

AGENDA
Disaster Fire and Safety Commission
October 27, 2021
7:00 PM

District 1 – Kim-Mai Cutler

District 5 – Shirley Dean

District 2 – Weldon Bradstreet

District 6 – Nancy Rader

District 3 –

District 7 – Robert Simmons

District 4 – Antoinette Stein

District 8 – Paul Degenkolb

Mayor’s Appointee- Jose Luis Bedolla

PUBLIC ADVISORY: THIS MEETING WILL BE CONDUCTED EXCLUSIVELY THROUGH VIDEOCONFERENCE AND TELECONFERENCE

Pursuant to Government Code Section 54953(e) and the state declared emergency, this meeting of the Disaster and Fire Safety Commission will be conducted exclusively through teleconference and Zoom videoconference. The COVID-19 state of emergency continues to directly impact the ability of the members to meet safely in person and presents imminent risks to the health of attendees. Therefore, no physical meeting location will be available.

To access the meeting remotely: Join from a PC, Mac, iPad, iPhone, or Android device: Please use this URL <https://us06web.zoom.us/j/89456151606> If you do not wish for your name to appear on the screen, then use the drop down menu and click on "rename" to rename yourself to be anonymous. To request to speak, use the “raise hand” icon by rolling over the bottom of the screen.

*To join by phone: Dial 1-669-900-9128 and enter Meeting ID 894 5615 1606. If you wish to comment during the public comment portion of the agenda, Press *9 and wait to be recognized by the Chair. Please be mindful that all other rules of procedure and decorum will apply for Commission meetings conducted by teleconference or videoconference*

Preliminary Matters

Call to Order

Approval of the Agenda

Public Comment on Non-Agenda Matters

1. Fire Department Staff Report
 - a. Measure FF Report
 - i. Measure FF Budget overview
 1. Program Review
 2. Implementation and metrics
 3. Requests for Proposals
 - ii. Program Specific Reports
 - b. Measure GG Report
 - i. Measure GG Budget overview

1. Program Review
 2. Implementation and metrics
 3. Requests for Proposals
- c. Department Activities
- i. Overall Call Metrics
 - ii. Special Reports

Consent Items

2. Approval of Draft Minutes of Meeting of September 22, 2021*

Action Items

3. Recommendation to identify High Risk Areas that are exempt from State Imposed Housing Increases Due to Public Safety Considerations (Dean)*
4. Revisiting the Commission's Recommendation to Use Measure FF Funds as Intended by Voters for Firefighting, Emergency Medical Response, 9-1-1 Communications Services, Hazard Mitigation, and Wildfire Prevention and Preparedness; to Not Reduce General Fund Allocations Towards Fire Services; and to Support Effective Commission Oversight*

Discussion Items

5. November 2022 Infrastructure Bond Ballot Measure (Public Works/Parks Recreation Waterfront Staff)
6. Criteria for use of a portion of Measure FF funds for vegetation clearance on private land (Rader)*
7. Commission Home Page Resource List (Bedolla)
8. Future Agenda Items and Next Steps
 - a. Volunteer Involvement

Adjournment

Disaster & Fire Safety Commission
Regular Meeting
Wednesday September 22, 2021

Present: Jose Luis Bedolla, Paul Degenkolb, Shirley Dean, Weldon Bradstreet, Nancy Rader, Toby Simmons, Kim-Mai Cutler

Absent: Toni Stein,

Staff: Keith May, Khin Chin, Abraham Roman

Public: 5 Attendees: Chris Cullander, Melissa Porter, Ray Yep, Brad, Jeffrey Lena

Preliminary Matters

Call to Order

J. Bedolla called meeting to order at 7:00pm

Approval of the Agenda

Public Comment on Non-Agenda Items

Jose Bedolla said a group from the Berkeley Pathwanderers group said that October 17 is the 30th anniversary of the Hills Fire and they will be hosting

1. Fire Department Staff Report

Outdoor Warning System

- MOU with Zaytuna College being processed through City of Berkeley
- BUSD still in review of the MOU
- Staff Report to Council on September 28th Agenda requesting permission for City Manager to enter into a contract with Genasys for the OWS.

Grizzly Peak Interagency Meeting

Held on August 12, 2021

- Red Flag flip down signs that will be flipped up on Red Flag Days. Oakland DoT will be installing them along Grizzly Peak Blvd starting at Centennial & Grizzly Peak.
 - The top plate will read as shown in the picture RED FLAG DAY. The bottom plate will read NO PARKING ON GRIZZLY PEAK BLVD along with the following with the Fife Code verbiage.



- Reported that there were logs removed at a turnout between Lomas Cantadas and Fish Ranch Rd.
- Report from NALCO Patrol Training found 1 Grizzly Peak turnout log moved.
 - Reported to UC Berkeley Team to replace

Wildfire Evacuation - <https://www.cityofberkeley.info/WildfireEvacuation/>

- Office of Emergency Services to hold several Evacuation Exercise Workshops leading up to a 2021 Fire Season Community Drill on October 9th

PSPS

CERT

- Designing a Hybrid Online CERT Class – Hoping to release in late October

Other Impact Items:

- Fire Dept. has been authorized to begin recruitment of our 111th Academy. We will be trying to hire 15 new firefighters.

Fire Department Report by California Incident Type

August 1 – September 14, 2021

Fires (structures, mobile properties, vegetation, rubbish, equipment, cooking, chimney,	43	8/3 structure fire on 3000 block Sacramento. Heavy smoke and flames upon arrival. Primary search found an elderly female unresponsive. Pt was transported but did not survive. Cause still under investigations.
Encampment Fires (structures, warming/cooking, debris)	10	
Explosion - no fire (overpressure ruptures, explosions)	1	
Rescue & EMS (medical assist, vehicle accident)	1,125	
Hazardous Condition - no fire (combustible spills/leaks, chemical release, radioactive condition, electrical wiring problem, biological hazard, potential accident w/ building/aircraft/vehicles)	62	
Service Calls (person in distress, water issue, smoke/odor problem, animal issue, public assist, cover assignment/standby)	130	
Good Intent (canceled en-route, wrong location, nothing found, steam mistaken for smoke)	154	
False Alarm Calls (malicious, malfunction, unintentional, biohazard scare)	240	
Severe WX (lightening, wind storms)	0	
Special Incidents (citizen complaints)	1	

TOTAL	1,766	
Unit Utilization	Apparatus Count	3,777

Quarterly Official Reports – Measure GG & FF	
Q1 (July, August, September)	In Agenda Packet for October
Q2 (October, November, December)	In Agenda Packet for January
Q3 (January, February, March)	In Agenda Packet for April
Year-end report	Present to DFSC in September

Consent Items

2. Approval of Draft Minutes of Meeting of August 4, 2021*

Motion to approve the minutes as revised: Dean

Second: Rader

Vote: 4 Ayes: Dean, Bradstreet, Degenkolb, Stein, Rader; 0 Noes; 1 Absent: Stein,; 3

Abstain: Bedolla, Simmons, Cutler

Action Items

3. Enforcement of Existing Parking Rules and Regulations (Bedolla)*

Motion to recommend that Council direct the Berkeley Police Department to enforce existing Berkeley Municipal Code in all Fire Zones: Dean

Second: Rader

Vote: 7 Ayes: Rader, Dean, Degenkolb, Cutler, Simmons, Bedolla, Bradstreet; 0 Noes; 1

Absent: Stein,; 0 Abstain.

4. Long Range Development Plan for UC Berkeley (Bedolla)*

Motion to: Dean

Second: Bradstreet

Vote: 7 Ayes: Rader, Dean, Degenkolb, Cutler, Simmons, Bedolla, Bradstreet; 0 Noes; 1

Absent: Stein; 0 Abstain.

5. Recommendation to identify High Risk Areas that are exempt from State Imposed Housing Increases Due to Public Safety Considerations (Dean)*

No action taken.

6. Request for Measure FF Plan, Proposal for Permanent Agenda Item on Measure FF Implementation, and Proposed Formation of Informal Working Group on Measure FF Implementation (Rader)*

Motion to: Rader

Second: Cutler

After discussion, motion was withdrawn by maker.

Discussion Items

7. Berkeley Fire Code Updates (Staff)
8. Wildfire Joint Powers Agency for East Bay (Bedolla)
9. Commission Home Page Resource List (Bedolla)
10. Future Agenda Items
 - a. Volunteer Involvement

Adjournment

Motion to Adjourn: Bradstreet

Second: Degenkolb

Vote: 7 Ayes: Rader, Dean, Degenkolb, Cutler, Simmons, Bedolla, Bradstreet; 0 Noes; 1

Absent: Stein,; Abstain:

Adjourned at 9:36p

DFSC Staff Report

October 27, 2021

1. Measure FF Monthly Report

a. Budget Overview – Chief Roman

i. Program Review

1. **Standards of Coverage Analysis** – This contract was approved by the Council on July 27, 2021, and work has begun to provide the consultant with a large amount of supporting data. This includes basic department demographics, emergency call response times, staffing levels, known and planned construction within the City and much more. The resulting work will include an evaluation of the City's risk profile (from a fire, EMS and rescue perspective), optimum fire station locations, crew/apparatus staffing and deployment, new employee work schedules, and appropriate response time standards. We expect this work to take between 6 – 12 months.
2. **Project Management and Subject Matter Expert (SME)** – The number and complexity of projects that the Department has engaged in over the next 3-5 years is monumental. We are bringing onboard a consultant who will (1) help us manage all projects to ensure that timelines are updated frequently, goals and objectives are met, project dependencies are tracked and updated and key communication occurs throughout the planning cycle and (2) provide the Department with external experts that have relevant experience in some of the more complex areas of work including emergency medical services deployment and developing a regional training collaborative agreement.
3. **Community Wildfire Protection Plan (CWPP)** – We are working with an expert that will engage with us to create a community-based plan that is focused on identifying and addressing local hazards and risks from wildfire in the City's Wildland Urban Interface (WUI) areas. The plan will determine what is at risk and will provide a road map of actions for the community to address the wildfire threat. We want to ensure the public funds and time we dedicate actually result in measurable improvements to the community's preparation and resiliency.
4. **Wildfire Prevention / Mitigation** – The department is in the process of expanding its traditional "Hazardous Fire Area" program of wildfire safety inspections to ultimately include all properties in Fire Zones 2 and 3. This represents a massive increase of inspections from about 1436 inspections to 8620 inspections. There is so much important work that we need to focus on as a community with regard to preparation and prevention of a catastrophic wildland fire. The Department literally does not have the people available to do this work. To help move these

important projects ahead, the Department has hired back nine retired members of the organization who have relevant experience in these program areas. They began work in September (the hiring process took about two months) and are focused on four main projects; restarting the Safe Passages program, establishing more FireWise groups in Berkeley, completing the CWPP process and implementing the Vegetation Management programs, and performing vegetation management inspections in Fire Zone 2. We are so grateful they all agreed to come back and help. In addition, Fire Prevention staff are preparing an amendment to our local fire code adoption which will expand fire sprinkler installation and retrofit requirements that currently exist in the Panoramic neighborhood into all of Fire Zone 2.

5. **Emergency Medical Technician (EMT) and Paramedic Recruitment** – A key component of transitioning our ambulance model to a more cost effective “single function” model is developing two new job classifications. One for Emergency Medical Technician (EMT) and one for Paramedic. Both of these new classifications will no longer also serve as firefighters. These classifications have been jointly developed by a labor management group within the Department and are working their way through the City review and approval process. We hope to begin recruitment sometime in late 2021 or early 2022. This will allow several important changes to occur:
 - a. It will create entry level EMT jobs within our Department. This will allow us to directly tie to the Berkeley High School Berkeley Fire and EMS pathway program that has been very successful. Graduates from that program will be qualified to apply for these entry level jobs.
 - b. The EMT classification will also allow us to recruit from a much larger applicant pool, which we know is more diverse than the paramedic applicant pool.
6. **Division of Training Property** – Our team has been actively looking at property throughout the region. We are working with the City’s real estate broker to determine the best path forward. We have engaged departments within Alameda and Contra Costa counties in preliminary conversations regarding a partnership to support a regional center. There is a lot of interest in this model and it would do much to break down the invisible barriers between agencies. Training together as a region is the beginning of a more collaborative, regional fire service that will be more resilient and better prepared to work together in larger incidents. We have a subject matter expert working with us who was involved in creating a regional training collaborative in an adjacent county and we are excited to have his leadership and experience to pull from. We hope to have a property identified within the next several months, if not sooner.

- ii. Implementation & Metrics
 - 1. **Outdoor Warning System** – Contract has been created and waiting for Genasys to sign. MOU with Zaytuna has been signed. BUSD MOU will be heard on November 17th by the BUSD Board.
- iii. RFP Updates
- b. Program Specific Reports
 - i. Defensible Space Inspection Updates

Vegetation Management Inspections – Annuitants

September 20, 2021 – October 18, 2021

Inspections	Violations	Re-Inspect Req.	No Violations
521	138	138	383

- ii. Other
2. Measure GG Monthly Report – Chief Roman
- a. Budget Overview
 - i. Program Review
 - ii. Implementation & Metric
 - 1. Hybrid CERT Model
 - a. The Office of Emergency Services continues to update and revamp the CERT curriculum. The goal of the CERT revamp is to provide a flexible program that can adapt to the changing COVID-19 pandemic and provide increased flexibility for interested community members. It will contain three parts: online self-study through the California Specialized Training Institute (CSTI), virtual instructor-led sessions to review the online modules, and a ½ day practicum session to gain hands on experience with the course material.
- The online self-study learning modules are now on the City of Berkeley website here. These online modules can be accessed via the Cal OES training website, the California Specialized Training Institute (CSTI). The City’s website includes a “how to” guide to help community members log in and access the training. OES continues to design the accompanying virtual and in-person practicum sessions and will update community members once they are ready.
- b. Evacuation Workshops held in September and October to assist the community in preparing their household for evacuations. 58 households participated.
 - c. Evacuation Virtual Drill held on October 9th.
 - i. 250 households registered for drill.
 - ii. 150 joined online debriefing.

- d. Objectives:
 - i. Describe which AC Alerts they may receive
 - ii. Identify their evacuation zone on Zonehaven and see what the follow up actions are, depending on the incident
 - iii. Practice fire weather plans with other community members

iii. RFP Updates

3. Department Activities

- a. Graduation of BFD 110th Fire Academy on October 1, 2021. We started with 13 recruits in this entry level firefighter-paramedic class, there have been two resignations. They participated in a 20-week State Fire Training Accredited course that results in State Certification. They have begun their field evaluation time to be cleared to work as a paramedic in Alameda County. Depending on experience and skill, this will take anywhere from two to six weeks, then they will begin working without a Field Training Officer (FTO).
- b. Entry Level Interviews are underway for next year's 111th Academy.

4. Call Volume Report

Fire Department Report by California Incident Type		
September 14, - October 20, 2021		
Fires (structures, mobile properties, vegetation, rubbish, equipment, cooking, chimney,	31	
Encampment Fires (structures, warming/cooking, debris)	16	
Explosion - no fire (overpressure ruptures, explosions)	0	
Rescue & EMS (medical assist, vehicle accident	932	
Hazardous Condition - no fire (combustible spills/leaks, chemical release, radioactive condition, electrical wiring problem, biological hazard, potential accident w/ building/aircraft/vehicles)	63	

Service Calls (person in distress, water issue, smoke/odor problem, animal issue, public assist, cover assignment/standby)	121	
Good Intent (canceled en-route, wrong location, nothing found, steam mistaken for smoke)	118	
False Alarm Calls (malicious, malfunction, unintentional, biohazard scare)	183	
Severe WX (lightening, wind storms)	0	
Special Incidents (citizen complaints)	3	
TOTAL	1,467	

Unit Utilization	Apparatus Count	3,275
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October 27, 2021 REVISED

[CONSENT OR ACTION]
CALENDAR

[Meeting Date (MM dd, yyyy)]

To: Honorable Mayor and Members of the City Council
From: Disaster and Fire Safety Commission
Submitted by: Jose Luis Bedolla, Chair, Disaster and Fire Safety Commission
Subject: Recommendation to Identify High Risk Areas that are Exempt from State Imposed Housing Increases Due to Public Safety Considerations

RECOMMENDATION

The Disaster and Fire Safety Commission (DFSC) recommends that the City Council define the location of those areas within the city of Berkeley in which residents are at high risk due to public safety considerations and use this information to guide the Housing Element process so that greater density and development in those areas is avoided to the extent reasonably possible. These areas include:

1. Fire Zones 2 and 3 with narrow (26 feet or less in width), winding streets, or those with "pinch-points" that do not allow emergency vehicle access and safe evacuation routes in the event of a wildfire.
2. Locations within the Alquist-Priolo (Hayward Fault) Earthquake Zone identified by the California Geological Survey.
3. Locations within the Liquefaction or Landslide Zones identified by the California Geological Survey and areas associated with creeks, above and underground.
4. Land that is sinking from the weight of existing development due to such factors as non-engineered fill.
5. Increasing impacts from sea level rise per State studies
6. Concentrated amounts of chemical hazards or on top of or close to existing major gas or fuel lines.

A. Establish a Priority: The DFSC requests that the identification process begin with Items 1 and 2 as listed above. State legislation mandating increased development in these areas is effective January 1, 2022 and the identification of the boundaries of areas where citizens are at high risk should be completed prior to that date. All of the areas listed above are important, but as a practical matter, it may take longer to review some more than others and, therefore, complete identification may have to be done in steps over time.

An additional consideration in giving priority at this time to areas affected by fire is that we are now entering the "traditional" wildfire season with the clear statewide warning that today's wildfires are both more frequent and intense and are being fueled by the State's continued severe drought with no relief in the foreseeable future.

B. Establish an Easy to Understand Map Format: The DFSC requests that the information presented be in an easy to understand map format that is available to the public and kept in an up-to-date format as the progress progresses, The California Geological Survey already maintains property-specific maps that address items 2 and part of 3 above. The DFSC requests that the City produce similar maps for the other hazardous areas as they are determined.

C. The Need for Timely Action: The Council has already taken action to indicate the intent to begin a process to complete a State required new Housing Element for the City's General Plan. Establishing high risk public safety areas is a foundational tool in the work that needs to be done to complete a new Housing Element.

D. Provides an Opportunity to Inform the Public: Defining high risk public safety zones not only informs residents about the nature of the risks but encourages individuals and groups to be a part of the effort to reduce those risks.

FISCAL IMPACTS OF RECOMMENDATION

Exact costs and staff time in changing the scope of work already been planned are to be determined.

CURRENT SITUATION AND ITS EFFECTS

There is broad agreement that Berkeley's Wildfire Urban Interface (WUI) area, the existence of the Hayward Earthquake Fault and landslide areas present serious safety concerns for residents. These safety risks should be a bedrock consideration that guides the Housing Element process so that greater density and development in these areas can be avoided to the extent reasonably possible. In undertaking that process the boundaries of these and other high risk public safety areas must be identified.

The CalFIRE map of Berkeley's "Very High Fire Hazard Severity Zone" is reflected in the map shown in Attachment 1. The area to the right of the dotted line drawn through the gray area reflects a portion of Fire Zone 2 and all of Fire Zone 3, the ES-R zoned area known as Panoramic Hill.

The portion of the gray area to the left of the dotted line is the rest of Fire Zone 2. The gray area indicates all of Fire Zone 2. See Attachment 2 which shows this without the CalFIRE dividing line drawn through Fire Zone 2 that is shown in Attachment 1.

Around 2008, CalFIRE recommended and published maps for Very High Fire Hazard Severity Zones in what was called Local Responsibility Areas (LRAs). According to Fire Department staff, Berkeley found that while CalFIRE maps approximated the boundaries historically considered to be at risk for wildfire in Berkeley there were areas that should be added under the LRA provision which means that Berkeley's High Fire Risk Areas is a combination of Fire Zone 3 and all of Fire Zone 2 as reflected in the Attachment 2 map.

An additional reason to clarify the boundaries of public safety areas is found in a last minute addition to the new State housing legislation that provides that an urban lot split in a single-family zone may be denied if the building official makes a written finding, based upon a preponderance of the evidence, that the proposed housing development would have a specific, adverse impact on public health and safety or the physical environment and for which there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact.. Having to consider this provision means that staff will have to have readily available information on a variety of factors. Identifying the boundaries of high safety risk areas would be an essential part of the information which would be needed.

Since this recommendation pertains to more than wildfire areas, it is recommended that generally such areas should be known as "high risk public safety areas"

BACKGROUND

In response to a directive from Governor Newsom, the Association of Bay Area Governments assigned the task of producing 441,176 new housing units to cities and counties in the Bay Area. Berkeley's share is to provide from 7,730 up to 9,025 new Rental Housing Needs Allocation (RHNA) goals over the next eight years. RHNA goals include percentages of groups ranging from very low income to above moderate-income levels which must be met. To accomplish this, Berkeley is currently engaged in an 18-month process to update the Housing Element of our General Plan. The statutory deadline is that the result must be submitted to the California Department of Housing and Community Development by January 31, 2023. The Housing Element must include an inventory of sites where the new units will be located. Overall, the General Plan guides the future growth of the City, and in addition to a Housing Element, it includes such other matters as preparation for disasters, natural and man-made. Goal 6 in the current Plan states that the intent is to make Berkeley a disaster resistant community that can survive, recover from, and thrive after a disaster.

Throughout all of the discussions that have occurred about disasters, it is recognized that certain areas are considered to be high risk because of wildfires, but without confirmation of the exact boundaries of those areas. There has also been consistent mention of other public safety considerations such as sea level rise, liquefaction and creeks, but no specific consideration regarding the impact of additional growth on public safety in these and other areas. Land that has already been identified by the City as being subject to sea level rise and liquefaction. In March 2021, a study indicated that land along our coast was currently sinking due to the weight of current development on non-engineered land fill. In addition, there are homes that are near the storage of large amounts of chemicals such as the daily average of 50,000 gallons of asphalt oil in the Lehigh Asphalt plant or the large amount of ammonia storage in the Bayer complex that should an incident occur will require major mutual aid that will certainly not be available should ruptures occur in an earthquake or in the event of fast-moving wildfire. Also no consideration has been given to those areas that are on top of or nearby the major gas line to the UC campus, or the jet fuel line in West Berkeley. All of these sensitive areas must be identified and considered in terms of prevention and safe evacuation within Berkeley's relatively small 9 square mile boundaries that is already more densely populated than our nearby surrounding East Bay communities.

Clearly this is a major task which must involve robust citizen participation by Berkeley residents. DFSC believes we start by defining the geologic and other areas that pose a public safety threat. While we must act immediately regarding the high risk fire hazard areas as indicated in items 1-3 in our list, any inability to develop maps for the hazards listed in 4 to 6 on a timely basis should not delay implementation of areas as we move through the list.

ENVIRONMENTAL SUSTAINABILITY

Reducing Berkeley's contribution to climate change impacts is a large task given State mandates to produce a new Housing Element that meet the assigned RHNA numbers. Ignoring the identification of high risk public safety zones is not the answer. Approving multi-family buildings that are accessible public transportation but still offer tenant parking and which do not contain affordable housing goals at all levels is not the answer. These are issues which must be sorted out in the Housing Element approval process but which do not impact the identification process per se.

RATIONALE FOR RECOMMENDATION

Increasing population in high risk public safety areas is not logical and, therefore, not acceptable. DFSCs recommendation is based on the concept that planning future growth must be based on a foundation of identification of those areas which contain the elements that place both the lives of residents and the future of the City at risk. Increasing population in high risk public safety zones should not be delayed because of side issues such as street parking, enforcement or past history. We need to look at this issue from a current comprehensive planning perspective that allows growth in a resilient City that can survive and thrive before, during and after a disaster.

ALTERNATIVE ACTIONS CONSIDERED

There is no real alternative to undertaking an identification process that includes all parts of the City.

CITY MANAGER

The City Manager [TYPE ONE] concurs with / takes no position on the content and recommendations of the Commission's Report. [OR] Refers to the budget process.

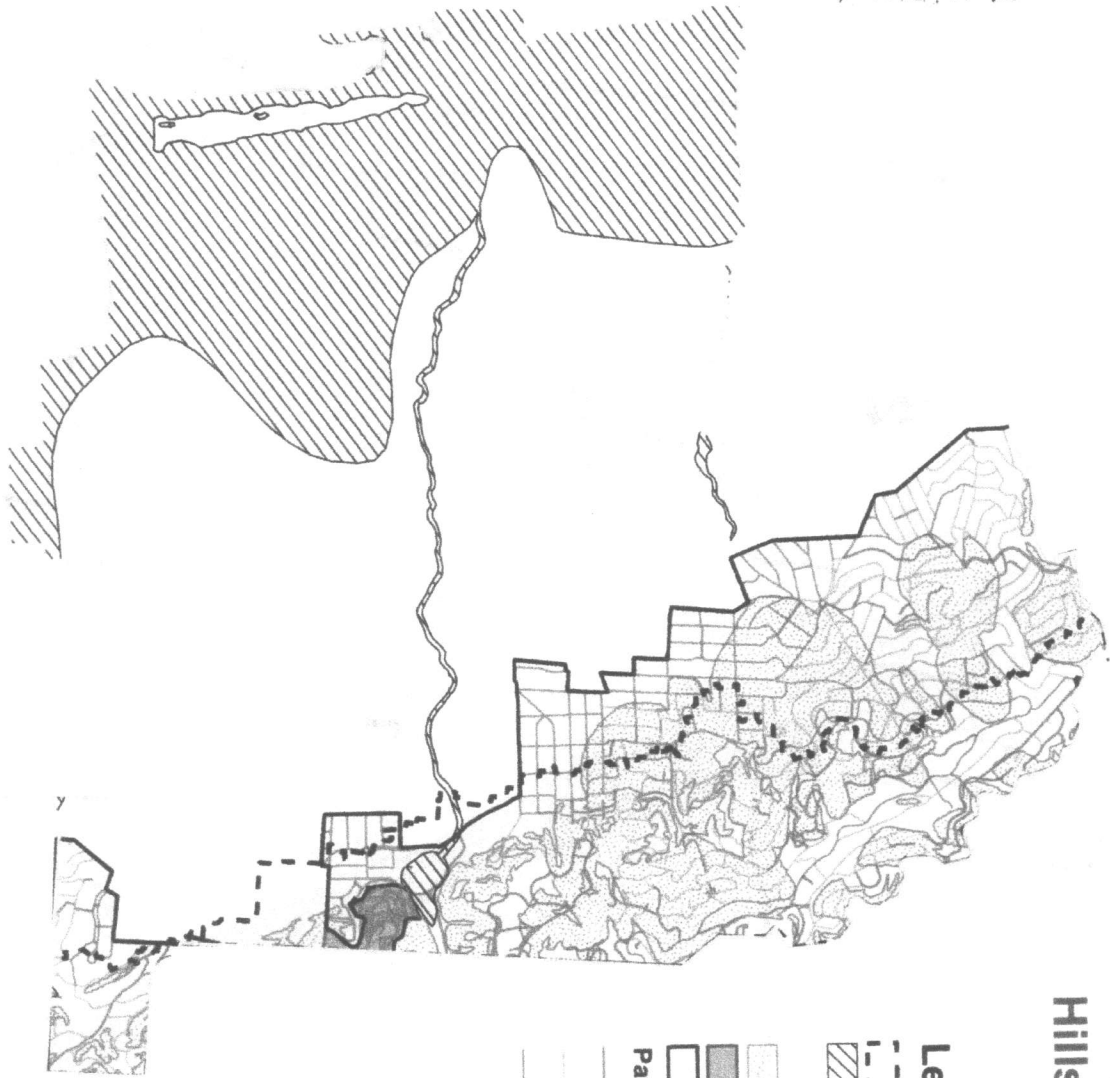
Note: If the City Manager does not (a) concur, (b) takes any other position, or (c) refers to the budget process, a council action report must be prepared. Indicate under the CITY MANAGER heading, "See companion report." Any time a companion report is submitted, both the commission report AND the companion report are Action reports.

CONTACT PERSON

[Name], [Title], [Department]










Attachments:

ATTACHMENT 1




City of Berkeley Hillside Conditions Map

Legend

-  Very High Fire Hazard Severity Zone
 -  CCGS Seismic Hazard Zone: Liquefaction
 -  CCGS Seismic Hazard Zone: Earthquake Fault
 -  CCGS Seismic Hazard Zone: Landslide
 -  ES-R Zoning District
 -  Hillside Overlay
- Pavement Width**
-  Less than or equal to 20 feet
 -  21 to 26 feet
 -  Greater than 27 feet

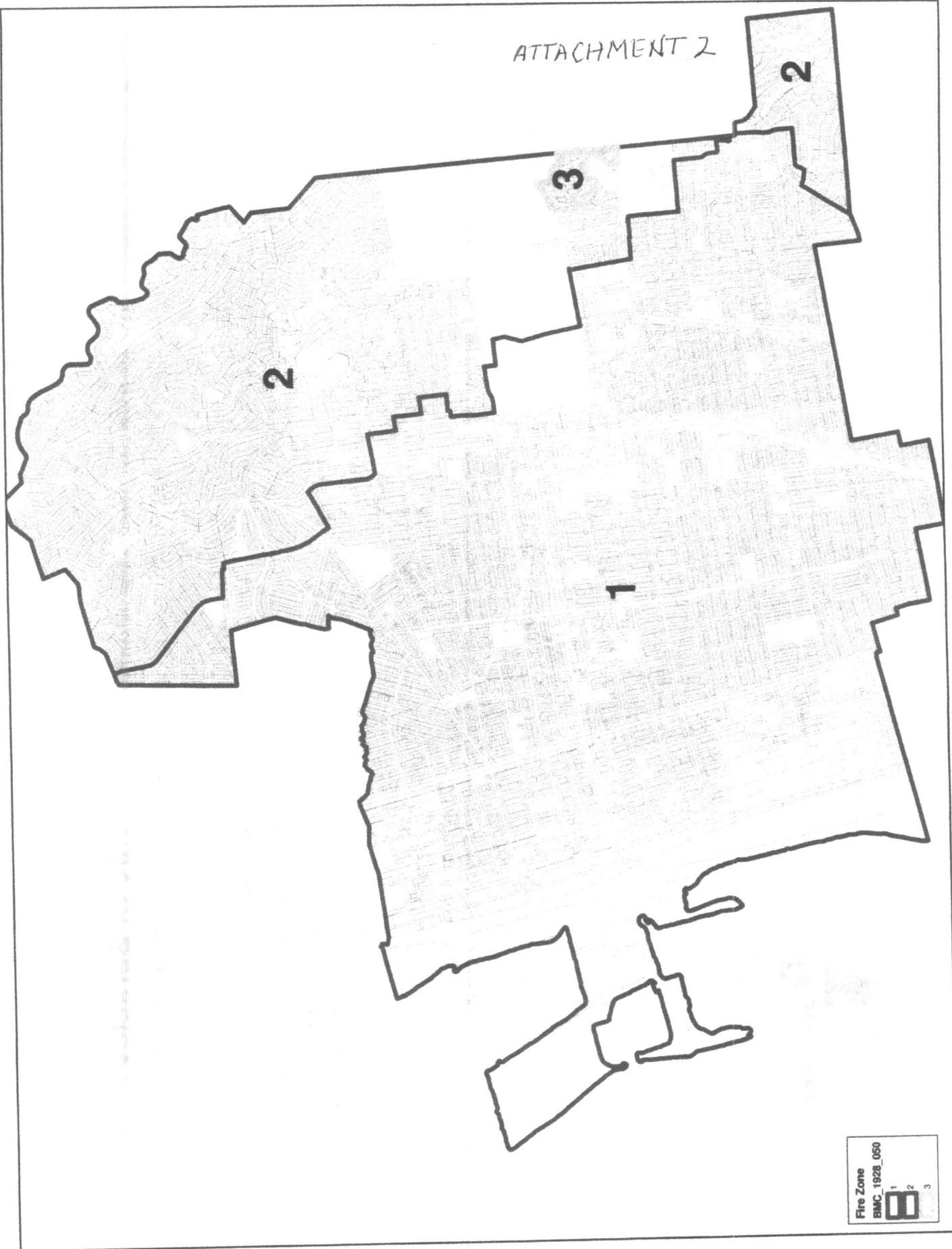
Updated:
November 14, 2019



0 800 1,600 3,200 Feet

CITY OF BERKELEY
Land Use Planning Division
Dept. of Planning & Development
2120 Milvia Street, 2nd Floor
Berkeley, CA 94704

ATTACHMENT 2



Fire Zone
BMC 1929_050

1
2
3



Disaster and Fire Safety Commission

CALENDAR –Action or Consent
(Meeting Date – mm, dd, yyyy)

To: Honorable Mayor and Members of the City Council

From: Disaster and Fire Safety Commission

Submitted by: Gradiva Couzin, Chair, Disaster and Fire Safety Commission

Subject: Recommendation to Use Measure FF Funds as Intended by Voters for Firefighting, Emergency Medical Response, 9-1-1 Communications Services, Hazard Mitigation, and Wildfire Prevention and Preparedness; to Not Reduce General Fund Allocations Towards Fire Services; and to Support Effective Commission Oversight

RECOMMENDATION

The Disaster and Fire Safety Commission (DFSC) supports revenue generated by the voter-approved *Fire, Emergency Services and Wildfire Prevention Tax* (Measure FF) going towards services described in the Fire Department's 5-year implementation plan, including:

- Wildfire Prevention and Response
- Training and Development
- EMS Operations
- Dispatch

The Commission has reviewed and provided input on expenditure plans described by the Fire Department and is engaged in the process of providing input and oversight prior to the budget being finalized. As these projects advance and line-item budgets continue to be developed in more detail, the Commission expects to follow up with more specific recommendations on funding allocations.

In order to provide effective oversight of Measure FF spending as resolved by City Council, the Commission needs to have the tools and information necessary to do so. This includes:

1. Thorough and detailed information about spending plans, including detailed line items and staffing numbers, before budgets are finalized and locked in place.
2. An accounting system that will clearly designate spending from the fund, including job codes that are specific to Measure FF, so that the Commission can easily determine staff time spent on Measure FF-funded activities.

Additionally, in allocating funds towards these critical safety improvements, it is imperative that the City ensures that Measure FF funds are used to supplement, rather than replace, general funding of Berkeley Fire Department costs.

When the City's current fiscal emergency ends, the General Funds allocation to the Fire Department must be increased back to pre-COVID levels, rather than relying on Measure FF funds to fill the gap permanently. Post-crisis, the City must not decrease General Fund spending on Fire Department services while covering the difference using Measure FF funds.

Lastly, several areas of proposed Measure FF expenditures relate closely to the City's Re-Imagining Public Safety effort, including 911 dispatch and related emergency services and the Safe Passages initiative. Council should ensure that all of these related efforts are coordinated to ensure that our public safety dollars are being spent as efficiently and effectively as possible to facilitate maximum progress on all of the City's goals. To this end, the Commission recommends that the DFSC have the opportunity to provide input into the Re-Imagining Public Safety project where it relates to Measure FF-funded programs.

As the body that is charged with oversight of Measure FF spending, the DFSC will continue to work collaboratively with City staff to review and provide input on Measure FF spending plans, to monitor both budget planning and actual spending, and to object to any allocation or spending we believe is improper.

FISCAL IMPACTS OF RECOMMENDATION

Following this recommendation will allow Measure FF funds to be fully used to accomplish the safety goals described in the voter guide, while having no impact on General Funds.

If the City had an expectation that a temporary fiscal-emergency reduction in General Fund allocation to the Fire Department could be made permanent once Measure FF funding is available, then the fiscal impact of this recommendation is to eliminate that expectation.

By honoring the voters' intent that this special funding be fully used towards the services described in the 2020 Voter Guide, following this recommendation can maintain or increase the public trust in future similar tax measures, ultimately leading to more voter support for future tax measures.

CURRENT SITUATION AND ITS EFFECTS

Measure FF is expected to generate approximately \$8.5 Million in yearly revenue. The City is currently in the process of planning how to spend this money.

The DFSC has reviewed and provided input into the Fire Department's 5-year Measure FF expenditures plan, and the Commission believes that the Fire Department's planned Measure FF spending is broadly consistent with the intentions of Berkeley's voters. The Commission looks forward to continued engagement with staff on funding plans.

If funds are allocated and spent according to the ballot measure, it will accomplish improvements in several DFSC priorities, including but not limited to the following:

- More inspectors to provide increased inspections in the Fire Zones, reducing fire fuel such as dry, overgrown brush and dead timber. This will reduce fire ignitions, slow the spread of any fires that do ignite, and help keep pathways clear for emergency access and egress.
- Increased vegetation management activities, including funding an innovative program for youth jobs that is also a recruitment tool so that more of Berkeley’s firefighters can be recruited from among Berkeley’s youth.
- Installation and management of a citywide outdoor warning system that will provide reliable, universal emergency warnings and will reach all members of the community without relying on inconsistent and inequitable alerting systems.
- Improved public education related to wildfire evacuations, including evacuation drills that provide an opportunity for both community members and staff to practice and improve the evacuation process.
- Improved evacuation routes, with dedicated staff time to manage the Safe Passages program, to evaluate and document the problem of emergency access and egress in the City’s Fire Zones and lead an interdepartmental program in addressing this problem through parking restrictions, increased enforcement, signage, and public education.
- Better planning and decision-making, with staff who can give focused attention to analysis, planning, policy, and protocols; can give the necessary time to researching options to make informed and data-driven decisions; and can interface more effectively with the public – including the Disaster and Fire Safety Commission - in both communications and collaborative planning.

Additional items not listed above include improvements to the 9-1-1 dispatch system, training facility improvements, and funding of new ambulances and technicians. The Fire Department’s current five-year funding plan as described to the Disaster and Fire Safety Commission shows the following estimated allocations in each area:

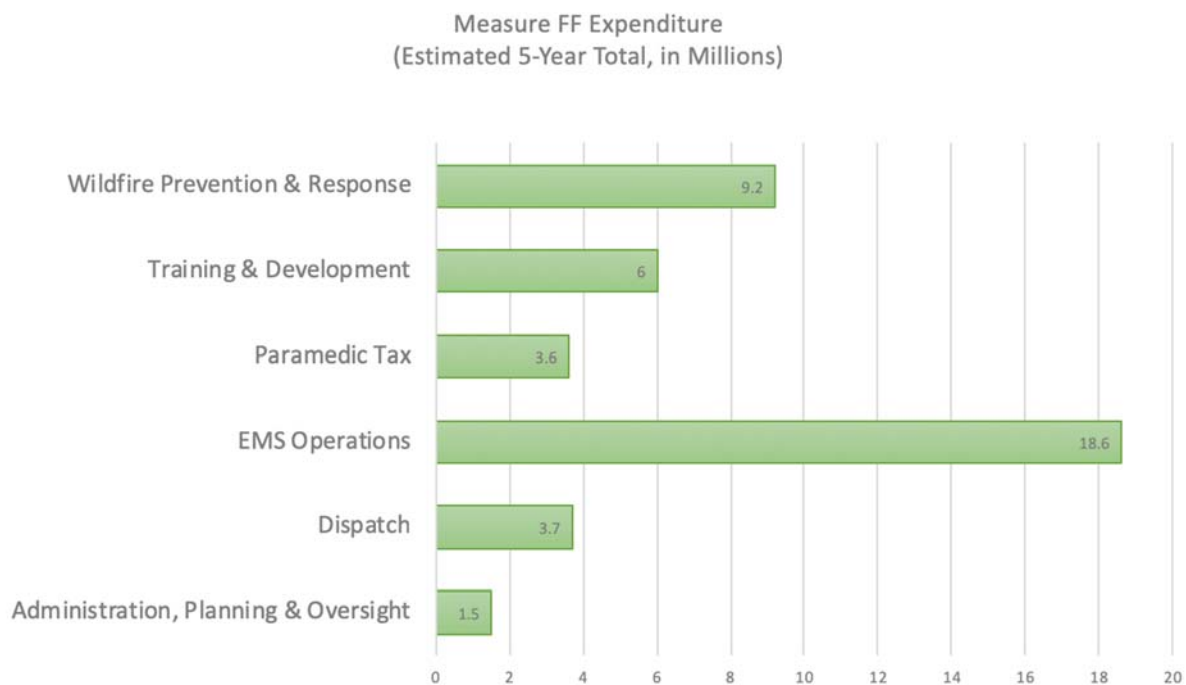


Chart: Measure FF Expenditure, Estimated 5-Year Totals Based on Berkeley Fire Department Presentation to DFSC 1/27/2021

BACKGROUND

On September 25, 2019 and October 23, 2019, The DFSC discussed a possible special assessment for wildfire prevention. Discussions focused on determining what the 1990s-era special assessment in the Berkeley Hills had been, what it had funded, and what funding would be needed today for improved vegetation management inspections in the City's Fire Zones. The topic was also on the DFSC agenda on February 26, 2020, but was tabled.

On June 16, 2020, City Council adopted an ordinance declaring a Fiscal Emergency due to the significant loss of revenue attributable to the COVID-19 pandemic.

On July 6, 2020 The DFSC discussed the Measure FF ballot measure at a Special Session and members of the Commission provided input to Fire Department staff.

On July 14, 2020 City Council adopted an Omnibus Package including several items in the Re-Imagining Public Safety effort that may overlap with the scope of Measure FF budget items and programs. The Measure FF ballot measure language was drafted prior to this package's adoption.

On September 22, 2020 Berkeley City Council passed a resolution Designating the DFSC as the Citizens' Oversight Committee for Expenditure of the Proceeds of the Fire, Emergency Services and Wildfire Prevention Tax (Measure FF)

In the 9/22/20 resolution, Council stated: "*Citizen input and oversight are crucial for transparency and accountability*" and "*For this purpose, in addition to its other powers, the Commission may: 1) request detailed expenditure plans for tax proceeds annually, which shall be provided to it as early in the budget process as feasible; 2) make recommendations to the City Manager and the City Council as to the rate at which the tax should be set and how any tax proceeds should be spent; and 3) obtain a report on actual expenditures.*"

On November 3, 2020, Berkeley voters approved Measure FF, by a vote of 74.2% "Yes" vs. 25.8% "No."

The measure authorized a special parcel tax of \$0.1047 per square foot of improvements (i.e., buildings or structures erected or affixed to the land) for each parcel of real property in the City of Berkeley. This tax is estimated to generate \$8.5 million per year.

An impartial analysis by the City Attorney at that time read in part:

"The tax is estimated to generate \$8.5 million annually. The proceeds shall be placed in a special fund to be used only for the following:

- *Local firefighter and emergency medical response including hiring and training personnel and upgrading safety equipment and facilities.*
- *Upgrading and modernizing the 9-1-1 dispatch system to implement and maintain a system to provide emergency medical dispatching.*

- *Wildfire prevention and preparedness activities including, but not limited to, vegetation management, hazard mitigation, public education, evacuation planning, and an emergency alert system.*

On January 27, 2021 The DFSC received a presentation, “*Department Redesign – Measure FF Implementation Plan,*” from Fire Department staff on a five-year plan for Measure FF expenditures. Individual members of the Commission provided follow up questions and input to Fire Department staff in the weeks following.

ENVIRONMENTAL SUSTAINABILITY

There is no direct environmental impact of this recommendation.

RATIONALE FOR RECOMMENDATION

The DFSC is enthusiastic about the potential for Measure FF funding to accomplish important and urgent improvements to public safety, as intended by voters. The funding can pay for numerous actions that have been recommended and supported by the DFSC over the years.

However, if the City’s General Funding to the Fire Department is reduced in the coming years, this may have the effect of draining away funding and dedicated staff time from these important safety improvements.

Measure GG was a similar but smaller tax, approved by Berkeley voters in 2008. On August 1, 2018, the DFSC sent a memo to City Council objecting to the City using Measure GG funds to replace, rather than augment, general funding of Berkeley Fire Department overtime costs. See Attachment 1. It is because of this issue with Measure GG expenditures that the DFSC now makes this recommendation to avoid the same problem with Measure FF.

Additionally, effective Commission input and oversight throughout the budget planning process are necessary to ensure that Measure FF funds are put towards safety improvements as intended by voters. The Commission values the opportunity to provide input into budget decisions prior to the budget being finalized each year, as is required by Council’s 9/22/20 resolution.

Because a large portion of the Fire Department’s planned Measure FF expenditures are for staff time to advance crucial safety efforts, the Commission is also seeking the ability to track what staff time and activities are being charged to Measure FF.

Lastly, the City’s Re-Imagining Public Safety effort is closely tied to several projects within the scope of Measure FF spending; it is important that the City coordinate the planning for these related activities, as well as other related activities in various City various departments. The omnibus package adopted by City Council includes the following items that should be coordinated with Measure FF budget items and programs as indicated:

- *Analyzing and developing a pilot program to re-assign non-criminal police service calls to a Specialized Care Unit.* The Specialized Care Unit may relate to new basic ambulance services being proposed within Measure FF expenditures.

- *Creating plans and protocols for calls for service to be routed and assigned to alternative preferred responding entities and consider placing dispatch in the Fire Department or elsewhere outside the Police Department.* The proposed Measure FF expenditure plan includes improvements to the Fire Department's 9-1-1 dispatch system and dispatch training facility improvements.
- *Pursuing the creation of a Berkeley Department of Transportation ("BerkDoT") to ensure a racial justice lens in traffic enforcement and the development of transportation policy, programs and infrastructure, and identify and implement approaches to reduce and/or eliminate the practice of pretextual stops based on minor traffic violations.* The proposed Measure FF expenditure plan may not include budget for increased parking enforcement needed to realize the City's goals for emergency evacuation under the Safe Passages program. The City should consider whether BerkDoT should address this need.

The Commission would like to have the opportunity to give input to Re-Imagining Public Safety plans where they relate to Measure FF-funded programs; we expect that a member of the DFSC will participate and follow the progress of the Re-Imagining Public Safety effort and the Commission will develop future recommendations on this topic.

ALTERNATIVE ACTIONS CONSIDERED

None.

CITY MANAGER

The City Manager [TYPE ONE] concurs with / takes no position on the content and recommendations of the Commission's Report. [OR] Refer to the budget process.

Note: If the City Manager does not (a) concur, (b) takes any other position, or (c) refer to the budget process, a council action report must be prepared. Indicate under the CITY MANAGER heading, "See companion report." Any time a companion report is submitted, both the commission report AND the companion report are Action reports.

CONTACT PERSON


[Name], [Title], [Department]

Attachments:

1. Disaster and Fire Safety Commission Recommendation, 8/1/2018: *Objection to Use of Measure GG Funds to Replace, Rather Than Augment, General Funding of Berkeley Fire Department*
2. Full text of *Fire, Emergency Services and Wildfire Prevention Tax* (Measure FF)



Disaster and Fire Safety Commission

Date: August 1, 2018
To: Honorable Mayor and Members of the City Council
From: Disaster and Fire Safety Commission
Submitted by:  Paul Degenkolb, Chairperson, Disaster and Fire Safety Commission
Subject: Objection to Use of Measure GG Funds to Replace, Rather Than Augment, General Funding of Berkeley Fire Department

The Disaster and Fire Safety Commission objects to the City using Measure GG funds to replace, rather than augment, general funding of Berkeley Fire Department overtime costs.

At the 8/1 regular meeting of the Disaster and Fire Safety Commission, the commission approved a motion to submit this memo, Objection to the Use of Measure GG Funds to Replace, Rather Than Augment, General Funding of Berkeley Fire Department: Couzin Second: Stein Vote: 7 Ayes: Grimes, Flasher, Degenkolb, Couzin, Bailey, Stein; 1 No: Legg; 1 Absent: Golomb; 0 Abstain.

Measure GG authorizes a special tax for the purpose of funding fire protection and emergency response and preparedness. Each year, Berkeley taxpayers pay roughly \$5 million into this tax.

In the years since Measure GG was passed, the City has chosen to decrease General Fund spending on Fire Department overtime, and to cover the difference using Measure GG funds. As a result, some Measure GG funds are replacing General Fund spending on fire and emergency purposes, rather than augmenting it.

The Commission estimates that, in effect, this practice siphons \$500,000 to \$1 million per year in Measure GG funds away from fire protection and emergency preparedness uses, with a corresponding increase in General Fund monies available for other uses.

A legal review by City Attorney Farimah Brown dated 4/6/2018 found that Measure GG gives the City broad discretion, and that it is not illegal for the City to reduce General Funds that go toward fire protection and emergency preparedness purposes while making up for the lost funds with Measure GG funding.

Nevertheless, the Commission believes this practice is a disingenuous use of the special tax dollars authorized by Measure GG and does not follow the spirit of the law that was approved by Berkeley voters.

As the body that is charged with oversight of Measure GG spending, the Commission will continue to monitor this spending and object to allocation we believe is improper. We anticipate that improved accounting software will allow the Commission to revisit this question with a more rigorous audit in the next 1-2 years.

The following charts show the decrease in General Funding for Fire Department overtime since the enactment of Measure GG:

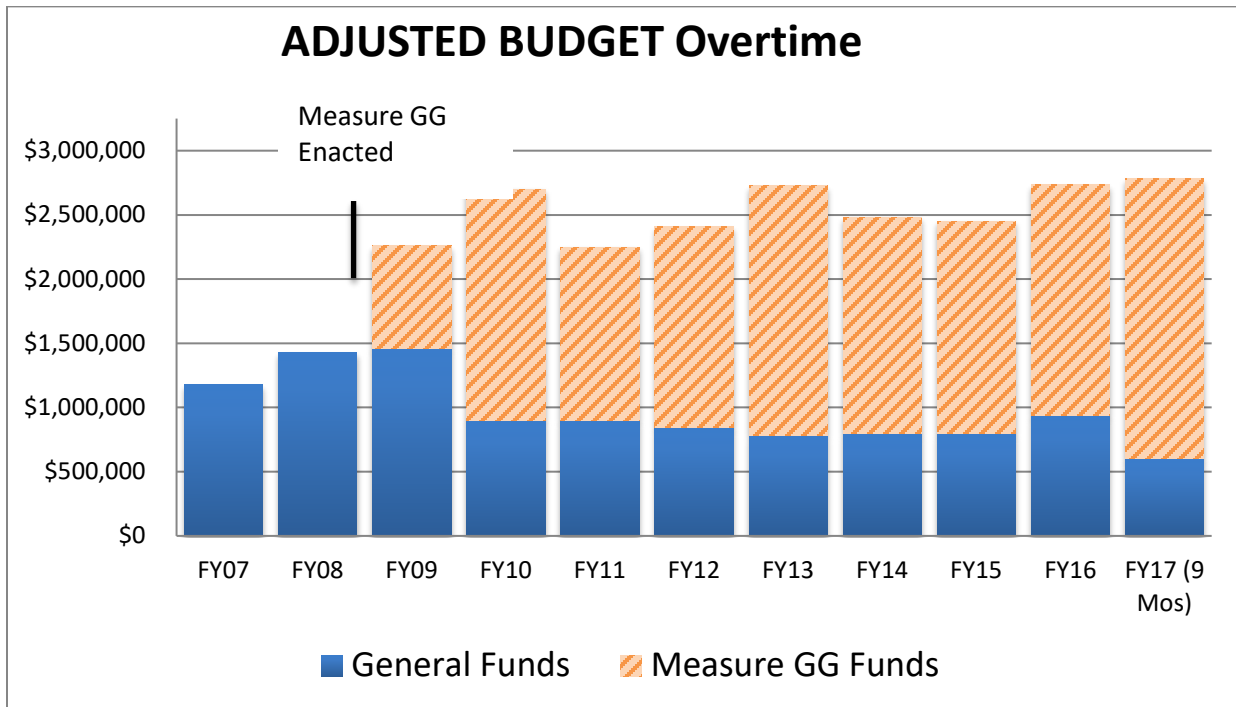


Figure 1: Berkeley Fire Department Overtime – Adjusted Budget
 Data from City of Berkeley’s FUND\$ system

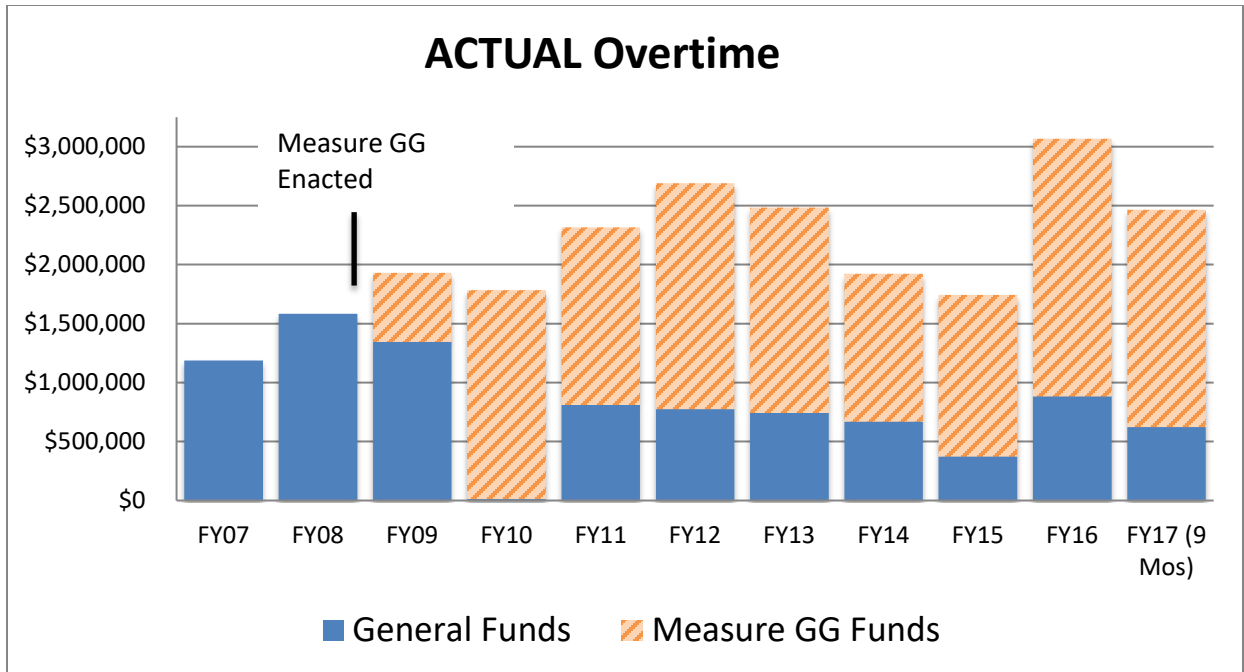
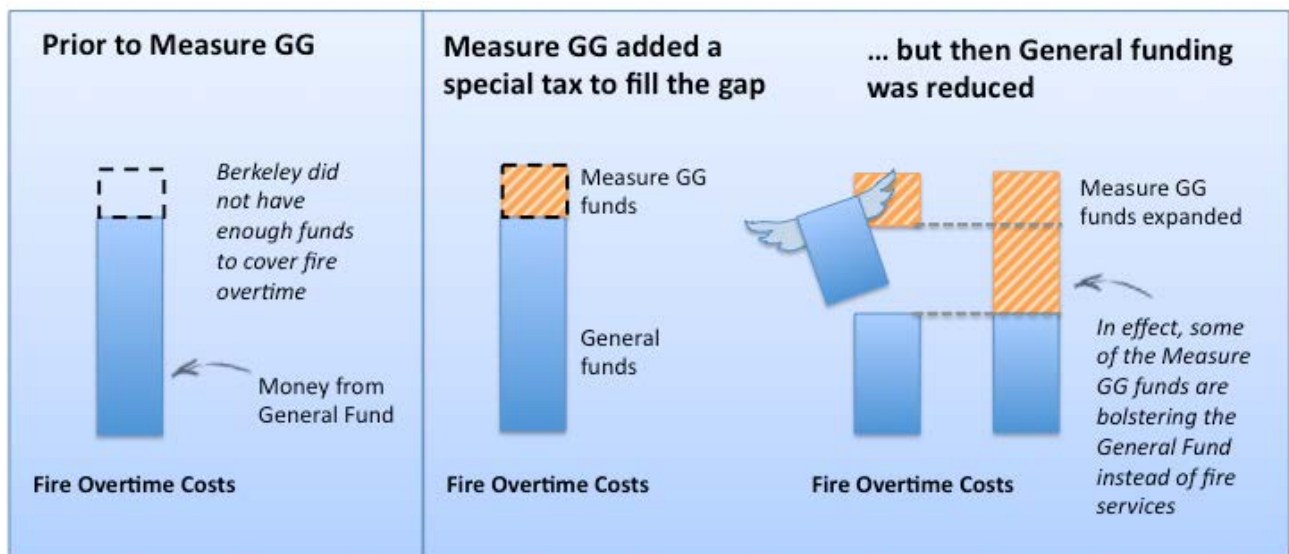


Figure 2: Berkeley Fire Department Overtime – Actual Overtime
 Data from City of Berkeley's FUND\$ system

The following figure shows an illustration of how the current funding allocation has the same effect as moving Measure GG funding away from its designated Fire Department use and into the General Fund:



A City Attorney says this is perfectly legal, but is this good governance?

Figure 3: Visual Illustration of Measure GG and General Funding

Shall an ordinance enacting a tax at a rate of \$0.1047 per square foot of improvements, which is estimated to generate \$8.5 million annually for firefighting, emergency medical response, 9-1-1 communications services, hazard mitigation, and wildfire prevention and preparedness, until repealed by the voters, be adopted?

ORDINANCE NO. #,###-N.S.

IMPOSING A SPECIAL TAX AT A RATE OF \$0.1047 PER SQUARE FOOT OF IMPROVEMENTS TO PAY FOR FIREFIGHTING, EMERGENCY MEDICAL RESPONSE, 9-1-1 COMMUNICATIONS SERVICES, HAZARD MITIGATION, AND WILDFIRE PREVENTION AND PREPAREDNESS

BE IT ORDAINED by the people of the City of Berkeley as follows:

Section 1. Findings and declarations.

The People of the City of Berkeley find and declare as follows:

A. On June 16, 2020, the City Council adopted an ordinance declaring a Fiscal Emergency due to the significant loss of revenue attributable to the COVID-19 pandemic and does not have adequate resources to maintain existing staffing levels, fill vacant positions, adequately train firefighters and paramedics, maintain and replace equipment and facilities, prepare and plan for wildfires, and upgrade and modernize its 9-1-1 dispatch system.

B. Over the years, the Fire Department has experienced a significant increase in calls-for-service, rising from approximately 6,300 in 1995 to approximately 16,000 in 2017 without adequate increases in staffing levels. Over the years, this has resulted in increasing response times.

C. An increasing number of calls in the Fire Department are dedicated to addressing the needs of vulnerable populations including individuals experiencing homelessness and mental health crises and the Fire Department does not have resources dedicated to addressing these vital community needs.

D. The City's 9-1-1 dispatch center does not have the resources to ensure adequate staffing levels, upgrade its systems, and modernize to include emergency medical dispatching to ensure that the appropriate emergency response services are deployed to 9-1-1 calls-for-service.

E. The City is vulnerable to wildfires that could impact significant portions of the City and without a consistent source of funding, the City does not have the resources to address wildfire prevention activities such as vegetation management, hazard mitigation, evacuation planning, public education, and an emergency alert system.

Section 2. Code Amendment. A new Chapter 7.83 is hereby added to the Berkeley Municipal Code to read as follows:

Chapter 7.83
Fire, Emergency Medical Response, 9-1-1 Communications Services, Hazard Mitigation, and Wildfire Prevention and Preparedness Tax

7.83.010 Special Tax.

A. A special tax for the purpose of funding firefighter and emergency medical response including, but not limited to, training, hiring, maintaining and upgrading facilities and equipment, upgrades to the 9-1-1 communication system, and wildfire prevention and preparedness activities is hereby authorized to be imposed on all improvements in the City of Berkeley as more fully set forth in this Chapter.

B. The City Council may impose the tax authorized by this Chapter at the rate and subject to the inflation adjustments, set forth in Section 7.83.020.

C. This special tax is imposed under Article XIII A, Section 4, of the California Constitution and the City's constitutional authority as a charter city under Article XI, Section 5 of the California Constitution.

D. The proceeds of the tax imposed by this Chapter shall be placed in a special fund to be used only for the purpose of enhancing public safety by funding the following:

1. Local firefighter and emergency medical response including hiring and training personnel and upgrading safety equipment and facilities.
2. Upgrading and modernizing the 9-1-1 dispatch system to implement and maintain a system to provide emergency medical dispatching.
3. Wildfire prevention and preparedness activities including, but not limited to, vegetation management, hazard mitigation, public education, evacuation planning, and an emergency alert system.

7.83.020 Tax Authorized – Tax rate – Adjustments for Inflation

A. The City Council is hereby authorized to impose a special tax of \$0.1047 per square foot of improvements in the City of Berkeley.

B. Annually in May, the City Council may increase the previous year's tax by up to the greater of the cost of living in the immediate San Francisco Bay Area or per capita personal income growth in the state, as verified by official United States Bureau of Labor statistics. If either index referred to above is discontinued, the City shall use any successor index specified by the applicable agency, or if there is none, the most similar existing index then in existence.

7.83.030 Definitions.

For purposes of this chapter, the following terms shall be defined as set forth below:

A. "Building" shall mean any structure having a roof supported by columns or by walls and designed for the shelter or housing of any person, chattel or property of any kind. The word "building" includes the word "structure."

B. "Improvements" shall mean all buildings or structures erected or affixed to the land.

C. "Square footage" shall mean the total gross horizontal areas of all floors, including usable basement and cellars, below the roof and within the outer surface of the main walls of buildings (or the center lines of party walls separating such buildings or portions thereof) or within lines drawn parallel to and two feet within the roof line of any building or portion thereof without walls (which includes, notwithstanding paragraph 3 below, the square footage of all porches), and including pedestrian access walkways or corridors, but excluding the following:

1. Areas used for off-street parking spaces or loading berths and driveways and maneuvering aisles relating thereto.

2. Areas which are outdoor or semi-outdoor areas included as part of the building to provide a pleasant and healthful environment for the occupants thereof and the neighborhood in which the building is located. This exempted area is limited to stoops, balconies and to natural ground areas, terraces, pools, and patios which are landscaped and developed for active or passive recreational use, and which are accessible for use by occupants of the building.

3. Arcades, porticoes, and similar open areas which are located at or near street level, which are accessible to the general public, and which are not designed or used as sales, display storage, service, or production areas.

D. "Structure" shall mean anything constructed or erected, the use of which requires location on the ground or attachment to something having location on the ground.

E. "Parcel" shall mean a unit of real estate in one ownership as shown on the most current official assessment roll of the Alameda County Assessor.

7.83.040 Exemptions.

A. The tax imposed by this Chapter shall not apply to parcels and improvements exempt from taxation by the City pursuant to the laws or constitutions of the United States and the State of California.

B. The tax imposed by this Chapter shall not apply to any property owned by any person whose total personal income, from all sources, for the previous calendar year, does not exceed that level which shall constitute "very low-income," as may be established by resolution of the City Council. Any taxpayer claiming the exemption under this section shall be required to demonstrate their entitlement thereto annually

by submitting an application and supporting documentation to the City Manager or their designee in the manner and at the time established in regulations and/or guidelines hereafter promulgated by the City Manager subject to review by the City Council in its discretion. Such applications shall be on forms provided by the City Manager, or their designee, and shall provide and/or be accompanied by such information as the City Manager shall require, including but not limited to, federal income tax returns and W-2 forms.

C. Any person or entity claiming an exemption from the tax imposed by this Chapter shall file a verified statement of exemption on a form prescribed by the City Manager prior to June 30th of the first fiscal year for which the exemption is sought

7.83.050 Duties and Authority of the City Manager.

It shall be the duty of the City Manager to collect and receive all taxes imposed by this Chapter and to keep an accurate record thereof. The City Manager is charged with the enforcement of this Chapter, except as otherwise provided herein, and may prescribe, adopt, and enforce rules and regulations relating to the administration and enforcement of this chapter, including provisions for the re-examination and correction of returns and payments.

7.83.060 Collection with Property Tax – Penalties and Interest.

The special tax imposed by this Chapter shall be due in the same manner, on the same dates, and subject to the same penalties and interest as established by law for other charges and taxes fixed and collected by the County of Alameda on behalf of the City of Berkeley. The special tax imposed by this Chapter, together with all penalties and interest thereon, shall constitute a lien upon the parcel upon which it is levied until it has been paid, and shall constitute a personal obligation of the owners of the parcel on the date the tax is due.

7.83.070 Collection.

The amount of any tax, penalty, or interest imposed under the provisions of this chapter shall be deemed a debt to the City. Any person owing money under the provisions of this chapter shall be liable to an action brought in the name of the City for the recovery of such amount. The City shall be entitled to reasonable attorneys' fees and its costs of suit in any such action.

7.83.080 Refunds.

Whenever the amount of any tax, penalty, or interest has been paid more than once or has been erroneously or illegally collected or received by the City under this chapter, it may be refunded as provided in Chapter 7.20 of the Berkeley Municipal Code or any such successor chapter.

7.83.090 Savings clause – Severability.

The provisions of this chapter shall not apply to any person, association, corporation, entity, or property as to whom or which it is beyond the power of the City of Berkeley to impose the tax herein provided. If any sentence, clause, section, or part of this chapter, or any tax against any individual or any of the several groups specified herein

is found to be unconstitutional, illegal, or invalid, such sentence, clause, section or part shall be severable and such unconstitutionality, illegality, or invalidity shall affect only such clause, sentence, section, or part of this chapter and shall not affect or impair any of the remaining provisions, sentences, clauses, sections, or other parts of this chapter. It is hereby declared to be the intention of the City Council and the People of the City of Berkeley that this chapter would have been adopted had such unconstitutional, illegal, or invalid sentence, clause, section, or part thereof not been included herein.

7.83.100 Violation – Penalty.

Any person who fails to perform any duty or obligation imposed by this chapter shall be guilty of an infraction as set forth in Chapter 1.20 of the Berkeley Municipal Code. The penalties provided in this section are in addition to the several remedies provided in this chapter.

Section 3. Increase appropriations limit. Pursuant to California Constitution Article XIII B, the appropriation limit for the City of Berkeley is hereby increased by the aggregate sum authorized to be levied by this special tax for each of the four fiscal years from 2021 through 2024.

Section 4. Effective date. The tax imposed by this Chapter shall be operative on January 1, 2021.

Section 5. Amendment, repeal, and reenactment. The City Council may repeal this ordinance, or amend it in any manner that does not result in an increase in the tax imposed herein, or add or modify exemptions, without further voter approval. If the City Council repeals this ordinance, it may subsequently reenact it without voter approval, as long as the reenacted ordinance does not result in an increase in the tax imposed herein.

Section 6. California Environmental Quality Act Requirements. This Ordinance is exempt from the California Environmental Quality Act, Public Resources Code section 21000 et seq., under, including without limitation, Public Resources Code section 21065 and CEQA Guidelines sections 15378(b)(4) and 15061(b)(3), as it can be seen with certainty that there is no possibility that the activity authorized herein may have a significant effect on the environment and pursuant to Public Resources Code section 21080, subdivision (b)(8), and CEQA Guidelines section 15273 as the approval of government revenues to fund existing services.

Section 7. Special Tax; Two Thirds Vote Requirement. This Ordinance imposes a special tax for restricted general revenue purposes and shall be effective only if approved by two-thirds of the voters voting thereon.

ORDINANCE NO. #,###-N.S.

IMPOSING A SPECIAL TAX AT A RATE OF \$0.1047 PER SQUARE FOOT OF IMPROVEMENTS TO PAY FOR FIREFIGHTING, EMERGENCY MEDICAL RESPONSE, 9-1-1 COMMUNICATIONS SERVICES, HAZARD MITIGATION, AND WILDFIRE PREVENTION AND PREPAREDNESS

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B. Over the years, the Fire Department has experienced a significant increase in calls-for-service, rising from approximately 6,300 in 1995 to approximately 16,000 in 2017 without adequate increases in staffing levels. Over the years, this has resulted in increasing response times.

C. An increasing number of calls in the Fire Department are dedicated to addressing the needs of vulnerable populations including individuals experiencing homelessness and mental health crises and the Fire Department does not have resources dedicated to addressing these vital community needs.

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B. The City Council may impose the tax authorized by this Chapter at the rate and subject to the inflation adjustments, set forth in Section 7.83.020.

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C. "Square footage" shall mean the total gross horizontal areas of all floors, including usable basement and cellars, below the roof and within the outer surface of the main walls of buildings (or the center lines of party walls separating such buildings or portions thereof) or within lines drawn parallel to and two feet within the roof line of any building or portion thereof without walls (which includes, notwithstanding paragraph 3 below, the square footage of all porches), and including pedestrian access walkways or corridors, but excluding the following:

1. Areas used for off-street parking spaces or loading berths and driveways and maneuvering aisles relating thereto.

2. Areas which are outdoor or semi-outdoor areas included as part of the building to provide a pleasant and healthful environment for the occupants thereof and the neighborhood in which the building is located. This exempted area is limited to stoops, balconies and to natural ground areas, terraces, pools, and patios which are landscaped and developed for active or passive recreational use, and which are accessible for use by occupants of the building.

3. Arcades, porticoes, and similar open areas which are located at or near street level, which are accessible to the general public, and which are not designed or used as sales, display storage, service, or production areas.

D. "Structure" shall mean anything constructed or erected, the use of which requires location on the ground or attachment to something having location on the ground.

E. "Parcel" shall mean a unit of real estate in one ownership as shown on the most current official assessment roll of the Alameda County Assessor.

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B. The tax imposed by this Chapter shall not apply to any property owned by any person whose total personal income, from all sources, for the previous calendar year, does not exceed that level which shall constitute "very low-income," as may be established by resolution of the City Council. Any taxpayer claiming the exemption under this section shall be required to demonstrate their entitlement thereto annually

by submitting an application and supporting documentation to the City Manager or their designee in the manner and at the time established in regulations and/or guidelines hereafter promulgated by the City Manager subject to review by the City Council in its discretion. Such applications shall be on forms provided by the City Manager, or their designee, and shall provide and/or be accompanied by such information as the City Manager shall require, including but not limited to, federal income tax returns and W-2 forms.

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The special tax imposed by this Chapter shall be due in the same manner, on the same dates, and subject to the same penalties and interest as established by law for other charges and taxes fixed and collected by the County of Alameda on behalf of the City of Berkeley. The special tax imposed by this Chapter, together with all penalties and interest thereon, shall constitute a lien upon the parcel upon which it is levied until it has been paid, and shall constitute a personal obligation of the owners of the parcel on the date the tax is due.

7.83.070 Collection.

The amount of any tax, penalty, or interest imposed under the provisions of this chapter shall be deemed a debt to the City. Any person owing money under the provisions of this chapter shall be liable to an action brought in the name of the City for the recovery of such amount. The City shall be entitled to reasonable attorneys' fees and its costs of suit in any such action.

7.83.080 Refunds.

Whenever the amount of any tax, penalty, or interest has been paid more than once or has been erroneously or illegally collected or received by the City under this chapter, it may be refunded as provided in Chapter 7.20 of the Berkeley Municipal Code or any such successor chapter.

7.83.090 Savings clause – Severability.

The provisions of this chapter shall not apply to any person, association, corporation, entity, or property as to whom or which it is beyond the power of the City of Berkeley to impose the tax herein provided. If any sentence, clause, section, or part of this chapter, or any tax against any individual or any of the several groups specified herein

is found to be unconstitutional, illegal, or invalid, such sentence, clause, section or part shall be severable and such unconstitutionality, illegality, or invalidity shall affect only such clause, sentence, section, or part of this chapter and shall not affect or impair any of the remaining provisions, sentences, clauses, sections, or other parts of this chapter. It is hereby declared to be the intention of the City Council and the People of the City of Berkeley that this chapter would have been adopted had such unconstitutional, illegal, or invalid sentence, clause, section, or part thereof not been included herein.

7.83.100 Violation – Penalty.

Any person who fails to perform any duty or obligation imposed by this chapter shall be guilty of an infraction as set forth in Chapter 1.20 of the Berkeley Municipal Code. The penalties provided in this section are in addition to the several remedies provided in this chapter.

Section 3. Increase appropriations limit. Pursuant to California Constitution Article XIII B, the appropriation limit for the City of Berkeley is hereby increased by the aggregate sum authorized to be levied by this special tax for each of the four fiscal years from 2021 through 2024.

Section 4. Effective date. The tax imposed by this Chapter shall be operative on January 1, 2021.

Section 5. Amendment, repeal, and reenactment. The City Council may repeal this ordinance, or amend it in any manner that does not result in an increase in the tax imposed herein, or add or modify exemptions, without further voter approval. If the City Council repeals this ordinance, it may subsequently reenact it without voter approval, as long as the reenacted ordinance does not result in an increase in the tax imposed herein.

Section 6. California Environmental Quality Act Requirements. This Ordinance is exempt from the California Environmental Quality Act, Public Resources Code section 21000 et seq., under, including without limitation, Public Resources Code section 21065 and CEQA Guidelines sections 15378(b)(4) and 15061(b)(3), as it can be seen with certainty that there is no possibility that the activity authorized herein may have a significant effect on the environment and pursuant to Public Resources Code section 21080, subdivision (b)(8), and CEQA Guidelines section 15273 as the approval of government revenues to fund existing services.

Section 7. Special Tax; Two Thirds Vote Requirement. This Ordinance imposes a special tax for restricted general revenue purposes and shall be effective only if approved by two-thirds of the voters voting thereon.

October 18, 2021

To: Disaster & Fire Safety Commission

From: Commissioner Rader

cc: Chief May, Khin Chin

Re: Questions Regarding Fire Prevention Inspection Program

I would like for the Commission to consider, together with the Fire Department/OES, how to maximize the effectiveness of the Measure-FF-funded Fire Prevention Inspection Program in reducing Berkeley's fire risk as quickly as possible. To do that, the Commission needs more information about how the current program is being implemented and, to that end, I hope to receive answers to the following questions as soon as possible. Thank you!

1. Which properties are inspected first?

- a. Geographic plan (e.g., start at eastern ridge, work west)?
- b. Or prioritize based on hazards? E.g.,
 - i. Flammable vegetation (e.g., eucalyptus), dense undergrowth and debris,
 - ii. Large concentrations of the above, and/or
 - iii. Homes at risk of ignition from proximate vegetation and fuel ladders
- c. What does the fire science say about which of these should be our top priority?

2. What is required of property owners?

a. How is BFC 4907.2 being interpreted?

- i. How is subsection 4 -- "create space between plants, and between plants and structures" -- applied? For example, must a hedge in between two closely spaced homes be removed?
- ii. Must the owner of a large property with many trees treat the entire property to comply with subsections 8-12? (i.e., "remove branches within 10' of the ground (limbing)"; "remove dead wood and thin crowns"; "provide separation distance between trees / shrubs"; "remove understory / brush / ground fuel below trees"; thin stands of trees / shrubs"; "cut grass/weeds"; "strip loose tree bark to 8 feet from the ground")
- iii. Are these requirements being uniformly applied?

3. Process, Enforcement & Fees

- a. Do residents receive an advance notice with a specific date of inspection?
- b. Are residents who are found to be out-of-compliance left with a specific list of overgrowth to remedy?
- c. How much time do residents have to comply?
- d. Is there a re-inspection? Is there a re-inspection fee?
- e. What happens in the event of willful non-compliance? Is there a schedule of fees? Can properties be redressed by force?

4. Affordability Issues

- a. What accommodations are available for residents who cannot afford to manage the overgrowth?
 - i. Lien applied to property
 - ii. If there are subsidy funds available, what are the criteria for disbursing those

funds?

- b. For large properties where treatment will be very costly (e.g., dozens of large trees; substantial build-up of debris), is there accommodation for property owners to comply over an extended period of time?
 - i. Can Measure FF funds be used to accelerate the treatment of high-hazard areas?
 - ii. Criteria?
- 5. Regulatory scope**
- a. Is the current Fire Code adequate to enable all necessary Department actions?

Chin, Khin

From: May, Keith
Sent: Wednesday, October 27, 2021 9:00 AM
To: Nancy Rader
Cc: Jose Bedolla; Chin, Khin; Roman, Abraham; Sprague, David A.; Lee, Aaron
Subject: RE: Questions for Wednesday's DFSC Meeting
Attachments: CWPP Memorandum.docx; CWPP Scope of Work.docx; CWPP Project Timeline.docx; CWPP Experience.pdf

Good Morning Commissioner Rader,

We are still formulating answers to your questions. I wanted to send you a few of them now until we have some time for the rest. The attachments are in response to Question #4.

Budget Questions

1. Could you please provide to the Commission the adopted FY 2022 budget with as much line-item detail as exists, as well as a 5-year budget? (A few of us spent some time with Chief Sprague early this year going over a draft 5-year plan in some detail, but I don't believe we ever received the budget as proposed, or adopted.) Ideally, we would have this by COB today. **We need to make that Council has this information before we release it to any Commissions or public. The Fire Chief is discussing this item with the City Manager.**
2. Can you please confirm my understanding that, because Measure FF taxes were collected starting on 1/1/21 for spending in FY 2022 (18 months), there's an extra \$2.5 million in one-time funds available that was not budgeted (i.e., \$12.5 million total collected by the end of FY2022, but \$10 million or so budgeted). (This is based on the budget information that I could find online from council packets, prompted by Richard Thomason's email to council back in June.) There were an additional 4m in funds projected to be collected and those were part of the budget that was proposed to the DFSC and adopted by the City Council. There are no unallocated funds in FY22.

Other FF Staff Report Follow-up Questions

1. What percent of the FY 2022 budget is related to wildfire fuel reduction? (By my calculation based on the budget I could find online, its only 11%). [See the slide from the FY22 FF presentation, below](#)

WUI: FY22 Actions 2/2

4. Increase Capacity to Perform Inspections

- 800 to 8000 (FZ 2 & 3)
- Determine compliance program

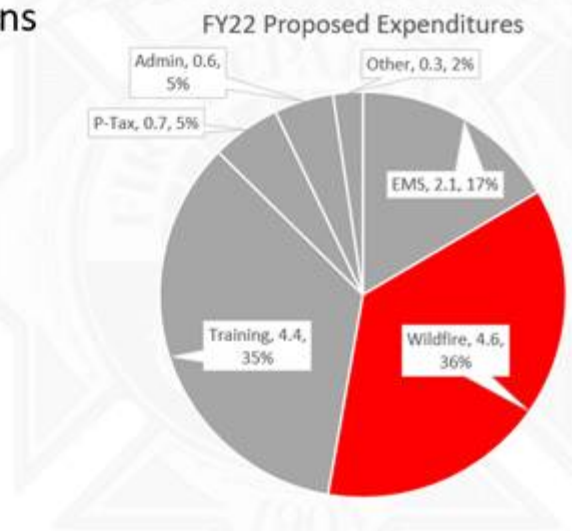
5. Increase Community Outreach

- From fire department & through neighbors

6. Outdoor Warning System

- Installation, training & community engagement

7. Know your zone & evacuation drills



2. Standards of Coverage Analysis – Will the analysis evaluation of the City’s risk profile include wildfire risk? **Yes, but only as it relates to staffing and deployment. The CWPP will be a much more comprehensive review of risk that is 100% focused on wildfire.**

3. Project Management and Subject Matter Expert (SME) –

- Is this the Measure FF Program Manager we had envisioned? **Yes, it is a contractor for now. We needed the work to start ASAP, a contractor was the quickest way. In the future, we will evaluate if writing a job description and hiring an FTE makes more sense.**
- Has an RFP been issued? (If so, please send) **RFP was issued, released and received no responses. We applied for and were granted City Manager authorization to contract with someone without an RFP since we rec’d no responses. RFP is on the City’s webpage, [here](#).**
- What is the timing for bringing the manager on, and what is the duration of the contract? **We are just starting the work. Contract was signed last(?) week.**
- I have a difficult time seeing how an outside consultant is likely to be as effective as in-house staff, particularly one at management level. How does a consultant have any authority (or accountability)? Where do they fit in the org chart? **They are working with and reporting to the upper command staff. They are helping us organize all of the complex projects we are engaged in (not just FF). They will help drive work through the chief officers.**
- This person is supposed to manage all projects, which would include the CWPP. So, when the CWPP is drafted such that it can be tracked, will this person be providing oversight of that program? **This person does not have authority over anyone nor are they providing oversight. The program manager is essentially a data sponge, taking information in on the status of all programs and projects and organizing it so we have better situational awareness and can more easily report out and adjust as internal/external factors influence completion.**

4. CWPP –

- a. Has an RFP been issued? (If so, please send; if not, can the Commission review a draft?) [One of the retired annuitants we hired back has been working on the scope for 2 months. It was completed and we have submitted a waiver of solicitation to the city manager since there is only one local expert that performs this work and has all the related data from all of our surrounding jurisdictions. See attached.](#)
- b. What is the timing and the scope of work? (E.g., does it include home-hardening measures, flammable vegetation, and development of related regulations?) [See attached.](#)
- c. Will it be focused on how to reduce risks as quickly as possible – i.e., strategies to address highest hazards on a priority basis? [See attached.](#) [Our goal is to understand where the risk is so we can spend the funding we have wisely.](#)

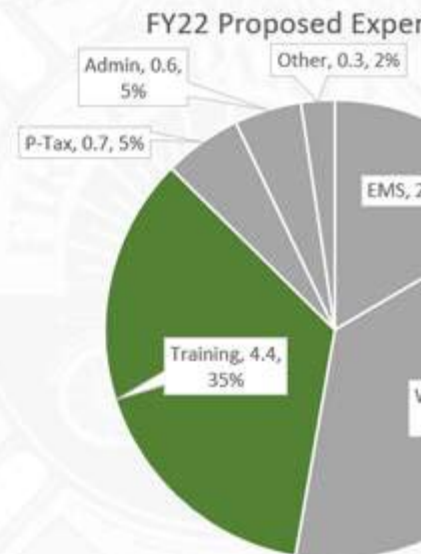
5. Wildfire Prevention / Mitigation – [Still working on a response.](#)

6. Division of Training Property –

- a. \$2.5 million was budgeted for a lease or purchase of property this year. If property is not identified for several months, will funds in this line item become available for other purposes? [There were 4m allocated to this project, not 2.5m. It is one time funds so there are not saving that can be used to offset other costs. The department is engaged and has narrowed the search down to several different sites. See slide from Council presentation below](#)

T&F: FY22 Actions

1. Increasing training staff
2. Enhancing professional development
3. Meeting training standards and mandates
4. Seeking to purchase or lease a multi-function property
 - Office Space
 - Apparatus storage
 - Warehouse space
 - FF Training facility
 - CERT Training Facility
 - Dispatch Facilities



Best,

Keith May

Assistant Chief, Special Operations Division
Public Information Officer
Berkeley Fire Department
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"We are what we repeatedly do. Excellence, therefore, is not an act, but a habit." Aristotle



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From: Nancy Rader <nraderrhome@gmail.com>
Sent: Monday, October 25, 2021 11:36 AM
To: May, Keith <KMay@cityofberkeley.info>; Chin, Khin <KChin@cityofberkeley.info>; Roman, Abraham <ARoman@cityofberkeley.info>
Cc: Jose Bedolla <joseluisbedolla@gmail.com>
Subject: Questions for Wednesday's DFSC Meeting

WARNING: This is not a City of Berkeley email. Do not click links or attachments unless you trust the sender and know the content is safe.

Hello All,

I very much appreciate the information in the FF Staff Report for this month. Still, I find that I have numerous remaining questions. I don't want to take up all the oxygen at the meeting, so thought I would send you these questions in advance in case you are able to provide some information ahead of time, and/or address the questions as part of your

verbal report. If possible, I'd like to follow up on any unanswered questions one-on-one (unless other commissioners show an interest, perhaps forming a committee) sometime in the next week or so with whoever is appropriate.

Budget Questions

1. Could you please provide to the Commission the adopted FY 2022 budget with as much line-item detail as exists, as well as a 5-year budget? (A few of us spent some time with Chief Sprague early this year going over a draft 5-year plan in some detail, but I don't believe we ever received the budget as proposed, or adopted.) Ideally, we would have this by COB today.
2. Can you please confirm my understanding that, because Measure FF taxes were collected starting on 1/1/21 for spending in FY 2022 (18 months), there's an extra \$2.5 million in one-time funds available that was not budgeted (i.e., \$12.5 million total collected by the end of FY2022, but \$10 million or so budgeted). (This is based on the budget information that I could find online from council packets, prompted by Richard Thomason's email to council back in June.)

Other FF Staff Report Follow-up Questions

1. What percent of the FY 2022 budget is related to wildfire fuel reduction? (By my calculation based on the budget I could find online, its only 11%.)
2. Standards of Coverage Analysis – Will the analysis evaluation of the City's risk profile include wildfire risk?
3. Project Management and Subject Matter Expert (SME) –
 - a. Is this the Measure FF Program Manager we had envisioned?
 - b. Has an RFP been issued? (If so, please send)
 - c. What is the timing for bringing the manager on, and what is the duration of the contract?
 - d. I have a difficult time seeing how an outside consultant is likely to be as effective as in-house staff, particularly one at management level. How does a consultant have any authority (or accountability)? Where do they fit in the org chart?
 - e. This person is supposed to manage all projects, which would include the CWPP. So, when the CWPP is drafted such that it can be tracked, will this person be providing oversight of that program?
4. CWPP –
 - a. Has an RFP been issued? (If so, please send; if not, can the Commission review a draft?)
 - b. What is the timing and the scope of work? (E.g., does it include home-hardening measures, flammable vegetation, and development of related regulations?)
 - c. Will it be focused on how to reduce risks as quickly as possible – i.e., strategies to address highest hazards on a priority basis?
5. Wildfire Prevention / Mitigation –
 - a. The summary indicates that the department is overwhelmed, which is understandable, but also a reason to prioritize and focus on high-impact measures. Is that happening? Examples:
 - i. Wouldn't it be reasonable and effective to conceive of Measure FF's wildfire risk reduction programs as constituting a city-wide FireWise program? Wouldn't this be more effective than trying to recreate FW programs at the neighborhood level, relying on voluntary actions (volunteering in two senses – people volunteering time, and people volunteering to do what needs to be done)?

- ii. Vegetation Management Inspections – See my 10/18 memo with list of specific questions about how these are being conducted (E.g., geographic approach or fuel-load approach?). Most especially:
 - 1. Will large-property owners with high build up of fuel loads be inspected and be required to treat those loads in year 1? Will non-compliance fines be levied?
 - 2. Beyond the eastern ridge area of the city, is there any effort to identify and inspect high-priority/high-risk properties sooner rather than later?
 - iii. If the answers to the above are no, and especially if there are available funds, what can be done to address high-priority/high-hazard areas of the city (whether on public or private land)?
 - b. With 521 inspections in one month, can we expect that 72% of Zone 2-3 properties will be inspected within a year? (That would be great, but is that the goal?) (521*12 = 6252 = 72% of the 8620 properties inspected)
 - c. What will the limited safe passages budget be focused on? (Drilling down on what unobstructed street width should be our goal?) (Also, since Public Works and Transportation need to be involved, will they need some budget from FF?)
 - d. Is the FD also evaluating whether fire code (or building code or other) amendments are needed to address home hardening and highly flammable vegetation?
6. Division of Training Property –
- a. \$2.5 million was budgeted for a lease or purchase of property this year. If property is not identified for several months, will funds in this line item become available for other purposes?

I know this is a lot, but I think the Commission can't do its job without the answers to these questions (at a minimum).

Nancy

Nancy Rader
 1198 Keith Avenue
 Berkeley, CA 94708
 (510) 845-5359 home
 (510) 919-6358 cell

WILDLAND RES MGT Project Experience

Wildland Res Mgt, a Nevada Corporation, is a consulting firm that emphasizes wildland fire management in the urban-wildland interface. Several projects entailed preparation of fire management plans for large landowners in areas of sensitive species and concerned communities. Other projects have involved the use of state-of-the-art fire behavior prediction systems or developed training programs.

Carol Rice, and Wildland Res Mgt have developed a notable "track record" and is respected for the quality of work produced; a section of projects follows. In addition, Cheryl Miller, RLA will be assisting this effort. Ms. Miller is currently the staff providing essential services to the Hills Emergency Forum, and is the Executive Director of the Diablo FireSafe Council. In these capacities, she has worked with all jurisdictions neighboring the City of Berkeley to secure funding, develop Community Wildfire Protection Plans and develop Firewise Communities.

Fire Mitigation Program Support, University of California, Berkeley

Wildland Res Mgt provides professional expertise supporting the Hill Campus and Remote Reserves owned by UC Berkeley. Carol Rice wrote the grant application that garnered the campus \$3.6 million to fund treatments for hazard reduction and evacuation support. She wrote prescriptions for defensible space contracts, provided analyses on FEMA grant implementation, and developed bid specifications for contractors to implement the plan and analyze environmental impacts. Consultation is ongoing, including the preparation of a new five-year wildland fire management plan for the 800-acre Hill Campus, **and supporting the development of a programmatic EIR based on the plan.** 2011-present.

Napa County Community Wildfire Protection Plan, Napa Communities Firewise Foundation

Wildland Res Mgt developed the county-wide community wildfire protection plan for Napa County, and development of its online Hub. A community base map that is comprised of an interactive map of the important characteristics of the county was compiled. A quantitative risk assessment framework based on the GIS layers was developed (prior to the 2020 wildfires). Stakeholder meetings are ongoing, and projects are being collected. 2021.

Risk Assessments, FireWise Community Applications, Community Wildfire Protection Plans; Napa FireWise Communities Foundation

Wildland Res Mgt provides expertise pertaining to wildland fire hazard reduction for this active foundation that focuses on 18 different fire safe councils within Napa County. Presentations are made emphasizing defensible space and vegetation management, and specific projects that would further fire safety are identified as requested. Risk assessments that form the foundation for local CWPPs are performed, and Firewise applications are prepared, 2011 – present.

Technical Support for Preparation of Environmental Documents, City of Oakland, Hills Emergency Forum, and Claremont Canyon Conservancy

Carol Rice is assisting local agencies and concerned parties respond to requests from the Federal Emergency Management Agency in preparation of an EIS for grants funding. Fire behavior was prepared, vegetation mapped, project goals developed, and project design refined. Comments are being offered regarding the EIS. 2009-2016.

Wildland Fire Management Plan and Update to the Fire Hazard Reduction Plan, Lawrence Berkeley National Laboratory

The project consisted of preparing a Federally-mandated wildland fire management plan and

updating the plan prepared in 2005. Fire behavior analysis demonstrated the progress in fire safety made by its implementation on the 130-acre national laboratory situated in the hills above the UC Berkeley campus. A prioritization for structure retrofitting was developed, and advice provided on final actions for the fire hazard program. 2012 and 2014.

County-wide Community Wildfire Protection Plan, Orange County Fire Authority

Wildland Res Mgt prepared this plan covering all lands in the wildland urban interface of Orange County, in association with Cheryl Miller and Esther Mandeno. Collaboration with the County of Orange Area Safety Task-Force (COAST) was an important part of the planning process. The Wildland Res Mgt team mapped sensitive values at risk, and protected lands, delineated the wildland urban interface and assessed risk in order to determine the need for projects. An action plan that defined roles and responsibilities of stakeholders aided implementation. Because the plan was produced under budget, a grant application workshop was provided to support increased funding to the stakeholders. 2015-16.

Santa Clara County Community Wildfire Protection Plan – through SWCA, Inc.

Carol Rice assisted in the development of projects and strategies to engage stakeholders and the public throughout the planning process. Eight public workshops were held throughout the county, and one special stakeholder meeting engaged large landowners such open space districts. Stakeholders were involved in the development of the document, map resources, and planning for future updates. 2015-2016.

Community Wildfire Protection Plan and Mitigated Negative Declaration, Sacramento Metro Fire

Wildland Res Mgt partnered with Ascent Environmental and Intterra, Inc., to prepare a CWPP for nearly the entirety of Sacramento County for the Sacramento Metro Fire Department. The development of a community base map, definition of the WUI, and assessment of risk were all developed as necessary components of the CWPP. Ms. Rice developed the factors, weights and scores for the risk assessment and determined the decision guides for the base map and WUI boundary as part of the CWPP development. This CWPP is currently being implemented, particularly by the Sacramento County Regional Parks Department where the project boundaries, vegetation types and sensitive features as identified in the geoportal are being used to refine training burns in the American River Parkway. Furthermore, the risk assessment framework that was developed for the CWPP has been continued as a data collection process by which inspectors can track inspections for defensible space and weed abatement. 2013-2014

Wildfire Hazard Reduction and Resource Management Plan and Programmatic EIR/EIS East Bay Regional Park District, through LSA, Inc.

Carol Rice was responsible for identifying and describing the areas of potential action based on potential flame lengths and crown fire potential within a 13-square mile study area that spans the hills from El Cerrito to San Leandro. Inputs to the fire behavior models were developed from translating values associated with vegetation types into fuel models, tree heights, crown density and height to live crown. Other inputs such as weather are being collected from local observation stations. Mitigation measures that reduce fire hazard with minimal environmental impact are to be identified. Participation in public meetings (where fire modeling outputs are explained) and various outreach activities (where peers solicited for feedback) are ongoing. *This plan was awarded “Outstanding Document” by the Association of Environmental Professionals in 2011. This is an update of the project completed in 1995 that received an award for planning by the American Society of Landscape Architects, 1997.* 2006-2011.

Fire Behavior Modeling of Wildland Interface Fuels, Moraga Orinda Fire Department

Wildland Resource Management assisted the Moraga Orinda Fire Department Parcel-Based Risk Evaluation by modeling the potential fire behavior in the District. Initial fire behavior modeling with FlamMap and FARSITE was conducted using an existing data set of fuel models, assigned values for other fuel layers, and weather of the Oakland Hills fire. Subsequent detailed fire behavior modeling was performed using fuels data derived from hyperspectral analysis of the vegetation. Appropriate weights were determined for the various values and the factors in the fire behavior portion of the parcel-based risk evaluation. 2003 – 2008.

Fire Hazard Reduction Study, Orlando Lawrence Berkeley National Laboratory

The project consisted of developing prescriptions for treatment on the 130-acre national laboratory situated in the hills above the UC Berkeley campus. Treatments considered concerns encompassing visual, wildlife habitat, soil erosion, biodiversity, noise and cost issues. Costs estimates were developed and used as a basis for budget requests. Pre- and post- treatment fire behavior was predicted for each area of treatment in order to assess the efficiency of treatment. The fire behavior predictions resulted in an increase of 50% in the area encompassed by the Lab in order to provide enough fire reduction buffer. The effect of treatments on fire behavior was tested using FARSITE, a fire growth prediction model. The results of the fire growth model, along with specifics regarding treatments were shared with local fire chiefs, neighborhood groups, Lab employees and environmental associations. This project is in its fourth year of implementation, with ongoing oversight and environmental monitoring. Carol Rice, in collaboration with LBL, also developed with four co-authors a handbook for removing hazardous weeds without harming native plants (*The Vegetation Almanac*). 1994-2005.

Environmental Compliance Strategy and Best Management Practices Development for Fire Management Projects in Alameda and Contra Costa Counties, Diablo FireSafe Council, through EDAW, Inc. (now AECOM)

This project is developing a comprehensive environmental compliance strategy and Best Management Practices (BMP) Guide recommends and incorporates species conservation measures according to U.S. Fish and Wildlife Service (USFWS) requirements per the Endangered Species Act. Carol Rice provided descriptions of fuel treatment methods and recommendations on applicability of treatment methods in various habitats and zones. 2008.

The BMP Guide provides the decision-making framework to address numerous management issues, including fuel load reductions, restoration of sensitive habitats, adaptive management, integrative pest management, invasive exotic plant eradication, pests and plant disease, green waste management, forest management, grazing opportunities, and managing lands for recreational activities. The plan also identifies opportunities for working with other agencies and community organizations. 2008.

Parcel-based Risk Assessment, Contra Costa Consolidated Fire Protection District

The fire risk facing each parcel in the Priority Hazard Zone was determined using a combination of code-based and fire behavior based factors and weights. This supplanted the mapp of the Very High Severity Zones in specific, justified locations. Wildland Resource Management conducted fire behavior modeling for the study area and guided the decision-making regarding the weights, focusing on the fire behavior related factors, but also involving those factors related to roofs, decks, structural characteristics and infrastructure. The firm also assisted in developing the visual presentations of the results. Carol Rice prepared a report documenting the purpose, process, compared the process with that used by the State in determining the Very High Fire Hazard Severity Zone, the established methodology, and results. 2008-2010

Development of a Report Describing Fire Hazards at the Urban/Wildland Interface; Insurance Services Offices

Carol Rice provided the technical support to a report which describes the history of fires in the urban/wildland interface, and the reasons why it persists. A new method for insurers and communities of evaluating fire hazard based on satellite imagery is highlighted. Several examples of proactive community-based programs are described to demonstrate how the hazard can be reduced. Current research to address structural survival from wildfires is explained, as are existing fire behavior and growth models. 1997-98.

Program Manager for Office of the Office of the State Fire Marshal Research Grants, through University of California Forest Products Laboratory

Carol Rice. coordinated performance and completion of six FEMA grants aimed at increasing fire safety in the urban/wildland interface. The scope of the grants encompassed developing new fire-safe guides, analyzing state-wide code compliance, evaluating fire hazard assessment methods, and developing training courses on fire-safe development and urban-interface codes. Our firm also provided technical expertise in development of a methodology to design a computer model that predicts the chance of structural ignition due to wildfire. In this project, protocols for testing landscaping materials and exterior structural elements are being determined. Exploration of ways to use biomass generated from fire hazard reduction in the urban/interface is included in the FEMA-funded projects. 1996-2002.

Analysis of Risk of Structural Ignition from Wildfires, through University of California Forest Products Laboratory.

Providing technical expertise in development of a methodology to design a computer model that predicts the chance of structural ignition due to wildfire. In this project, protocols for testing landscaping materials and exterior structural elements are being determined. Exploration of ways to use biomass generated from fire hazard reduction in the urban/interface is included in this FEMA-funded project. Coordinated completion of other FEMA grants developing new fire-safe guides, analyzing state-wide code compliance, evaluation of fire hazard assessment and development of training courses on fire-safe development and urban-interface codes. 1996-2001.

Fire Behavior Modeling, Gaming, City of Oakland, through Amphion, Inc.

This project involves fire department and City staff in simulating wildfire conditions in the hills of Oakland. The fire growth model, FARSITE was used. Working with Cheryl Miller, several simulated ignition points are being located and growth patterns described using computer outputs as a base. 1996 - 1997.

Vegetation Management Plan of the East Bay Hills, Consortium of the Cities of Berkeley, Oakland, Piedmont, and East Bay Regional Park District, East Bay Municipal Utilities District, and University of California, through Amphion, Inc.

This project received an award for planning by the American Society of Landscape Architects, 1997. The planning effort funded by the Federal Emergency Management Agency includes development of vegetation management recommendations for public wildlands as well as model ordinances for residential gardens and structures, and prescriptions for wildlands along the hills from San Leandro to El Cerrito. Hazards and risks were rated and lands classified. Potential funding sources and an evaluation of new vegetation management techniques was encompassed in the scope of work. A homeowner information program was developed addressing defensible space and building "retrofit" actions. 1993-1995.

Litigation Support For Fire Management Considerations After the Oakland Fire. Larson & Burnham.

Wildland Resource Management coordinated a six-member team of wildland fire experts in litigation involving wrongful deaths and claims for damages after the Oakland Fire. Issues involved included fuel management, fire behavior, and influences of weather on fire growth patterns. 1993-1995.

Homeowner Education Program and Hazard Reduction Guidelines Development; Berkeley City Fire Department

This project included a series of demonstrations in residential gardens of on-the-ground interpretations of the Hazardous Area. Wildland Resource Management obtained volunteer contract labor, donations of plant material, plus coordinated solicitation and selection of garden sites.

Wildland Resource Management developed a set of site-specific guidelines for fire hazard reduction on a right-of-way that both addresses fire safety and responds to neighborhood concerns for erosion prevention, aesthetics, and wildlife habitat preservation. Wildland Resource Management worked with neighborhood representatives and presented this set of guidelines at a neighborhood meeting where it was met with approval by vocal residents.

Wildland Resource Management interpreted fire hazard reduction regulations in terms more readily understood by residents, compiled existing information about defensible space (such as plant lists, standards, guidelines, programs in other jurisdictions, and renditions of fire-safe lots). 1993-1995.

Program Management of Fire Hazard Reduction Program; University of California, Office of Environmental Health and Safety

In this ambitious project we coordinated with state agencies, park districts, homeowner associations, campus community, contractors, and local fire departments to conduct a series of activities within a five-year program. This included planning prescribed fires, supervising hand labor crews, developing contracts with local goat herder, planning, conducting native vegetation restoration projects and making presentations to homeowners. Efforts also involved maintenance of approximately 20 acres of mature eucalyptus and conversion of other stands to native grass and oak forests. Presentations were frequently made to University officials, and news media (especially since the Oakland Hills Fire) concerning the fire hazard reduction program. 1987-1992.

Guiding Plan for Fire Management in the Wildland/urban Interface; San Mateo County Fire Chiefs' Association

A methodology was developed that allows local fire managers to address fire protection issues in the urban/wildland interface of San Mateo County. Hazard assessment is addressed in the guide, as are options for vegetation management, and legal and land use issues. Presentation tools were developed to assist communication with the public and policy-makers. 1989-1990.

Analysis of Land Use Planning Process and Fire Damage; USDA Forest Service

Wildland Resource Management determined whether the identification of fire related hazards and mitigation measures in current General Plans has actually minimized damage from wildfire. Using an analysis of three fires, we presented the opportunities and requirements available using existing land use procedures to mitigate fire loss. 1988-1989.

Fire Management Plan; University of California, Office of Environmental Health and Safety

The plan recommended vegetation and management techniques on a site-specific basis to reduce fire hazards to such facilities as the Lawrence Berkeley Laboratory, or adjacent residential properties on this 1400 acre parcel. Local vegetation includes grasslands, oak/bay forests, north coastal scrub and introduced forest stands (including eucalyptus, Monterey pine, and various conifers). The plan identifies tradeoffs of using prescribed fire, goat-grazing, hand labor, chemical or mechanical treatments and fire retardant landscape plants. Costs, schedules, and a public education program are also detailed. 1986-87.

Analysis of Factors Causing Structure Loss; Department of Forestry and Resource Management University of California, Berkeley

The in-place factors that contribute to the loss of homes during a wildfire were analyzed and weighted. The analysis of variables such as access, water supply, building design and placement yielded a type of hazard rating that has been used in statewide budget allocation, prevention efforts and development planning. 1985-86.

Evaluation of Fire Behavior in the Berkeley/Oakland Hills; East Bay Regional Park District

Potential fire behavior was predicted for the North Coastal Scrub and oak/bay woodlands along the urban interface of the Berkeley/Oakland hills. Site-specific fuel models were developed, and live fuel moisture trends and levels were established. 1984-85.

Fuel Break Management Plan; East Bay Regional Park District

Fuel break maintenance techniques along the urban/wildland interface of the Berkeley/Oakland Hills were reviewed and guidelines were proposed. Tradeoffs involved with each maintenance technique were detailed. Site-specific techniques were recommended for 9.7 miles of fuel break. 1984-1986.

SELECTED PUBLICATIONS, PRESENTATIONS AND REPORTS

Carol L. Rice. 2018. Fire history, ecology and management in the Oak Woodlands of California. Invited presentation at the California Native Plant Society Conservation Conference, February 1-3, Los Angeles, CA. In press.

Carol L. Rice. 2015. Simulated effects of wildfire on water quality on the Mokelumne Watershed for the East Bay Municipal Water District using FlamMap and FARSITE. Presentation to the California-Nevada-Hawaii Forest Fire Council, So. Lake Tahoe, CA October 21, 2015.

Carol L. Rice. 2013. Planning to Live with Fire: Tools and best Practices. Invited presentation to the Board of Forestry, December 4, 2014.

Carol L. Rice, Sarah McCaffrey and Molly Mowery. 2013. Community Wildfire Protection Planning. An invited webinar as part of the Planning for Growth and Open Space Conservation webinar series. November 6, 2013.

Carol L. Rice 2012. Planning to Live with Fire: Designing and Retrofitting Communities with Fire in Mind. Webinar presented January 26, 2012. <http://uc-d.adobeconnect.com/p13qjwdmlmk/> California Fire Science Consortium.

Carol L. Rice, Ronny J. Coleman and Mike Price. 2011. Clarifying Evacuation Options through fire behavior and traffic modeling. Presented at the International Association of Wildland Fire Second Human Dimensions of Wildland Fire. 2101. Proceedings available at www.treearch.fs.fed.us and www.iawfonline.org.

Carol L. Rice, Cheryl Miller, and Kenneth Blonski. 2011. Tunnel Fire - 20 Years After. Wildfire Magazine online, September/October 2011. Vol. 20 No. 5.

George Laing and Carol Rice. 2011. Risk Assessment: Fire Protection Planning and Mitigation Options from 30,000 feet. Invited Presentation at the California Fire Prevention Institute, Buellton, CA. March 11-14, 2011. California Fire Prevention Officers.

Kenneth S. Blonski, Cheryl Miller and Carol L. Rice. 2010. *Fire in the Urban-Wildland Interface: Practical Solutions for Local Government, Planners, Fire Authorities, Developers, and Homeowners*. Solano Press, Pt. Arena, CA. 396 pgs.

Cheryl Miller, Ken Blonski and Carol L. Rice. 2010. You too can prevent wildfires. Environmental Monitor. Fall, 2010.

Rice, Carol L., Ronny J. Coleman and Mike Price. 2010. *Incorporating Fire Behavior into Evacuation Plans*. Presented at the International Association of Wildland Fire Conference on Fire Behavior and Fuels. October 24-28, 2010. Spokane, WA. Danielsen Consulting, Inc., East Bay Regional Park District, Ernest Orlando Lawrence Berkeley National Laboratory, Wildland Resource Management, Inc. 2005. Vegetation Management Almanac for the East Bay Hills. Published by the Hills Emergency Forum, Berkeley, CA.

Rice, Carol L., Kate Bolton, and Rich McClure. 1997. Maintenance program for a fire-safe sustainable landscape at the Ernest Orlando Lawrence Berkeley National Laboratory. The Second International Wildland Fire Conference. May 25-30, 1997. Vancouver, BC.

Rice, Carol L. and Cheryl Miller. 1997. Working to have it all in the urban wildland interface: Ways to minimize environmental impacts of fuel reductions at the urban wildland interface. Fire in California Ecosystems: Integrating Ecology, Prevention and Management, Nov. 17-20, 1997, San Diego. In press.

Rice, Carol L. 1997. The role of land use planning in reconciling fire safety and ecosystem management. Invited presentation at the California Under Fire - A Prescription for a Fire Safe future, Partnership Summit, Diamond Bar, CA. June 24-26, 1997. pg 8 *In* Summary Report. Forest Resources Assessment Program, California Department of Forestry and Fire Protection.

Rice, Carol L. and Cheryl Miller. 1997. FARSITE modeling in the urban/wildland intermix. pgs 561-570 *In*: 13th Conference on Fire and Forest Meteorology. International Association of Wildland Fire, Lorne, Australia, October 26-31, 1996.

Rice, Carol L. 1996. Fire Ecology. pgs. 162-176, Chapter 14 in California's I-Zone: Urban/Wildland Fire Prevention and Mitigation, Training textbook, compiled and edited by California Fire Marshal Office.

Rice, Carol L. 1996. Fire Hardening your home. pg 15-20 *In* After the Vision Fire - Restoration, Safety & Stewardship for the Inverness Ridge Communities. Published by the Environmental Action Committee of West Marin. 83 pg.

Rice, Carol L. and Cheryl Miller. 1994. Regional vegetation management for fire hazard reduction in the wildland-urban interface of the East Bay Hills. Invited presentation to the Annual Conference of the National Fire Protection Association, May 17, 1994, San Francisco, CA.

Memorandum

TO: Dee Williams-Ridley, City Manager
FROM: Abraham Roman, Interim Fire Chief
DATE:
SUBJECT: Community Wildfire Protection Plan with Geospatial Hazard and Risk Analysis (CWPP)
for *Wildland Res Mgt*

Recommendation:

We are requesting City Manager approval to enter into an agreement with *Wildland Res Mgt* prior to City Council ratification. We are requesting a waiver of competition due the proposed vendors extensive experience with Berkeley and the adjacent jurisdictions of Oakland, Contra Costa County and Tilden Regional Park. These are the areas where a catastrophic wildland fire could likely be sparked and then travel into the City of Berkeley given the right fuel moisture and weather conditions. This vendor local experience, local knowledge and local data, along with their local networks of subject matter experts makes them the ideal choice for this project.

Approximate contract terms are a base contract period of one year for \$200,000 and two, two-year extensions for a total not to exceed of \$400,000.

Background:

The CWPP will review the threat of wildfire, values at risk, need for action, and community support. It will provide detailed next steps, "buy-in" for project actions and further actions to guide the Fire Department through this complex process. After careful analysis, we suggest entering in to contract with *Wildland Res Mgt* who has a long history of identifying Wildland Fire Hazard and Risk in our local region, and across the state.

Wildland Res Mgt, a Nevada Corporation, is a consulting firm that emphasizes wildland fire management in the urban-wildland interface. Several projects entailed preparation of fire management plans for large landowners in areas of sensitive species and concerned communities. Other projects have involved the use of state-of-the-art fire behavior prediction systems or developed training programs.

Carol Rice, and Wildland Res Mgt have developed a notable "track record" and is respected for the quality of work produced; a section of projects follows. In addition, Cheryl Miller, RLA will be assisting this effort. Ms. Miller is currently the staff providing essential services to the Hills Emergency Forum, and is the Executive Director of the Diablo Fire Safe Council. In these capacities, she has worked with all jurisdictions neighboring the City of Berkeley to secure funding, develop Community Wildfire Protection Plans and develop Firewise Communities.

Below you will find a partial list of their projects including many that involve the City of Berkeley and its neighbors (See CWPP Experience.pdf for full list). Wildland Res Mgt is a local expert with significant existing regional knowledge and contacts would add significant value to the Berkeley project.

- Fire Mitigation Program Support, University of California, Berkeley
- Technical Support for Preparation of Environmental Documents, City of Oakland, Hills Emergency Forum, and Claremont Canyon Conservancy
- Wildland Fire Management Plan and Update to the Fire Hazard Reduction Plan, Lawrence Berkeley National Laboratory

- Wildfire Hazard Reduction and Resource Management Plan and Programmatic EIR/EIS East Bay Regional Park District, through LSA, Inc.
- Fire Behavior Modeling of Wildland Interface Fuels, Moraga Orinda Fire Department
- Fire Hazard Reduction Study, Orlando Lawrence Berkeley National Laboratory
- Environmental Compliance Strategy and Best Management Practices Development for Fire Management Projects in Alameda and Contra Costa Counties, Diablo FireSafe Council, through EDAW, Inc. (now AECOM)
- Parcel-based Risk Assessment, Contra Costa Consolidated Fire Protection District
- Fire Behavior Modeling, Gaming, City of Oakland, through Amphion, Inc.
- Vegetation Management Plan of the East Bay Hills, Consortium of the Cities of Berkeley, Oakland, Piedmont, and East Bay Regional Park District, East Bay Municipal Utilities District, and University of California, through Amphion, Inc.
- Litigation Support For Fire Management Considerations After the Oakland Fire. Larson & Burnham.
- Homeowner Education Program and Hazard Reduction Guidelines Development; Berkeley City Fire Department
- Evaluation of Fire Behavior in the Berkeley/Oakland Hills; East Bay Regional Park District

This contract will allow for an initial and on-going risk and hazard analysis. The plan will require updating with time including the addition of mitigation data, and the addition of new updated Hazard Mapping. For Example, CalFire will be completing a high-resolution Fire Hazard Mapping project for all of Alameda County, including Berkeley, in late 2022; and, they will be completing a 5-meter, Fine Scale Fuels Model for all of Alameda and Contra Costa counties in the Fall of 2024. Both of these mapping data sets could be utilized to update and the Berkeley plan to keep it current.

If approved, we will actively work with CoB General Services, Finance, and *Wildland Res Mgt* to complete the required forms and documents to enter into agreement (See CWPP Scope of Work.docx and CWPP Project Timeline.docx). We will work to submit this agreement for City Council approval as soon as is practical.

Attachments:

1. CWPP Scope of Work.docx
2. CWPP Project Timeline.docx
3. CWPP Experience.pdf

City of Berkeley Community Wildfire Protection Plan Project Overview

Tasks	Timeframe	Outcome/ Results/ Deliverables
<p>Kickoff and Community Base Map (Steps #1-3)</p> <p>Convene decision-makers (minimum = Wildlife Res Mgt, local government, Berkeley Fire Department, and Cal Fire.</p> <p>Engage interested parties. Develop informational materials regarding process and stakeholder involvement.</p> <p>Develop a layered Community Base Map based on existing state and local assessments.</p>	<p>Date and location to be determined</p>	<p>Project Kick Off – Working Session #1 – requirements of a CWPP, schedule, additional stakeholders, community base map and existing local assessments.</p>
<p>Hazard and Risk Assessment (Steps #4)</p> <p>Prepare hazard and risk assessments</p>	<p>Date and location to be determined</p>	<p>Project Working Session #2</p>
<p>Projects & Priorities (Steps #5-6)</p> <p>Review hazard and risk assessments that identify:</p> <ul style="list-style-type: none"> • Fuel hazards • Risk of wildfire occurrence • Homes, business & critical infrastructure at risk • Other community values at risk • Local preparedness & firefighting capabilities. <p>Discuss “Fuels Reductions Projects and Prevention Strategies” and “Recommendations to Reduce Structure Ignitability.”</p>	<p>Date and location to be determined</p>	<p>Project Working Session #3 – Recap Session #1. Community hazard and risk assessments. Potential projects.</p>
<p>Action (Step #7) Assessment Priorities and Action Plan</p> <p>Develop “Assessment Strategy” and “Action Plan.” Identify recommendations, priorities, roles, responsibilities, funding needs & timetables for highest priority projects.</p>	<p>Date and location to be determined</p>	<p>Project Working Sessions #4 - Recap sessions #1 & 2. Action Plan and Assessment Strategy.</p>
<p>Plan Review (Step #8)</p> <p>Develop Admin Draft Plan.</p> <p>Circulate Draft Plan for Public Review and Comment.</p>	<p>Date and location to be determined</p>	<p>Project Working Session #5 Admin Draft Plan</p> <p>Public Comment on Draft Plan.</p>
<p>Final Berkeley CWPP (Step #9)</p> <p>Finalize the “Community Wildfire Protection Plan” and present for approvals.</p>	<p>Final Plan for Approvals</p>	<p>Presentations to adopting bodies – Berkeley City Council & Cal Fire.</p> <p>Update of Final Plan Materials.</p>

Scope of Work & Deliverable Products

For Berkeley Community Wildfire Protection Plan Support

The project is divided into six tasks serving as milestones over a total of 9 months (November 1, 2021 through xxx).

The Berkeley Community Wildfire Protection Plan (CWPP) will review the threat of wildfire, values at risk, need for action, and community support. The CWPP will provide detailed next steps, “buy-in” for project actions and further actions. The task will meet or exceed the required steps outlined in the handbook “Preparing a Community Wildfire Protection Plan.” <https://www.forestsandranqelands.gov/communities/documents/cwpphandbook.pdf>

Task 1 Convene Decision-makers and Interested Parties: Wildland Res Mgt will work with the Berkeley Fire Department (BFD) to develop a list of key decision-makers to form the core CWPP advisory group. Together Wildland Res Mgt and BFD will request participation in the advisory groups from the required signators: local government, fire department and CAL FIRE. Wildland Res Mgt will develop informational materials regarding the planning process and participation opportunities. Wildland Res Mgt will e-mail invitations to potential interested organizations and a range of stakeholders based on the list developed with BFD.

Task 1.1 Working Session #1 - Kickoff Hazard and risk assessment. The first in a series of working sessions will discuss the requirements of a CWPP and begin to create a wildfire community base map. A layered community-based map will be developed by Wildland Res Mgt with input from BFD based on existing state and local hazard assessments. The BFD shall avail the City of Berkeley (COB) GIS Mapping, Lidar, and other databases. Wildland Res Mgt will develop an agenda for the working session, oversee the schedule, and presentation materials. A written summary will be prepared following the working session.

Task 2. Working Session #2 – Geospatial Hazard and Risk Assessment: The second working session will commence the Berkeley wildfire hazard and risk analysis process. Wildland Res Mgt, BFD staff, and COB IT staff will identify already-completed databases and analyses the city can utilize. Wildland Res Mgt may leverage these analyses to develop more granular or site-specific depiction of conditions and prediction or assessment of wildfire hazard and risk. Wildland Res Mgt will develop a novel geospatial hazard and risk assessment that includes a variety of factors (topography, fine-grain vegetative fuels, structure characteristics and density, access, fuel mitigation, powerlines, typical traffic). Wildland Res Mgt will work with the BFD to identify both the factors (or themes) as well as the weights (relative importance) of each of those factors or themes. Each theme will be its own analysis, depicting varying levels of steepness, degrees of structure ignitability in types of construction materials, classes of vegetation density, widths of streets, locations where curvature may block response, and, of course, fire behavior characteristics (flame lengths, ember production, rates of fire spread). The combination of these themes will result in both a geospatial hazard assessment and a geospatial risk assessment, based on the relative importance of each theme, and the values assigned to the classes in each of the themes.

One possibility is to create the Wildfire Hazard Assessment by combining these various themes into factors that affect:

1. Fire behavior
2. Ignition Sources
3. Owner Intervention
4. Suppression difficulty

Wildfire Hazard Summary – Wildland Res Mgt shall arrange a wildfire hazard story map by topography (watersheds) and shall list each geographic region of concern in priority order. Wildland Res Mgt shall provide a summary of each geographic region of concern and highlight the associated hazards such as extreme fire behavior predictions, proximity to ignition sources, high population density, limited egress, or difficult suppression ingress. The wildfire hazard summary shall be *Linked* to the Berkeley Wildfire Hazard Assessment Story Maps.

Risk Assessment – If sufficient data is available, Wildland Res Mgt shall calculate overall risk from a Wildfire. Wildland Res Mgt shall combine the weighted factors for calculating wildfire intensity and likelihood (Hazard assessment) with the weighted factors for calculating community susceptibility and vulnerability (values assessment) – Hazards + Values = Risk. Wildland Res Mgt shall attempt to provide mapping that reflecting the calculation of wildfire risk.

A written summary will be prepared following the working session.

Task 3. Working Session #3 – Projects and Priorities: The third working session will prioritize potential hazard reduction strategies and identify recommendations, roles, responsibilities, funding needs and timetables for the highest priority projects. A written summary will be prepared following the working session.

Task 4. Working Session #4 - Assessment Priorities and Action Plan: Wildland Res Mgt shall collaborate with fire department staff in determining priority of projects such as evacuation corridors, perimeter fuel break, life safety, property damage, natural resources, funding, etc.

Wildfire Res Mgt shall work with BFD staff to develop a unique coding to identify project and categories. Examples of project categories can include but are not limited to:

Fuel Management
Wildfire response support
Community education and outreach
Planning

Wildland Res Mgt shall collaborate with BFD staff to create an action plan for implementing the CWPP projects. The action plan should define the scope, partners, and type of resources needed for implementation, funding source, and general level of funding that might be required. The action plan will be linked to CWPP on-line hub.

Task 5. Working Session #5 - Plan Review & Develop Admin Draft Plan (Step 8). An Administrative Draft Berkeley CWPP will be prepared to document the hazard assessment, risk assessment, mitigation strategies and action plan developed with the stakeholders in the first three sessions. The Administrative Draft Berkeley CWPP will be presented at the working session #5.

Comments from working session #4 on the Administrative Draft will be incorporated into a Public Draft CWPP document that will be posted on the BFD website and circulated electronically for public comment.

Task 6. Final Berkeley CWPP Adoption: Comments will be incorporated into the Final Draft CWPP. BFD and Wildland Res Mgt will coordinate with agency partners for signatures on the Final Berkeley CWPP. Final CWPP will be posted on the Berkeley Fire Department website and available electronically.

Deliverables:

- Working session summaries (5) – electronically distributed.
- Administrative Draft Berkeley CWPP - electronically distributed
- Public Draft Berkeley CWPP - electronically distributed
- Final Draft Berkeley CWPP for approvals electronically distributed
- Final Berkeley CWPP– posted on website and electronically distributed in HUB Format

Final Berkeley CWPP On-line Hub Format Linked to BFD Home Page

Wildland Res Mgt will develop the on-line Hub where existing conditions such as a Community Base Map, and results of the hazard and risk assessment are shared. The hub will include a pre-view of the features available, a set of frequently asked questions, a community base map, the results of the hazard and risk assessments, status of Firewise communities in the city, and map of suggested and previously completed projects and more. The maps, data and plans will be downloadable and updatable.

The final Berkeley CWPP, related documents, and Hub site will be updatable as conditions and assessment change, because of certain triggers, spanning project completion, disturbances such as wildfire or earthquakes, or because of changes in priorities and policies.

Wildland Res Mgt and BFD will determine exact Hub Content such as:

Hub Section 1- Contains preview tiles and description of each linked tile:

Link 1: Berkeley Community Wildfire Protection Plan

Link 2: Berkeley wildfire Hazard and Risk Assessments

Link 3: Berkeley CWPP Project Action Plan

Link 4: Berkeley CWPP Project Map with tools and layers

Link 5: Berkeley CWPP Community Base Map annex (Annexed to existing wildfire threat mapping from surrounding fire jurisdictions)

Link 6: Berkeley Firewise Neighborhood Groups Fire Reduction Projects (geodata based)

Link 7: Vision 2050

Hub Section 2 - Contains “What’s Here links” and “How To with link to Video tutorial”
Hub Section 3 - Contains “Frequently Asked Questions”

Services to be Provided by City of Berkeley

1. Communications to stakeholders and community members via website, social media and media releases.
2. GIS mapping and Lidar services.
3. Copying and Printing (meeting materials, draft and final plans).
4. Meeting facilities.
5. Fire Department and City Staff participating in planning and working sessions.

Chin, Khin

From: May, Keith
Sent: Wednesday, October 27, 2021 8:42 AM
To: Nancy Rader (nraderhome@gmail.com)
Cc: Chin, Khin; Riggs, Steven; Lee, Aaron; Jose Luis Bedolla
Subject: Fire Prevention Inspection Program
Attachments: FirePreventionResponse-Rader Expanded Questions on FF Inspection Program (10-18-21).docx

Good Morning Commissioner Rader,

Attached are the answers to your questions dated October 18th regarding Fire Inspection Program that Fire Marshal Riggs has provided.

Best,

Keith May

Assistant Chief, Special Operations Division
Public Information Officer
Berkeley Fire Department
2100 Martin Luther King Jr. Way
Berkeley, CA 94704
510-981-5508 office
510-693-2221 cell
kmay@cityofberkeley.info

"We are what we repeatedly do. Excellence, therefore, is not an act, but a habit." Aristotle



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October 18, 2021

To: Disaster & Fire Safety Commission

From: Commissioner Rader

cc: Chief May, Khin Chin

Re: Questions Regarding Fire Prevention Inspection Program

I would like for the Commission to consider, together with the Fire Department/OES, how to maximize the effectiveness of the Measure-FF-funded Fire Prevention Inspection Program in reducing Berkeley's fire risk as quickly as possible. To do that, the Commission needs more information about how the current program is being implemented and, to that end, I hope to receive answers to the following questions as soon as possible. Thank you!

1. Which properties are inspected first?

- a. Geographic plan (e.g., start at eastern ridge, work west)?
- b. Or prioritize based on hazards? E.g.,
 - i. Flammable vegetation (e.g., eucalyptus), dense undergrowth and debris,
 - ii. Large concentrations of the above, and/or
 - iii. Homes at risk of ignition from proximate vegetation and fuel ladders

ResponseFP1a-b: Our prioritization method is a hybrid model. Priorities start at the traditional Hazardous Fire Area inspection area east of Grizzly Peak Blvd. This is the traditional 'green belt' protection area adjacent to East Bay Regional Parks lands. Our inspection plan involves working west from this location. For the expansion of the Defensible Space (DS) inspection program towards the West, we have prioritized the areas shown as having the highest fire potentials and severities by CalFire's fire modeling.

- c. What does the fire science say about which of these should be our top priority?

ResponseFP1c: There is a significant amount of science which underlies the CalFire fire modeling and the resulting maps published by CalFire and used by BFD for prioritization. In CalFire's modeling terrain is assigned a score based on numerous factors that predict both fire likelihood and fire behavior. Factors include past fire history, existing and potential vegetation fuels, predicted flame lengths, blowing embers, terrain, aspect (compass facing) of the terrain and typical fire weather.

2. What is required of property owners?

- a. **How is BFC 4907.2 being interpreted?**
 - i. How is subsection 4 -- "create space between plants, and between plants and structures" -- applied? For example, must a hedge in between two closely spaced homes be removed?

ResponseFP2a1: Under the existing statutes (which may change somewhat in January of 2024 with the State mandated 'Ember Resistant Zone'): Within each Defensible Space (DS) plant modification 'prescriptions' are made to achieve the goals of vegetation management within that DS. Within 0 ft – 30 ft from structures there are a number of DS goals, including the removal of potential sources of ignition that may be in contact with or very near to a structure, reducing ignitions in this space, reducing the heat output of materials, preventing fires from reaching tall plant crowns and/or forcing crown fires to the ground, etc. One major goal is to modify the landscape to allow individual plants to burn without involving structures or spreading appreciably to adjacent vegetation. This is achieved by

creating vertical and/or horizontal separation (or some combination of these) between plants or groups of plants, and other plants or structures. CalFire uses research, testing and anecdotal evidence to develop separation guidelines for plants. Current standards state that vertical clearance should be a minimum of three-times a fuel's height (i.e. 2 ft high bush needs 6 ft clearance, or a minimum of 8 ft vertical clearance above the ground for the plant canopy above). For horizontal separation the standard varies by type of vegetation and slope. Ideally, tree crowns should be separated by 10 ft – 30 ft (depending on slope). Shrubs should be separated by 2x – 6x their height (depending on slope).

It is difficult to answer hypothetical questions specifically. The type and location of vegetation can also have some bearing. In some cases of the hedge example you used the hedge could be trimmed up from the ground, cleaned and trimmed to reduce it's volume an may be safe to remain. In other cases, removal of part of all of the hedge may be more appropriate.

- ii. Must the owner of a large property with many trees treat the entire property to comply with subsections 8-12? (i.e., "remove branches within 10' of the ground (limbing)"; "remove dead wood and thin crowns"; "provide separation distance between trees / shrubs"; "remove understory / brush / ground fuel below trees"; thin stands of trees / shrubs"; "cut grass/weeds"; "strip loose tree bark to 8 feet from the ground")

Response FP2a2: State law technically makes a property owner responsible for providing defensible space on their property out to a distance of 100 ft. from structures. However, the same law allows for varying intensity of vegetation management between 0 ft. – 30 ft. and 30 ft. – 100 ft. from structures. Based on our local lot size and geometry the Berkeley Fire Department is concentrating on the space 0 ft. – 30 ft. from structures as well as within 10 ft. of road and street frontages. There may be some circumstances where DS greater than 30 ft. is necessary and achievable, but these will be exceptions rather than the rule. There is no requirement to 'groom hillsides' (i.e. to cut/trim vegetation just to cut vegetation). Vegetation management is required where conditions in one of the defensible spaces around a structure or other target area require it.

- iii. Are these requirements being uniformly applied?

Response FP2a3: We are making substantial efforts to ensure that there is as much uniformity of enforcement as possible. There are many factors which effect vegetation management, including factors which effect fire ignition and behavior (see response FP1c), the fire resistance of materials used to construct a structure, etc. BFD necessarily has dozens of personnel conducting these inspections. Any property owner with questions regarding DS findings has the ability to contact the inspector of record for clarification, and/or appeal to the individual supervising the DS field inspection function. This gives our supervising personnel the opportunity to 'normalize' inspections across different inspectors when necessary.

3. Process, Enforcement & Fees

- a. Do residents receive an advance notice with a specific date of inspection? **No, based on the number of properties that we need to inspect and the variability of inspector time and complexity of each situation we are unable to provide specific dates for DS inspections**
- b. Are residents who are found to be out-of-compliance left with a specific list of overgrowth to remedy? **A list of corrections is provided. We find that often times property owners with questions will contact BFD to request a meeting with inspection**

personnel. We hope to be able to offer digital photographs to accompany inspection reports in the near future.

- c. How much time do residents have to comply? The standard correction window BFD is using is 30-days from date of initial inspection. This correction window can be modified depending on the scope of work required, etc. Property owners can contact inspectors to discuss correction time frames if needed.
- d. Is there a re-inspection? Is there a re-inspection fee? We are conducting re-inspections of non-compliant properties. The department's standard business practice is to not bill for a re-inspection if all violations have been abated. For situations where violations have not been abated our standard inspection fee is charged on a time-at-property basis (\$98 per qtr. hr.)
- e. What happens in the event of willful non-compliance? Is there a schedule of fees? Can properties be redressed by force? The fire department uses the standard City code enforcement process (policies/procedures as set forth in BMC 1.24) if/when it becomes necessary to cite violations of this or any other fire code provision. Citation is a last resort and we prefer to use the administrative (non-criminal) citation process when possible. There is some latitude in fines to allow for enforcement personnel to vary fines with the severity of the offense, but generally the fine escalation is \$100, \$200 and \$500. It is possible to abate a property using an abatement warrant from a court. There are numerous steps between a Notice of Violation and an actual abatement, with numerous opportunities for a property owner to appeal during the process.

4. Affordability Issues

- a. What accommodations are available for residents who cannot afford to manage the overgrowth?
 - i. Lien applied to property

Liens can be applied to properties in situations where the City has had to abate a hazard and where for some reason a property owner is unable or unwilling to take responsibility. BFD is researching available models of liening properties for DS work. The lien process generally involves all of the steps and due-process provisions which normally lead up to a court abatement warrant.

- ii. If there are subsidy funds available, what are the criteria for disbursing those funds?

Response FP4a1-2: BFD and many other stake holder organizations in the State (including CalFire and Cal. Office of Emergency Services, CalOES) have identified a need for solutions including financial aid or grants for low-income or otherwise disadvantaged parties to allow them to achieve Defensible Space. CalFire currently has some existing grant programs that tend to focus on DS projects in disadvantaged communities where the mitigation has a community wide impact. CalFire / CalOES are also working aggressively on several grant programs for the future. These proposals involve FEMA funding with State matching funds and would apply to residents that meet a 'means test' for need. Pilot programs for these concepts are under way and testing may take place in 2022-2023 time frame. The use of local funds in some manner hasn't been ruled out by BFD but available funds may be better spent if we can get matching State / Federal funds in the near future.

- b. For large properties where treatment will be very costly (e.g., dozens of large trees; substantial build-up of debris), is there accommodation for property owners to comply over an extended period of time?

Our current strategy is to prioritize the 0 ft – 30 ft zone from structures and 10 ft. from

roadways. There may be some unusual circumstances where a 100 ft defensible space clearance is required and achievable. Where the scope of a defensible space project is unreasonably large we can and will discuss the concept of phasing defensible space work with a large-scope over a period of time. However, we will still prioritize work closest to structures and generally a 30 ft. strip of DS would not be considered a large scope project.

- i. Can Measure FF funds be used to accelerate the treatment of high-hazard areas?

There have been some Measure FF funds detailed to COB Urban Forestry to fund the trimming or removal of trees along roadways that were identified as needing abatement to reduce risks to the evacuating public or first responders. To date, there hasn't been a situation where this need has been identified on public lands for large scale abatement projects or has occurred to assist a private property owner.

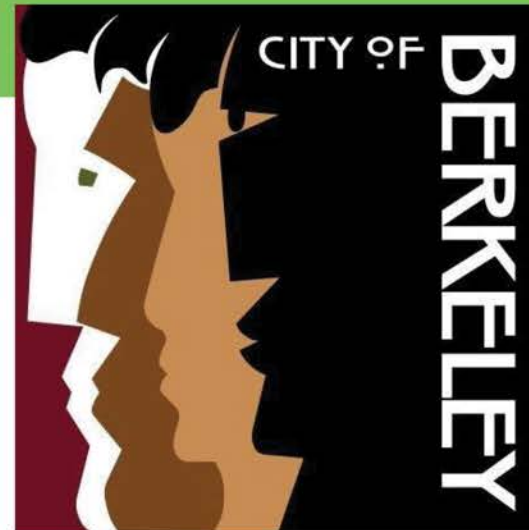
- ii. Criteria? To Be Determined

5. Regulatory scope

- a. Is the current Fire Code adequate to enable all necessary Department actions? The Berkeley Fire Department currently has all of the legal authority we need to pursue implementation of defensible space (both in local ordinance and State statutes). The biggest challenge currently is the staffing necessary to implement the program.

Vision 2050

Pathway to Sustainable and Resilient Infrastructure
by a November 2022 Revenue Measure and More



What is Vision 2050?

A long-term plan to integrate solutions for sustainable and resilient infrastructure to meet the serious challenges of the future, including climate change.

Core Values for Infrastructure Development



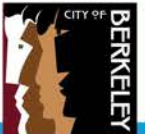
What Is Driving the Problem?

- Most streets, sidewalks, sewers, parks, playgrounds, public buildings, etc. were built over 75 years ago
- Revenues cannot keep pace with the rapid decline of aging infrastructure and the need for investments in sustainability and housing affordability
- Devastating impacts of climate change – resiliency and green infrastructure are even more important
- \$1 Billion in deferred maintenance in our infrastructure due to past underinvestment



What Is the Goal?

- Create a dedicated source of funding to make a substantial impact on Berkeley's infrastructure, housing and sustainability needs
- Develop an infrastructure program plan that reflects community priorities
- Ensure the funding and infrastructure projects are equitable



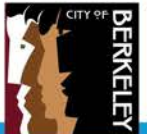
What Has Already Been Done?

- **Measure M** – Passed in 2012, \$30 million infrastructure bond for street improvements/green infrastructure
- **Measure T1** – Passed in 2016, \$100 million infrastructure bond to repair/replace aging infrastructure and facilities
<https://www.cityofberkeley.info/MeasureT1Updates.aspx>
- Both measures started this important work, but additional funding is needed to implement Vision 2050



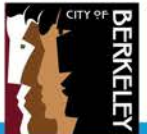
What We Need from You?

- Take our survey: www.tinyurl.com/2050Survey
- Your input on:
 - State of local infrastructure
 - Availability of and access to affordable housing
 - Readiness for the impacts of climate change
 - Ensuring equity
- Your input on potential funding priorities for Vision 2050 in the near-term and long-term
- Your feedback on potential funding mechanisms



What are Your Priorities?

- Streets Reconstruction
- Traffic Safety
- Sidewalk Repair
- Underground Utilities
- ADA- Accessibility
- Infrastructure for Bicyclists/
Pedestrians
- Trees
- Old City Hall/Veterans Building
- Affordable Housing
- Seismic Safety
- Natural Gas Lines
Decommissioning
- Climate Change Resiliency
- San Pablo Park Pool and Center
- Solar Energy and Electric
Vehicles
- Marina Docks, Pilings, Dredging
- Playgrounds
- Storm Drains
- Green Infrastructure
- Senior Centers
- Berkeley Pier/Ferry
- What else?



\$1B in Local Infrastructure Needs



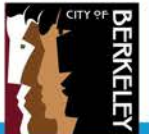
Streets & Sidewalks



Affordable Housing



Bike, Pedestrian & Traffic Safety



\$1B in Local Infrastructure Needs



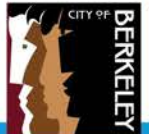
Marina, Waterfront
& Shoreline



Climate Change, Sea
Level Rise & Wildfire Risk



Access to Transit



\$1B in Local Infrastructure Needs



Sewers, Storm Drains & Creeks to
Protect Water Quality



Green Infrastructure



Aging Parks, Playgrounds,
Restrooms & Public
Buildings



Local Funding Mechanisms

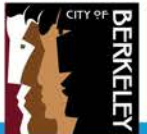
Tax Type	Amount	Est. Total Funding	Avg. Cost Per Year	Tax Basis	Use of Funds	Tax Model	Exemptions
Infra. Bond	\$27 per \$100,000 AV	\$250m	\$200	\$ Assessed value	Capital only	Most progressive	No
	\$54 per \$100,000 AV	\$500m	\$400	\$ Assessed value	Capital only	Most progressive	No
Parcel Tax	15¢ per sq foot	\$250m (~\$12m/yr)	\$300	\$ per building sq foot	Capital + Maint.	Progressive	Low income/senior
	30¢ per sq foot	\$500m (~\$25m/yr)	\$600	\$ per building sq foot	Capital + Maint.	Progressive	Low income/senior
Sales Tax	0.5¢ per \$1.00	\$9m/yr	Varies – 10.75% total rate	Taxable purchases	Capital + Maint.	Least Progressive	Yes*

**Essential purchases like groceries and prescription medicine are exempt*



Current Work --> Long-Term Vision

- Opinion polling of community to understand public priorities for investment and feasibility of various revenue measures
- Meetings with diverse community groups and stakeholders (residents, businesses, community orgs, advocates, etc.)
- Input gathered through polling/outreach will help identify priorities for a 2022 revenue measure and a long-term program plan to address infrastructure needs through 2050



Timeline to 2050

2012-Now

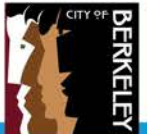
- Measures M & T1 address first phase of infrastructure needs
- Measure R/Vision 2050 and community engagement
- City Council adopts Vision 2050 framework
- City Manager forms Vision 2050 Implementation Team

Now – 2022

- Engage community to develop priorities for continued investment
- Council worksession in January 2022
- Develop program plan by February 2022
- Finalize funding mechanism for a November 2022 ballot measure by May 2022

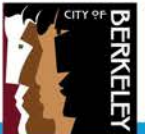
2022-2050

- Use feedback/lessons from 2022 revenue measure to develop future phases – thinking long-term about local priorities and how to fund them
- Fully implement Vision 2050



How YOU Can Help

- Send questions/comments to Vision2050@CityofBerkeley.info
- On **November 1**, visit www.tinyurl.com/2050Survey and complete our Online Survey to let us know what local issues are important to you
- **Spread the word!** Share this survey with friends, neighbors and family to help us get a better understanding of community priorities



DISASTER & FIRE SAFETY COMMISSION

FY 2021 YEAR END BUDGET

October 27, 2021

FY2021 Year End Expenditures

Program	FY2021 Original Budget	FY2021 Revised Budget	FY2021 Actuals				FY2021 Available Budget	FY2021 Total Actuals	FY2020 Actuals
			Q1 July-Sept. 2020	Q2 Oct.-Dec. 2020	Q3 Jan.-Mar. 2021	Q4 Apr.-June 2021			
Disaster Prep	\$ 1,098,490	\$ 1,098,490	\$ 226,795	255,230	225,033	235,763	\$ 155,668	\$ 942,822	\$ 897,112
FRALS	\$ 781,252	\$ 781,252	\$ 141,089	194,515	51,161	99,501	\$ 294,985	\$ 486,267	\$ 864,418
Minimum Staffing	\$ 2,234,254	\$ 2,029,239	\$ 1,004,583	1,143,499	70,015	974,945	\$ (1,163,802)	\$ 3,193,041	\$ 2,618,604
Radio Interoperability	\$ 356,941	\$ 349,441	\$ 5,357	6,309	5,952	46,648	\$ 285,174	\$ 64,267	\$ 333,497
Training	\$ 293,907	\$ 293,907	\$ 65,188	92,630	74,715	89,336	\$ (27,962)	\$ 321,869	\$ 306,177
Community Outreach - HHCS	\$ 239,315	\$ 236,621	\$ 30,427	45,359	43,155	85,195	\$ 32,485	\$ 204,136	\$ 137,856
Totals	\$ 5,004,159	\$ 4,788,950	\$ 1,473,439	1,737,542	470,031	1,531,388	\$ (423,451)	\$ 5,212,401	\$ 5,157,664

Note: Minimum Staffing actuals are high due to COVID-19 coverage

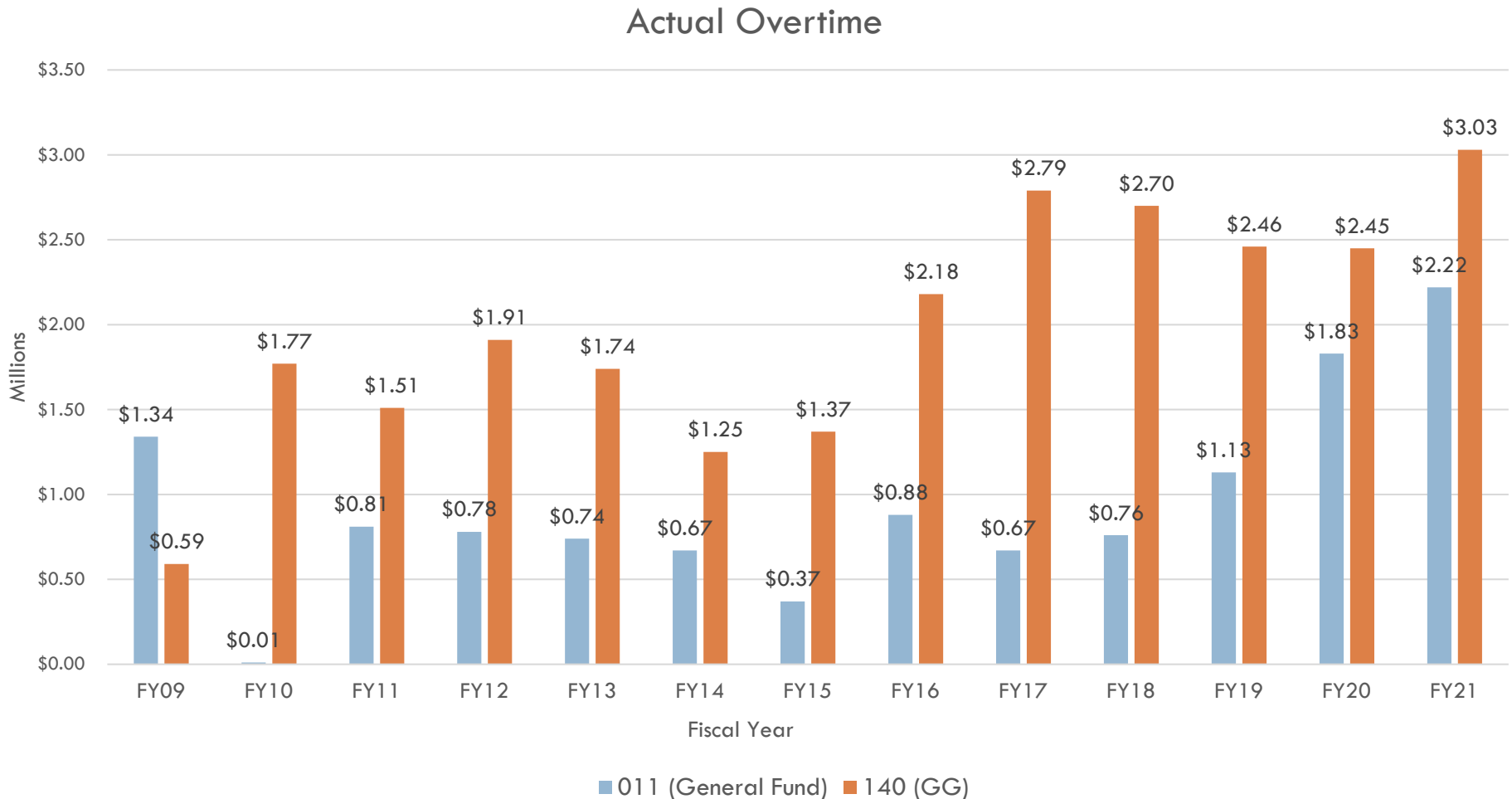
FY2021 Program Expenditures

<u>PROGRAM</u>	<u>EXPENSE</u>
Medical Director Contract	\$72,000

Due to COVID-19, the following programs were on hold:

- Dumpster Program
- Disaster Readiness Classes/Training
- Gas Shut Off Valve Program
- CRC/Cache Program
- 2021 Shakeout & Urban Shield Prog's

FY2021 Overtime by Fiscal Year & Fund



FY2022 Measure GG

Quarterly Expense Tracking

Program	Budget	Actuals				% Budget Available	Available Budget
		Q1 July-Sept. 2021	Q2 Oct.-Dec. 2021	Q3 Jan.-Mar. 2022	Q4 Apr.-June 2022		
Disaster Prep	\$ 1,188,442	\$ 210,697				82%	\$ 977,745
FRALS	\$ 613,172	\$ 11,880				98%	\$ 601,292
Minimum Staffing	\$ 2,392,254	\$ 303,176				87%	\$ 2,089,078
Radio Interoperability	\$ 670,662	\$ 5,421				99%	\$ 665,241
Training	\$ 300,742	\$ 121,237				60%	\$ 179,505
Community Outreach - HHCS	\$ 242,527	\$ 23,389				90%	\$ 219,138
Totals	\$ 5,407,799	\$ 675,800	-	-	-	88%	\$ 4,731,999