will raise approximately

\$20 million annually to fund wildland fire hazard mitigation efforts throughout the county.

Following the passage of Measure C, the Marin Wildfire Prevention Authority (MWPA) was formed to serve as the governing body to manage the funds raised through Measure C.

**MARIN WILDFIRE PREVENTION AUTHORITY**

**P.O. Box 4248, 2 Civic Center Drive, #4248, San Rafael, CA 94913**

**415.539.MWPA (6972) • [www.marinwildfire.org](http://www.marinwildfire.org)**



In 2018, the One Tam agency partners—the Marin Municipal Water District, Marin County Parks, the National Park Service, and the California Department of Parks and Recreation—initiated development of a Marin countywide fine-scale vegetation map and landscape database. As part of this CWPP update, the new vegetation data was used to develop an updated fuel model data set for the county. These data sets are used as inputs for fire behavior models, which predict potential fire behavior and identify areas that may be potentially hazardous if a fire were to occur.

Using geographic information system (GIS) analyses, county-level and parcel-level fire hazard assessments were performed. The results of these analyses can be used to identify areas and communities that are at greatest risk of being negatively impacted by wildfires. The CWPP concludes with a discussion of mitigation strategies, and recommendations to (1) educate and prepare residents for wildland fires and (2) reduce fire hazard.

The first table in the report following the Executive Summary entitled “Plan Updates” lists updates that have been made to the 2020 CWPP. This CWPP update was funded by the Marin County Fire Department (MCFD) and a Federal Emergency Management Agency (FEMA) grant to support the Marin County Hazard Mitigation Plan.

A draft of the updated 2020 CWPP is available for review and comment. Please use the comment function in Google Docs to suggest edits. The maps shown in the CWPP document will be available for viewing online soon. The 2016 Marin CWPP is available on the FIREsafe MARIN website (<https://www.firesafemarin.org/cwpp>).

#### **FISCAL IMPACT:**

There is no cost to the MWPA, Marin County Fire Department was awarded grant funds to update the CWPP. There will be significant costs savings to MWPA utilizing the GIS information within the CWPP for the evacuation study.



**MARIN WILDFIRE PREVENTION AUTHORITY**

For the Meeting of December 3, 2020

To: Marin Wildfire Prevention Authority Operations Committee  
From: Jason Weber  
Subject: Fire Safe Marin Update

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**RECOMMENDATION:**

Receive report from FIRESafe Marin on MWPA supported projects and programs.

**BACKGROUND:**

FIRESafe Marin has been contracted to provide a variety of services and programs for MWPA. Attached is an update on those programs/projects. Rich Shortall who will be available for questions.

**FISCAL IMPACT:**

Funds for FIRESafe Marin have been allocated in your FY20-21 budget.

## **MWPA Project Update December 2020**

### **Monthly Webinars**

**FSM-2020-C01**

Our fifth webinar featured speakers Steve Quarles, UC Cooperative Advisor Emeritus and Jack Cohen PhD, a nationally known Forest Service scientist. There were approximately 200 live attendees, and many follow up views on our YouTube channel. Our next presentation is entitled Vegetation Management Practices in Marin's Open Space and will be held on Tuesday, December 15 @ 6pm. Featured speakers include Mike Swezy, Marin Conservation League & Max Korten, Director Marin County Parks & Open Space District addressing preservation of native biodiversity, restoration activities, environmental compliance, tools and treatments and long term maintenance.

### **5 Community Wildfire Protection Workshops 5 (1 in each zone) FSM-2020-C02**

#### **Annual workshop for Landscape Professionals**

**FSM-2020-C03**

#### **Annual Workshop for Home Hardening Contractors**

**FSM-2020-C04**

Planning has begun for the five online community workshops to be held next spring. Video highlights from our webinars will be combined with locally focused presentations from representatives of each of the five zones.

FIRESafe MARIN is working with CA Landscape Contractors Association - North Coast Chapter and UC Marin Master Gardeners to develop an educational program for landscape contractors. Course objectives have been identified along with presentation medium. Next step is development of course content.

### **Prevention and Preparedness in schools "Get Ready Fifth Grade" FSM-2020-C05**

This project has been completed and delivered to the Marin County Board of Education. It will be piloted by several Marin County teachers.

### **Prepare Educational materials such as brochures and handouts FSM-2020-C06**

We continue to distribute our educational materials. The popular "Homeowners Guide to Wildfire Preparation in Marin" was revised and 25,000 new copies have been printed and delivered primarily for distribution by the wildfire mitigation specialists. As the defensible space inspections wrap up in some parts of the County, we plan to use the experience of some of the inspectors to continue to develop new materials for the program.

### **Develop Spanish language training and educational materials FSM-2020-C07**

The FSM website is now equipped with the Google Translate feature so that all of the information is available in multiple languages. Our popular "Evacuation Checklist" has been translated into Spanish and posted on the website under our new "Espanol" heading that links to additional original Spanish language content. Hard copies of the Spanish language checklist have been printed. A Spanish language video to accompany the Red Flag Warning project has been completed and is posted on our website.

**Support Wildfire Mitigation Specialists****FSM-2020-C08**

As the defensible space inspections wrap up in some parts of the County, we plan to use the experience of the inspectors to develop new materials for the program. Executive Officer Mark Brown Glass Fire narration video has been edited as a training film for the WMS's. We will utilize the data from this program to help Firewise communities update their action plans for next year.

**Monthly Firewise online Community Meetings****FSM-2020-C09**

We continue to host the monthly Firewise Leaders meeting immediately after the FSM Board meeting on the second Friday of each month and we routinely participate in local Firewise meetings. FSM liaisons, following Covid-19 safety guidelines, participated in several community assessment walkthroughs last month.

**Staff to support Firewise sites with technical and direct support****FSM-2020-C10**

FSM staff successfully helped our 70+ Firewise sites with this year's NFPA renewal process. Our Firewise metric project is complete and is being used to measure improvements in organizational capacity and effectiveness.

**Maintain current and comprehensive website library of resources****FSM-2020-C11**

We are about to launch a major reorganization effort to add new content and make our more user friendly. The website is very popular and we receive questions about sharing our content from fire councils throughout the State.

**Educational video- creation and distribution****FSM-2020-C12**

Content from each of our webinars is being edited into shorter clips on specific topics. These clips will be used to help explain educational content on our website and will be used for the Spring Community Workshops. Executive Officer Mark Brown's Glass Fire presentation has been edited into a training video for WMS's. We have created a production list for future videos. We have added a new "highlight reel" feature to our newsletters to encourage views of webinars from the preceding month. Our Youtube channel has significantly expanded its content.

**Respond to resident inquiries and requests in timely manner****FSM-2020-C13**

We continue to provide same day response to virtually every request for information. Our ability to respond in a comprehensive and timely manner greatly reduces the workload of our fire departments.

**Prepare and distribute monthly newsletter****FSM-2020-C14**

Monthly Newsletters are normally sent out on the second Tuesday. Our average open rate (40%) and click throughs (5%) are extremely high for a non profit. Be sure to check out the monthly "Fire Smart Landscape Tip" from UC Marin Master Gardeners, the new highlight reel feature and links to interesting articles on topics related to the webinar.

**Prepare articles for print media: Marin IJ, Pacific Sun****FSM-2020-C15**

Election coverage has been the primary media focus for the last two months. We have developed a series of new Public Service Announcements for the Marin Independent Journal that align with the webinar series. We have been successful in finding a sponsor each month which allows these PSA's to appear in the paper.

**Fire Smart demonstration gardens throughout the County****FSM-2020-C1**

The Sleepy Hollow Fire Protection District is funding a major Fire Smart landscaping demonstration project in Sleepy Hollow. An experienced fire safe landscaping architect is designing the project. Representatives from UC Marin Master Gardeners are auditing the project with the goal of creating a planning template for future demonstration gardens.

**NOAA Weather Radios****FSM-2020-C17**

1000 NOAA weather radios were distributed to the 17 MWPA jurisdictions on a pro rata basis. The manufacturer programmed the radios with batteries installed, but forgot to de-energize the batteries during a multi week process of shipment. The manufacturer has agreed to send us replacement batteries at no charge. FSM will collect survey data on the effectiveness of the program.

**Countywide chipper program****FSM-2020- C18**

This year's chipping program, which started on July 6, officially ended on November 30. During the five months of the program, we made \_\_\_ curbside pickups, removed \_\_\_ cubic yards of biomass, and delivered \_\_\_ cubic yards of chipped material for conversion to energy. Some material was also chipped in place and spread on site at owners request. There were many additional small chipping projects completed at the request of local communities. The program was managed with software created by a local company called FireAside. This software scheduled reservations, mapped efficient routes, collected photos and size of all piles chipped, and generated satisfaction surveys. The program was extremely popular. We will be producing a comprehensive report including significant new data. FIRESafe MARIN strongly recommends creation of a countywide chipper program tied as much as possible to the defensible space program. The program will need to restart early next spring, so we anticipate a mid year request to the MWPA Board for funding.

**Alert and Warning via Red Flag Warning signs****FSM-2020-C19**

25 A-frame Red Flag Warning signs have been distributed equitably in the 5 zones. This is a pilot project to test the effectiveness of the signs. We are working with a manufacturer to fabricate larger, permanently installed flip signs that will display the "Red Flag Warning Today" when open and may be used to display other public safety messages when the signs are closed. We have developed a public education campaign to support the program including door hangers plus English and Spanish videos.