

DISASTER AND FIRE SAFETY COMMISSION

REGULAR MEETING

June 26, 2024

7:00 PM

Fire Department Division of Training Classroom – 997 Cedar Street

Mayor's Appointee- Andy Katz

District 1 – Michael Wilson
District 2 – Weldon Bradstreet
District 3 – Todd Darling
District 4 – Robert Kinosian

District 5 – Shirley Dean
District 6 – Greg Murphy
District 7 – Harrison Raine
District 8 – Theo Gordon

AGENDA

Preliminary Matters

Call to Order

Approval of the Agenda

Public Comment on Non-Agenda Matters

Public speakers

1. Chairperson's Report
2. Fire Department Staff Report*

REGULAR AGENDA MATTERS *All Regular agenda Matters are for discussion and possible action.*

- | | |
|--------------------------|----------------------------------------------------------------|
| 3. Action: | Minutes of May 22, 2024 |
| Recommendation: | Approve the draft minutes of the May 22, 2024 regular meeting. |
| Written Material: | May 22, 2024 Draft Minutes |
| Presentation: | N/A |

- 4. Action:** Support Of The Grizzly Peak Mitigation Project (Gordon)
- Recommendation:** Recommendation To Support Vegetation Management in Fire Zones
- Written Material:** Council Report and Resolution
- Presentation:** N/A
- 5. Discussion:** Local Hazard Mitigation Plan Update (Staff)
- Recommendation:** N/A
- Written Material:** First Draft 2024 Local Hazard Mitigation Plan available at <https://BerkeleyCA.gov/Mitigation>
- Presentation:** First Draft 2024 LHMP PowerPoint Presentation
- 6. Action:** Ad-Hoc LHMP Workgroup (Bradstreet)
- Recommendation:** Create ad-hoc Workgroup to document proposed DFSC feedback on First Draft LHMP for action at August 7 2024 meeting
- Written Material:** N/A
- Presentation:** N/A
- 7. Work Group Reports**
Receive reporting on recent activities by the following work groups:
- Plan & Budget Oversight
 - Home Hardening
 - Wildland Urban Interface
 - Safe Passages
 - Community Outreach
- 8. Future Agenda Items and Next Steps**

Adjournment

This meeting will be conducted in accordance with the Brown Act, Government Code Section 54953. Any member of the public may attend this meeting. Questions regarding this matter may be addressed to Keith May, kmay@berkeleyca.gov 510-981-5508.

Communications to Berkeley boards, commissions or committees are public record and will become part of the City's electronic records, which are accessible through the City's website. Please note: E-mail addresses, names, addresses, and other contact information are not required but, if included in any communication to a City board, commission, or committee, will become part of the public record. If you do not want your e-mail address or any other contact information to be made public, you may deliver communications via U.S. Postal Service or in person to the secretary of the relevant board, commission, or committee. If you do not want your contact information included in the public record, please do not include that information in your communication. Please contact the secretary to the relevant board, commission, or committee for further information.

Any writings or documents provided to a majority of the commission regarding any item on this agenda will be made available for public inspection at Berkeley Fire Department located at 2100 Martin Luther King Jr. Way Berkeley, CA.

COMMUNICATION ACCESS INFORMATION:

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I hereby certify that the agenda for this regular/special meeting of the Berkeley City's Disaster and Fire Safety Commission was posted at the front of the Division of Training, 997 Cedar Street, as well as on the City's website, three days prior to the scheduled Commission meeting.

SECRETARY SIGNATURE

DRAFT

## DFSC Staff Report

June 26, 2024

### 1. Measure FF Monthly Report

#### a. Budget Overview –

b. Quarter 1 (July, August, September) report due in November

Quarter 2 (October, November, December) report due in February

Quarter 3 (January, February, March) report due in May

Quarter 4 (April, May, June) End of Year Report **due in October**

#### i. Program Review

- **WUI Interns** – The Interns provide Berkeley Fire Department with a trained, mobile and mission-specific workforce that is principally assigned to monitor vegetative hazardous fuel on or near structures, collect data, and identify reduction activities

- **Updates:** Academy – June 10-27, 2024

- **Wildfire Prevention / Mitigation – Vegetation Management Inspections –**

**Updates:** The WUI team have secured a pathway to provide for one-time clean-up of the understory of eucalyptus groves on private property, secured a grant to help fund the mitigation of vegetation hazards in and around evacuation routes, and anticipate the expansion of the mesh program to help harden homes building on the pilot project from last year. The team continues to expand the Firewise program and are looking forward to more NFPA recognized communities this year.

- **Safe Passage** - The Fire Department has contracted with a vendor to help the City of Berkeley meet requirements outlined in SB 99, AB 747, and AB 1409, provide City with professional services in the areas of traffic and evacuation modeling and planning, given various evacuation and/or emergency response scenarios as determined by the City.

- **Update:** No New Updates.

#### ii. Implementation & Metrics

- **Outdoor Warning System** – No new updates.

# MONTHLY DASHBOARD | May 1 - 30, 2024

Prepared for the Disaster and Fire Safety Commission by the Berkeley Fire Department



## Defensible Space Inspections

### Year to Date- 2024

**1,544** Total Inspections

**407** Violations

**21** Re-Inspections

**757** Inspections

**432** Discoveries

**200** Violations

**0** Citations

### Significant Statistics

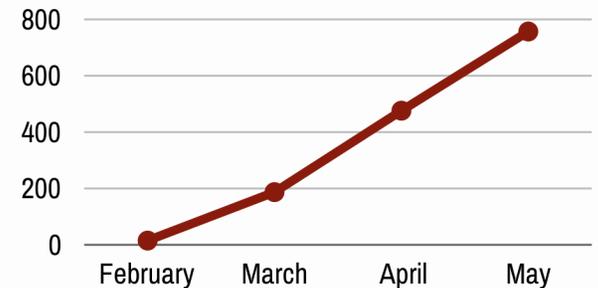
**2** Re-inspections

**75** Resolved Items

**56** Resolved Violations

**27%** Full Inspection Access

## Inspections Access Over Time



## Open Vegetation Program

2024 Program Data

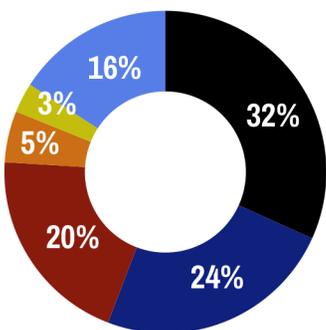
### Chipping

**175** Cubic yards of flammable material removed

**59** Completed pickups city-wide

**8** Weeks Completed

**82%** of surveyed residents stated that the chipping program caused them to remove vegetation on their property



### Types of Vegetation Removed by Residents

- Lower Tree Limbs
- Dead Vegetation
- Vegetation in Zone Zero
- Bamboo/Palms
- Cypress/Juniper
- Other

## Home Hardening Program

2023 Pilot Program Data



**9**  
Residents Who Participated



**54**  
Pieces of Mesh Distributed

## Resident Assistance Program

2023 Pilot Program Data



**17**  
# of Residents



**\$23,399**  
Amount Spent by Residents

**91** Cubic yards removed

**16 hours** Resident touchpoints

## FireWise

2024 Program Data

### Application Status

**5** FireWise Communities (Recognized)

**3** Pending Applications

**16** In-Progress Applications

## Grizzly Peak Grant

Stage 1

- Completed communications plan for the entirety of the grant work
- Built a draft webpage for up-to-date information
- Developed project branding and a program announcement letter that will be shared with stakeholders.
- Initiated contracts for vegetation removal vendors
- Vetting biological monitors

2. Measure GG Monthly Report
  - a. Budget Overview – No new update
  - b. Quarter 1 (July, August, September) report due in November  
Quarter 2 (October, November, December) report due in February  
Quarter 3 (January, February, March) report due in May  
Quarter 4 (April, May, June) End of Year Report **due in October**
  
3. Fire Facilities Master Plan (FMP): Berkeley Fire Department stations are undersized, in poor condition and in need of remodels or replacement. The Department initiated a long-term replacement planning process to better understand infrastructure needs. This process will provide the City leaders of today and tomorrow with actionable information ahead of future infrastructure bond measures. (*Measure FF has funded the study only*)
  - a. Update: **No new update**
  
4. Department Activities
  - a. **Administration Building Lease** – The City Council approved a 20-year lease for a building at Gilman and Ninth St for the new Fire Department Headquarters. The City will acquire these parcels beginning in November of this year through January of 2027. These leases will allow the Department to begin to consolidate operations from 2100 MLK, 1007 University, and 997 Cedar to this facility. The new space will also allow the organization to expand and have adequate space for staff, a proper Emergency Operations Center, multiple classrooms, meeting rooms, storage, wellness center, space to support a BLS division, and adequate off-street parking for all staff.
  - b. Our Dispatch Supervisors received an introduction and training to the new firehouse alerting system. Over the past few months, the new Honeywell Phoenix G2 System has been installed and is now ready to be used. The company that provided the previous system went out of business back in January. This system has been limping along and we can now replace it as soon as our dispatchers have been trained.
  - c. **Transportation Project Tracking:** Staff is continuing to meet with Public Works Transportation Division in an effort to develop a clear, documented process by which transportation projects will move through the city and obtain the necessary input and approvals.
  - d. The Fire Department, with the approval of the City Council, is about to launch a new program to address the high demands of 9-1-1 call volume in the City of Berkeley. We will be deploying a medical unit staffed with a Physician Assistant and a Senior Paramedic that will provide a better and more effective service to the community by adding the benefit of being able to deliver primary health care to patients without having to transport them to the emergency department. This will be a 6-month pilot program, with an option to extend for three additional one-year terms. The unit will be operating during peak hours four days a week on a 10-hour shift. We are anticipating starting this unit towards the end of July.

The services to be provided include, but are not limited to:

- Staff an alternative 911 emergency medical response unit
- Respond to reports of non-life-threatening medical incidents and fire department referrals
  - Connect 911 users with healthcare and social services resources appropriate for their needs
  - Absorb low acuity medical calls for service from the 911 system
  - Provide comprehensive in-home medical care for patients with non-emergent medical complaints
  - Offer patients an in-home option to receive convenient medical follow-up to a 911 call
  - Prevent habitual use of the 911 system for routine medical care
  - Coordinate and connect patients to allied networks of providers through referrals and warm hand-offs when appropriate

5. Grants

- a. **SAFER Grant Planning:** We were not successful in this grant cycle but have retained the services of a grant writer and will be resubmitting in the next cycle.
  - i. No New Updates.

6. Call Volume Report

| <b>Fire Department Report by California Incident Type</b>                                                                   |     |  |
|-----------------------------------------------------------------------------------------------------------------------------|-----|--|
| <b>May 2024</b>                                                                                                             |     |  |
| <b>Fires – including Encampment Fires</b> (structures, mobile properties, vegetation, rubbish, equipment, cooking, chimney, | 42  |  |
| <b>Encampment Fires</b> (structures, warming/cooking, debris)                                                               | 32  |  |
| <b>Explosion - no fire</b> (overpressure ruptures, explosions)                                                              | 0   |  |
| <b>Rescue &amp; EMS</b> (medical assist, vehicle accident                                                                   | 893 |  |

|                                                                                                                                                                                                                            |              |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--|
| <b>Hazardous Condition</b> - no fire<br>(combustible spills/leaks,<br>chemical release, radioactive<br>condition, electrical wiring<br>problem, biological hazard,<br>potential accident w/<br>building/aircraft/vehicles) | 46           |  |
| <b>Service Calls</b> (person in<br>distress, water issue,<br>smoke/odor problem, animal<br>issue, public assist, cover<br>assignment/standby)                                                                              | 104          |  |
| <b>Good Intent</b> (canceled en-<br>route, wrong location, nothing<br>found, steam mistaken for<br>smoke)                                                                                                                  | 100          |  |
| <b>False Alarm Calls</b> (malicious,<br>malfunction, unintentional,<br>biohazard scare)                                                                                                                                    | 183          |  |
| <b>Severe WX</b> (lightening, wind<br>storms)                                                                                                                                                                              | 0            |  |
| <b>Special Incidents</b> (citizen<br>complaints)                                                                                                                                                                           | 3            |  |
| <b>TOTAL</b>                                                                                                                                                                                                               | <b>1,371</b> |  |
| <b>Apparatus Count</b>                                                                                                                                                                                                     |              |  |
|                                                                                                                                                                                                                            | <b>3,061</b> |  |

**DFSC Action Tracker**

| Date of DFSC Action | Description                                                                                                                                                                                                                | Status                                                                                                                                                                                                                                                                                                                                 |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>10/25/2023</b>   | Provide a recommendation to City Council on the development of a plan that includes a feasibility study and identification of funding sources for constructing an emergency secondary access/egress road on Panoramic Hill | Agenda Committee referred the item to Public Safety Committee. The next Public Safety Committee is set for July 15, 2024                                                                                                                                                                                                               |
| <b>3/24/2024</b>    | Support The Fire Department To Fund a Program Manager II Position                                                                                                                                                          | City Council Agenda 5/7/2024. Approved recommendation amended to include: In line with the City Manager's recommendation to refer this item to the budget process, refer to the Fiscal Year (FY) 2024-25 Budget Process \$265,000 to fund a Program Manager II position within the Fire Department to support street trauma prevention |

# DISASTER AND FIRE SAFETY COMMISSION

## REGULAR MEETING

May 22, 2024

7:00 PM

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District 3 – Todd Darling  
District 4 – Robert Kinosian

District 5 – Shirley Dean  
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### AGENDA

#### Preliminary Matters

##### Call to Order

*Meeting called to order at 7:05pm*

*Present: Wilson, Bradstreet, Kinosian, Dean, Murphy, Raine, Gordon, Darling  
[arrived 7:13pm], Katz [arrived 7:14pm]*

*Absent: n/a*

*LOA: n/a*

##### Approval of the Agenda

*Motion to approve: Bradstreet*

*Second: Murphy*

*Vote: Ayes: Bradstreet, Raine, Wilson, Kinosian, Dean, Murphy, Gordon, Darling,  
Katz*

*Nays: 0*

*Abstain: 0*

##### Public Comment on Non-Agenda Matters

0 public speakers.

1. Chairperson's Report – No Chair Report
2. Fire Department Staff Report\*

**REGULAR AGENDA MATTERS** *All Regular agenda Matters are for discussion and possible action.*

- 3. Action:** Minutes of March 27, 2024  
**Recommendation:** Approve the draft minutes of the March 27, 2024 regular meeting.  
**Written Material:** March 27, 2024 Draft Minutes

*Motion to approve with edits: Bradstreet  
Second: Raine  
Vote: Ayes: Bradstreet, Raine, Wilson, Kinoshian, Dean, Murphy, Gordon, Darling, Katz  
Nays: 0  
Abstain: 0*

- 4. Discussion/Action:** Discussion on whether to hold a future DFSC Regular meeting for the missed April meeting.  
**Recommendation:** Approve/Dismiss a future DFSC Regular meeting to make up the canceled April Regular meeting or skip  
**Written Material:** COB Religious-Cultural Holidays 2024

*Item tabled for future meeting agenda.*

*Public speakers: 1*

- 5. Discussion/Action:** Recommendation to City Council on the Measure GG/FF Tax Rate Adjustments

**Recommendation:** Approve/Dismiss the increase to use the 2024 CPI or PIG Tax Rate Adjustments.

*Public speakers: 1*

*Motion to approve: Katz  
Second: Murphy  
Vote: Ayes: Bradstreet, Raine, Wilson, Kinoshian, Murphy, Gordon, Darling, Katz*

Nays: 0  
Abstain: Dean

## 6. Work Group Report

Public speakers: 2

Receive reporting on recent activities by the following work groups:

- Plan & Budget Oversight
- Home Hardening
  - Commissioner Murphy reported out on Workgroup activity.
- Wildland Urban Interface
- Safe Passages
- Community Outreach
- Vision Zero

## 7. Future Agenda Items and Next Steps

- Fulfill by emailing Commission Secretary and Chair

## Adjournment

*Motion to approve: Bradstreet*

*Second: Wilson*

*Vote: Ayes: Bradstreet, Raine, Wilson, Kinoshian, Dean, Murphy, Gordon, Darling, Katz*

*Nays: 0*

*Abstain: 0*

## Meeting adjourned 8:58pm

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SECRETARY SIGNATURE

DRAFT



Disaster and Fire Safety Commission

CONSENT CALENDAR
TBD, 2024

To: Honorable Mayor and Members of the City Council
From: Disaster and Fire Safety Commission
Submitted by: Weldon Bradstreet, Chairperson, Disaster and Fire Safety Commission
Subject: Support Of The Grizzly Peak Mitigation Project

RECOMMENDATION

The Disaster and Fire Safety Commission (DFSC) supports the collaborative efforts of the Berkeley Fire Department, UC Berkeley, East Bay Municipal Utilities District, and East Bay Regional Parks Grizzly Peak Mitigation Project.

The Disaster and Fire Safety Commission publicly endorses and supports the Grizzly Peak Fuel Mitigation Project; a grant funded collaboration between regional partners to reduce the impacts of wildfire and protect evacuation routes through fuel mitigation. This project will better secure high-traffic evacuation routes during a wildfire, slow the spread of fire by transforming evacuation routes into better fuel breaks, and remove dead and/or flammable wildfire fuel from the right-of-way's in the City of Berkeley.

FISCAL IMPACTS OF RECOMMENDATION

The project is funded entirely through grants. Oversight of the program is done by existing staff. There are no direct costs for supporting, or completing, this project.

CURRENT SITUATION AND ITS EFFECTS

Each improved roadway in the City of Berkeley is defined by a right-of-way; a width of city owned space within which a paved road is maintained. To either side of the road, in varying widths, there are sidewalks, planted islands, and sometimes unimproved land that is the responsibility of the city. This area is often overgrown, can have un-mitigated dead plant material, or overhanging branches that are not only a violation of the Berkeley Fire Code, but can severely jeopardize the road and any travelers in the event of an impending wildfire.

Some of these areas have been adopted by local residents and have been maintained to varying levels of compliance with the fire code. Other areas have been left unmitigated except as determined to be hazardous by forestry, PG&E, and other stakeholders. The result is areas of roadways that are overgrown with potentially flammable vegetation, presenting a hazard to evacuating vehicles during a wildfire.

BACKGROUND

Multiple post-incident studies and forensic analyses have been conducted following devastating wildfires in Northern California.¹ These studies have been validated and further refined by UL/NIST in Technical Note 2205² in their research on home hardening and slowing the spread of direct flame impact to residential communities. Thinning of vegetation by removing ladder fuels (fuels that provide a consistent vertical path for fire to travel from ground cover up into the canopy of taller vegetation like trees), creating fuel breaks (space between vegetation), and entirely removing fuels that impinge on structures or roadways have been demonstrated to greatly improve survivability.

The City of Berkeley Fire Department, in partnership with other regional stakeholders UC Berkeley, East Bay Municipal Utilities District, and East Bay Regional Parks, secured a grant of which \$442,000 is currently allocated to within Berkeley's jurisdiction to mitigate the hazards discussed above. There is access to additional funds if needed.

¹ <https://gis.data.ca.gov/search?collection=Dataset&tags=dins>

¹ <https://nvlpubs.nist.gov/nistpubs/TechnicalNotes/NIST.TN.2205.pdf>

ENVIRONMENTAL SUSTAINABILITY

The project itself will remove woody biomass from the Very High Fire Danger Zones of Berkeley, eliminating it as a potential fuel source, and reducing the potential impact of wildfire to the community.

RATIONALE FOR RECOMMENDATION

The recommendation for support is to further the mission of the Wildland Urban Interface of the Berkeley Fire Department, the Disaster and Fire Safety Commission, and the Wildfire Prevention Plan.

ALTERNATIVE ACTIONS CONSIDERED

No alternative actions.

CITY MANAGER

CONTACT PERSON

Keith May, DFSC Secretary, Fire Department, 510-981-5508

Attachment: RESOLUTION NO. ##,###-N.S.

RESOLUTION NO. ##,###-N.S.

Resolution to Support The Grizzly Peak Mitigation Project

WHEREAS the City of Berkeley has a significant portion of homes built in the Wildland Urban Interface as identified by the Cal FIRE Very High Fire Danger Severity Zone, and

WHEREAS vegetation management, in conjunction with home hardening, is a scientifically demonstrated method for reducing the impact of wildfire on a community, and

WHEREAS vegetation management is also a proven method for slowing the spread of fire, and

WHEREAS evacuation routes are a critical factor in the evacuation of residents, compromise of which would be deleterious to Berkeley lives and community, and

WHEREAS the City of Berkeley has a defined right-of-way along either side of all City maintained roads, and

WHEREAS vegetation management can be accomplished along said evacuation routes using grant funds in partnership with Cal FIRE, East Bay Regional Parks, UC Berkeley, and the City of Berkeley

NOW THEREFORE, BE IT RESOVED that the Disaster and Fire Safety Commission hereby does support and endorse the Grizzly Peak Fuel Mitigation effort to remove hazardous vegetation and conduct other fuel mitigation along defined evacuation routes as defined, monitored, and executed by the Berkeley Fire Department.

2024 Local Hazard Mitigation Plan (LHMP)

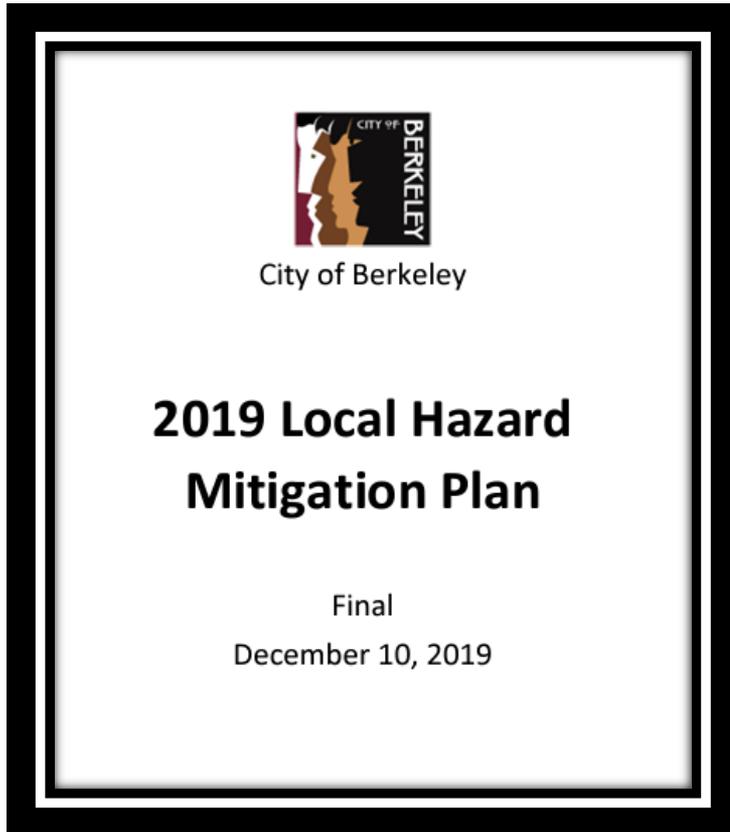
First Draft Plan

Disaster and Fire Safety Commission
June 26, 2024

Agenda

- Local Hazard Mitigation Plan (LHMP) Overview
- What is Hazard Mitigation?
- Plan Changes Since 2019
- First Draft Plan: Risk Assessment and Mitigation Strategy Updates
- Public Outreach
- Next Steps

Local Hazard Mitigation Plan



- Appendix to City's General Plan
- Adopted in 2004, 2014, and 2019
- Financial incentives (pre- and post-disaster)
- Public Review for First Draft: May 24 to July 31
- Key Plan Elements
 - B: Risk Assessment
 - C: Mitigation Strategy

What is Hazard Mitigation?



Hazard mitigation breaks the cycle of damage, by taking action now to reduce impacts later.

EVERY \$1 SPENT ON MITIGATION

A row of six money bags. The first bag on the left is blue with a white dollar sign. The remaining five bags are grey with white dollar signs.

SAVES \$6 ON FUTURE RECOVERY

A row of six blue money bags, each with a white dollar sign.

Image Credit: Boston.gov

Examples of mitigation activities

- Home hardening (like in top photo)
- Strengthening structures (like earthquake retrofits)
- Making land use decisions that will minimize damage
- Reducing vegetation in high-fire areas (like in bottom photo)
- Strapping down water heaters



Major Plan Changes Since 2019



New Hazards Included in the Plan

- High Wind
- Poor Air Quality
- Infectious Disease
- Utility Interruption
- Sea Level Rise

Individual and Household Actions

- Previous versions: Heavy focus on City government actions
- 2024 LHMP: And what can you do?
- Example: Earthquake
 - City: Retrofitting municipal buildings, facilitating grants
 - Household: bolting down furniture



First Draft Plan: Risk Assessment and Strategy Updates

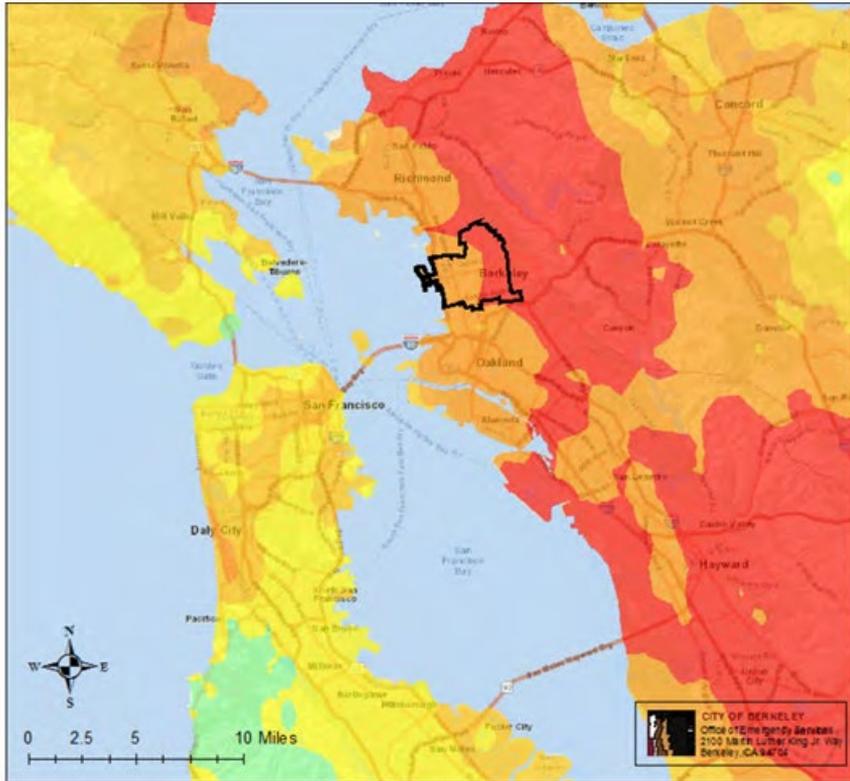
Risk Assessment Summary

Hazard	Likelihood	Severity of Impact
Earthquake	Likely	Catastrophic
Wildland-Urban Interface Fire	Likely	Catastrophic
Extreme Heat	Likely	Moderate to Catastrophic
Poor Air Quality	Likely	Minor
High Wind	Likely	Minor
Rainfall-Triggered Landslide	Likely	Minor to Catastrophic
Tsunami	Possible	Minor to Catastrophic
Sea Level Rise	Likely	Minor to Major
Floods	Likely	Minor
Utility Interruption	Likely	Minor to Major
Hazardous Materials Release	Likely	Minor to Catastrophic
Infectious Disease	Likely	Minor to Catastrophic

Mitigation Strategy Summary

- 33 Actions
- Focus:
 - Current work with funding secured
 - Improvements to buildings, infrastructure, and wildfire mitigation (aligning with the Community Wildfire Protection Plan)
 - New actions or activities related to new hazards
 - Upcoming Environmental Justice and Safety Element updates

Earthquake



Source: USGS, HayWired Scenario, August 2017.
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

Mitigation Actions

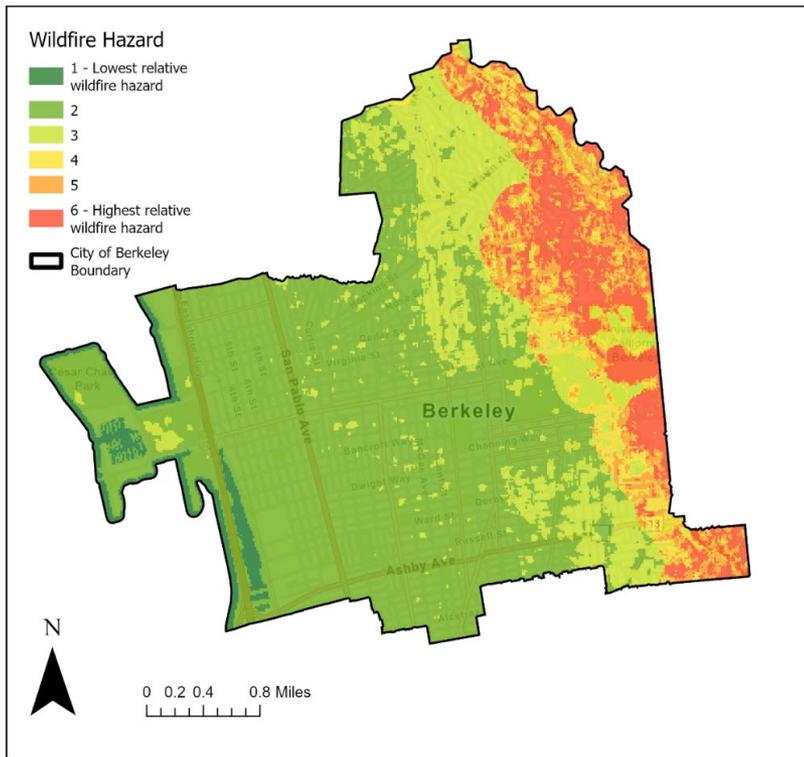
City buildings

- Building assessments
- Strengthen and replace in prioritized order

Privately owned buildings

- Soft Story Retrofit Program
- Retrofit Grants Program
- Concrete Retrofit Ordinance Research
- URM Ordinance

Wildland-Urban Interface Fire



Sources: 2020 Alameda and Contra Costa County Wildfire Risk to Structures and Wildfire Hazard Maps for Fire Prevention Planning, East Bay Regional Parks, et al. California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

Mitigation Actions

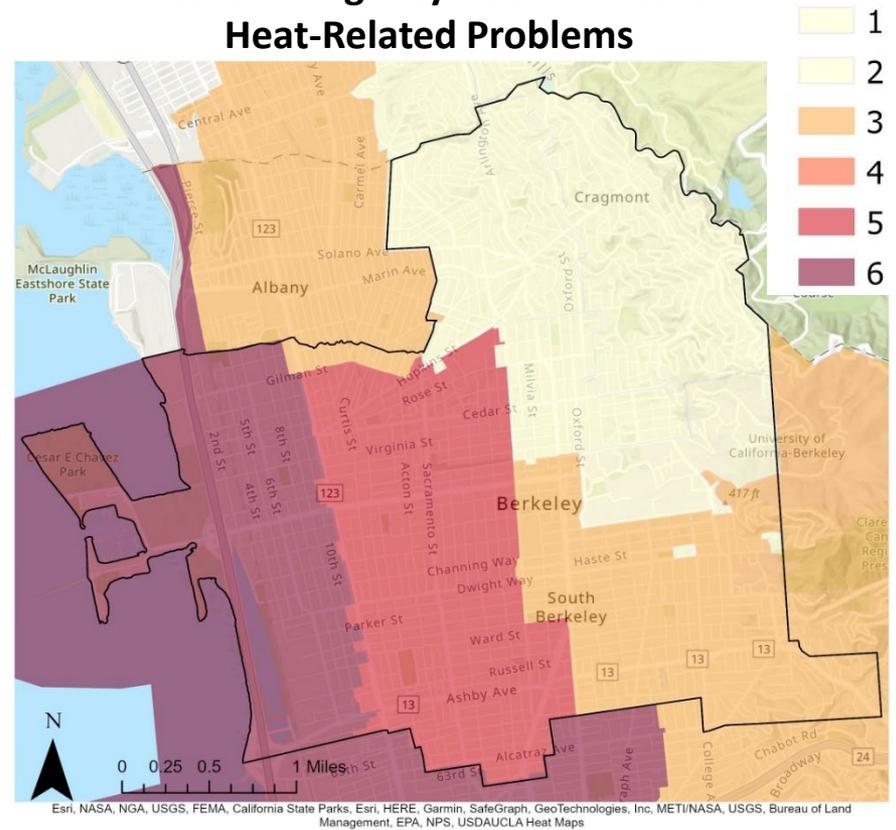
- Coordinate regional mitigation strategies
- Improve responder access and community evacuation in Fire Zones 2 and 3 through road maintenance and parking restrictions
- Manage and promote pedestrian evacuation routes in Fire Zones 2 and 3
- Mitigate risk to Berkeley's overnight camps
- Reduce fire risk through:
 - fire code and updates and enforcement
 - vegetation management
 - residential assistance program
 - utility undergrounding
 - Implementing actions in the Community Wildfire Protection Plan

Extreme Heat

Mitigation Actions

- Expanding Urban Forestry team and their activities
- Encouraging passive and energy-efficient strategies to cool down buildings
- Continuing to seek out funding to use cool paving materials on streets when feasible to reduce urban heat island impacts
- Implementing transportation projects and programs to reduce emissions

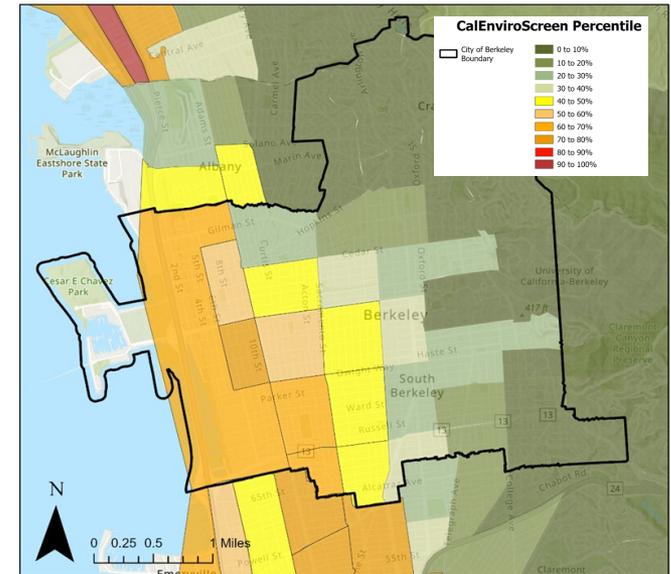
Excess Emergency Room Visits for Heat-Related Problems



Poor Air Quality

Mitigation Actions

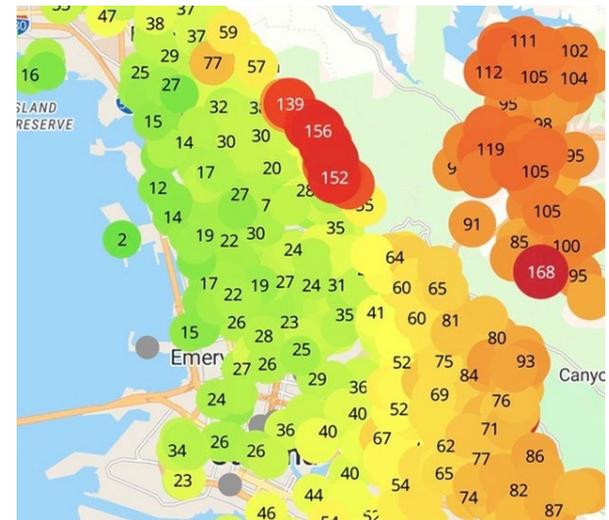
- Expanding Urban Forestry team and their activities
- Implementing transportation projects and programs to reduce emissions



Credits: CalEnviroScreen 4.0, October 2021

Esri, NASA, NGA, USGS, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/ NASA, USGS, Bureau of Land Management, EPA, NPS, USDA

Regular day poor air quality



Poor air quality from fires

High Wind

Mitigation Actions

- Expanding Urban Forestry team and their activities
- Reduce fire risk through utility undergrounding.

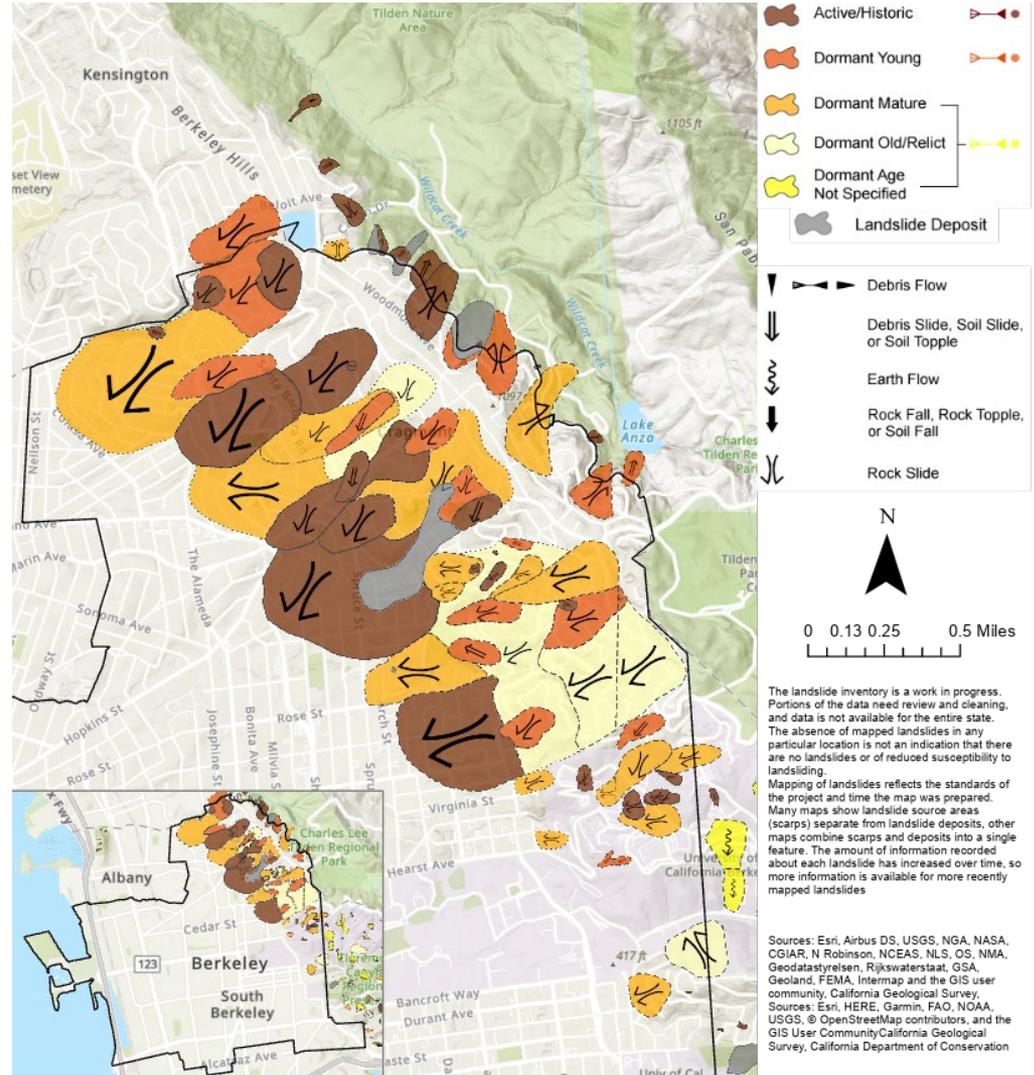


Photo credits: Berkeleyside (Benji Friedman, Ximena Natera, Berkeleyside/CatchLight)

Landslide

Mitigation Actions

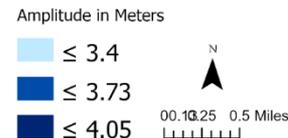
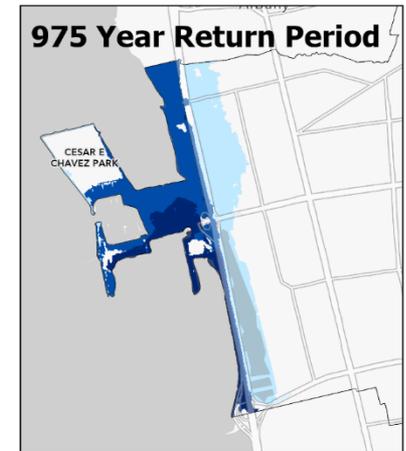
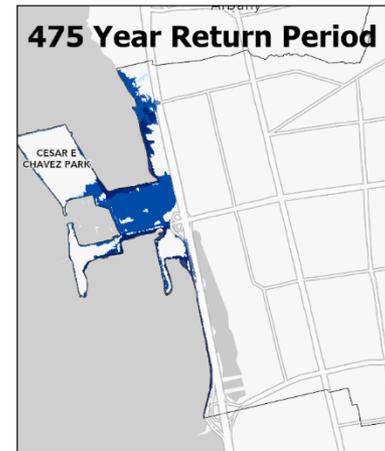
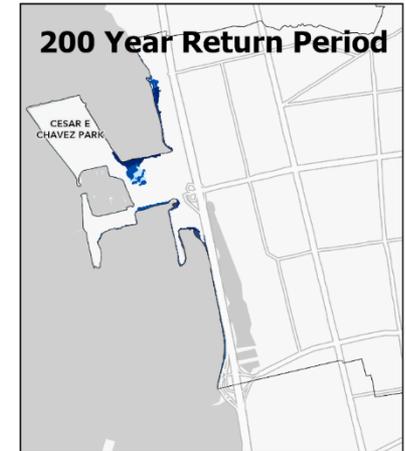
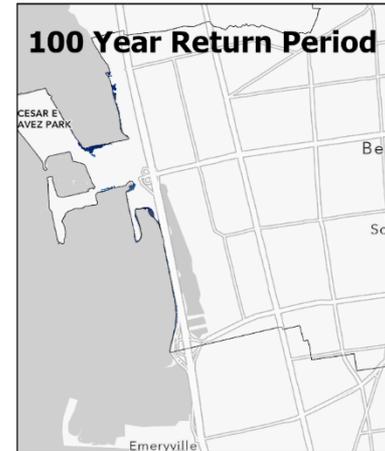
- **Collect, analyze and share information** with the Berkeley community about Berkeley hazards and associated risk reduction techniques.
 - Track changes in hazard risk using the best-available information and tools.
 - Collect and share up-to-date hazard maps identifying areas subject to heightened risk from hazards.



Tsunami

Mitigation Actions

- Continue to replace and repair damaged finger docks
- Collaborate with the California Office of Emergency Services, the California Geological Survey, and the Federal Emergency Management Agency to **document and explore additional tsunami hazard mitigation measures for Berkeley’s maritime communities.**



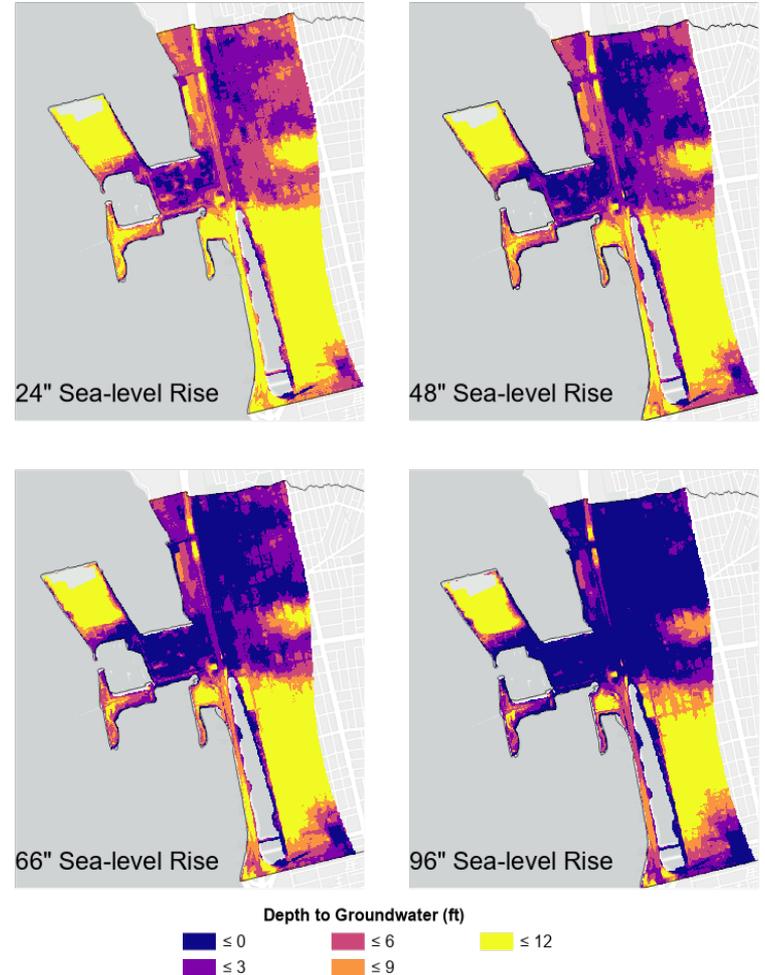
State of California, 2023. Probabilistic Tsunami Hazard Analysis Raster Data – Version 1, California Geological Survey and AECOM Technical Services; dated 2023.

California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA

Sea Level Rise

Mitigation Actions

- Mitigate the impacts of sea level rise in Berkeley.
 - Continue to ensure new and existing public and private developments and infrastructure are protected from floods due to sea-level rise through the permitting process for new development and conditions.
 - Identify funding and nature based solutions to adapt to sea level rise at Berkeley Waterfront areas at risk of future inundation

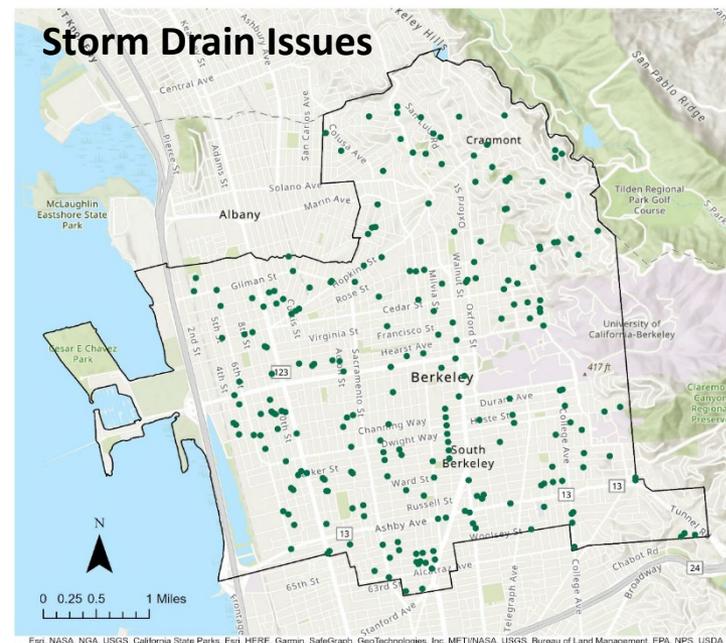
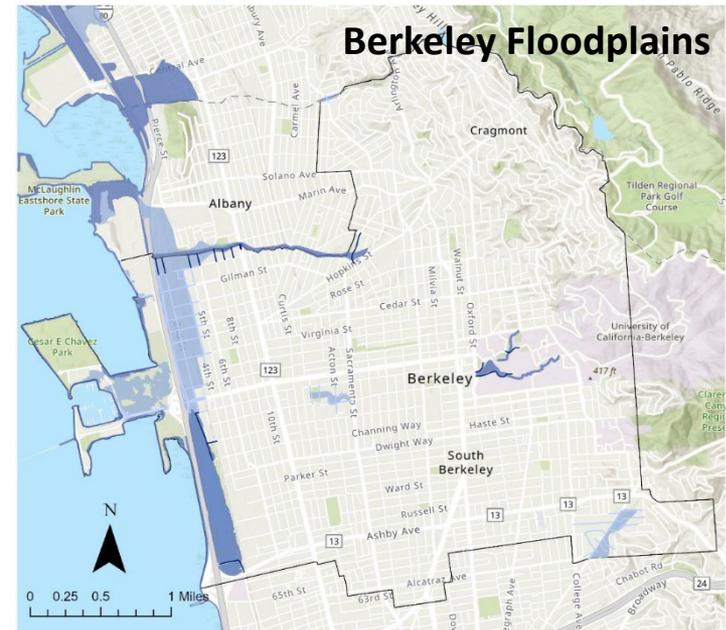


Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Pathways Climate Institute, San Francisco Estuary Institute

Flood

Mitigation Actions

- Maintain City participation in the National Flood Insurance Program
- Use development standards to ensure that new development does not contribute to an increase in flood potential
- Complete a Stormwater Master Plan for all City stormwater infrastructure
- Renovate the tide tubes that remove storm water from Berkeley Aquatic Park and Potter Street to the Bay
- Design public improvements such as streets, parks, and plaza for retention and infiltration of stormwater by diverting urban runoff to bio-filtration systems



Utility Interruption

Mitigation Actions

- Urge PG&E to perform utility undergrounding in Berkeley's Very High Fire Hazard Severity Zone (VHFHSZ) to mitigate wildfire risk and limit evacuation and ingress obstruction.
- Coordinate undergrounding efforts with the State of CA Public Utilities Commission, and elected officials.
- Provide key hazard information and best practices to Berkeley's business and arts community through established networks, for example by exploring opportunities for local business to share best practices and resources during utility interruptions.
- Identify potential actions to mitigate energy assurance vulnerabilities at critical City facilities during planning/conceptual design of both retrofits and new construction.
- Provide guidance to help the City consider opportunities to design, finance and implement clean energy assurance strategies (e.g., photovoltaic-supplemented generation, energy efficiency activities, and/or mobile charging stations).
- Work with partners to identify additional non-City critical facilities and develop strategies to provide clean backup power at these sites.
- Create new formats and user friendly guidance to educate the public, especially underserved populations, on Berkeley hazards.

Public Outreach



Engagement Methods

- In-person outreach at various events during the drafting stage, including National Night Out and Solano Stroll
- Two in-person workshops during the drafting stage, including a Winter Weather Workshop and a Tsunami Workshop at the Marina
- Two in-person workshops after First Draft is released
 - June 3 5:30pm – 7:30pm at Central Library
 - July 20 10am – 12pm at South Berkeley Library
- Detailed hazard videos posted to YouTube
- Presentations to the Planning and Disaster and Fire Safety Commissions, memos to all other Commissions
- Community members are invited to send in feedback via email or in person at the Fire Department

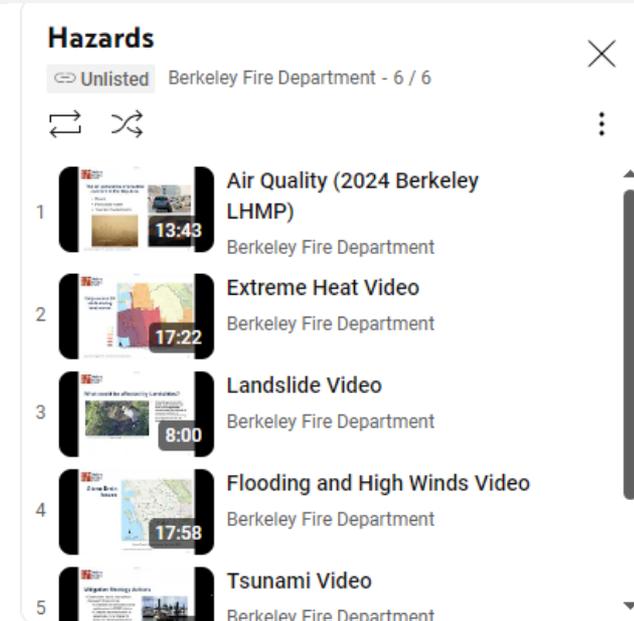
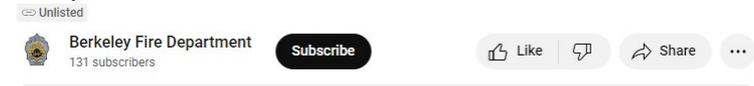


Videos

- LHMP is written to satisfy FEMA requirements, making it long and dense.
- We don't want to just check the box!
 - We want community members to be able to engage with this material, so we made hazard videos.
- You can watch at your leisure and focus on the hazards you're most worried about.
- Videos are designed as both an alternative and a supplement to in-person meetings.
- These videos will remain available even after the LHMP process, continuing to support our outreach about hazards.



Earthquake Video



Next Steps



Plan Review and Approval Process



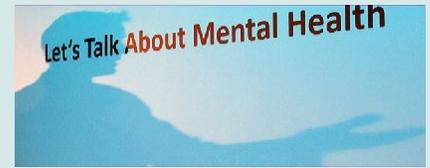
Next Steps

- First Draft 2024 LHMP at www.BerkeleyCa.gov/Mitigation
- Commission and community feedback deadline: July 31, 2024
- Submit written feedback:
 - To Mitigation@berkeleyca.gov
 - Via postal mail to the Fire Department
 - Via business hours drop off at the Fire Department



City of Berkeley
Health, Housing, and Community Services

JOIN A COMMUNITY MEETING TO SHARE
INFORMATION AND PROVIDE INPUT ON
CITY OF BERKELEY
MENTAL HEALTH SERVICES ACT (MHSA)
FUNDING AND SERVICES
AND PROPOSITION 1



In-Person Hybrid Meetings:

North Berkeley Senior Center

1901 Hearst Ave., Berkeley – Gooseberry Room

Wednesday, June 12th: 6:00pm-7:30pm

Wednesday, June 19th: 6:00pm-7:30pm

South Berkeley Senior Center

2939 Ellis Street, Berkeley – Multipurpose Room

Thursday, June 13th: 6:00pm-7:30pm

Tuesday, June 18th: 6:00pm-7:30pm

Zoom Only Meetings:

Thursday, June 6th: 11:00am-12:30pm

Monday, June 10th: 1:00pm-2:30pm

Join Zoom and Hybrid Meetings at:

<https://us06web.zoom.us/j/8446733966?pwd=OGp3Tm5LQTc5TGdhb2tYWlIKcDVhdz09&omn=89471660365>

Or call into Zoom Meetings: 1(669) 444-9171

Meeting ID: 844-673-3966

Password: 081337

Meetings are being held to share information and elicit input on the proposed MHSA FY25 Annual Update, Proposition 1, and on mental health needs in Berkeley.

Four in-person hybrid meetings (where individuals can either join in person, or by Zoom), and two Zoom Only Meetings will be held.

Light refreshments will be served at in-person meetings.

For more Information contact:

Karen Klatt (510) 981-7644

KKlatt@cityofberkeley.info

*If you are calling into the meeting and would like a copy of the presentation, please contact Karen Klatt.

Internal

-----Original Message-----

From: cafred1@juno.com <cafred1@juno.com>

Sent: Tuesday, June 11, 2024 5:39 PM

To: May, Keith <KMay@berkeleyca.gov>

Cc: May, Keith <KMay@berkeleyca.gov>

Subject: Letter for the Disaster & Fire Safety Commission - Please Ban Wood Burning in Berkeley

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.

6-11-2024

Hello Mr. May,

Please include this letter concerning banning wood burning in Berkeley in the meeting packet for the next meeting of the Disaster & Fire Safety Commission.

Please confirm receipt of this letter.

thank you very much,

Clifford Fred

Berkeley California

June 11, 2024

Clifford Fred

Berkeley, California

TO THE BERKELEY DISASTER & FIRE SAFETY COMMISSION:

ALL WOOD & SYNTHETIC LOG BURNING SHOULD BE IMMEDIATELY BANNED IN BERKELEY.

BREATHING WOOD SMOKE IS TERRIBLE FOR EVERYONE'S HEALTH; WOOD & SYNTHETIC WOOD SMOKE WEAKENS THE IMMUNE SYSTEM,

PLEASE IMMEDIATELY BAN FIREPLACE, WOOD STOVE & FIRE PIT USE IN BERKELEY:

PLEASE IMMEDIATELY BAN ALL SYNTHETIC LOG PRODUCTS; THEY ARE EVEN MORE HAZARDOUS & CAN CAUSE BREAST CANCER.

Hello Disaster and Fire Safety Commissioners,

While the adverse health effects of breathing wood smoke might or might not interest your Commission, please note the following.

Burning wood in a fire place or wood stove is inherently dangerous. In a typical 100 year old Berkeley house, the chimney can be detached from the house, the flue can likely be dirty and clogged, and the house of the wood burner could easily catch fire.

With wood burning legal in Berkeley, someone who smells smoke will assume it is from someone's chimney or wood stove – and thus not call 911, when in fact it could be a house on fire. If wood burning were illegal, people would be much more likely to call 911 when they smell smoke.

Not only in winter, but throughout much of the year, my household is regularly choking on various neighbors' wood smoke and synthetic log smoke from fire places, wood stoves and fire pits, including on official Spare the Air Days. Breathing wood smoke and synthetic log smoke is terrible for one's health and can be fatal.

There has been a surprising upsurge in wood burning in our neighborhood and elsewhere in Berkeley in recent weeks. We are senior citizens, and having endure wood smoke almost every night is terrible for our health.

It is profoundly selfish for people to burn when it's 65 degrees outside.

As Jimmy Carter urged many years ago, just put on a sweater.

According to the Bay Area Air Quality Management District – BAAQMD, “during the winter, smoke from residential wood burning is the leading cause of air pollution in the Bay Area.”

Please enact an immediate ban on fireplace, wood stove and fire pit use in Berkeley. Wood and synthetic wood smoke weakens the immune system, thus increasing the likelihood of contracting an infectious disease like the Covid Virus, and increasing the likelihood of dying from Covid if contracted.

WOOD SMOKE CAN TRIGGER ASTHMA ATTACKS

Breathing wood and synthetic log smoke can trigger serious asthma attacks. A serious asthma attack triggered from breathing wood or synthetic log smoke would likely be a death sentence.

There is absolutely no reason to allow wood smoke and synthetic log smoke in a densely populated city, especially a city like Berkeley with a temperate climate.

The following information is from the Minnesota Pollution Control Agency website - <https://www.pca.state.mn.us/air/wood-smoke-and-your-health> -

“While people have always burned wood, we now know that wood smoke can impact the health of your family and others around you. It contains wood tars, gases, and soot, as well as chemicals like carbon monoxide, dioxins, volatile organic compounds (VOCs), and fine particles.

People who frequently breathe wood smoke are at risk for serious adverse health effects. One source of health problems is the fine particles in wood smoke.”

“Wood smoke doesn't stay in one place; particles can travel far, affecting neighbors. Scientists have studied health patterns among people who burn wood in their homes, people who have been exposed to smoke from wildfires, and people who live in developing countries where wood is burned for heat and cooking. “

“Short-term exposure to fine particles in the air can aggravate lung disease, trigger asthma attacks and acute bronchitis, and may also increase the risk of respiratory infections. Scientists have also linked short-term exposures to heart attacks and abnormal heartbeats. Over time, breathing fine particles in the air increases the chances of developing chronic obstructive lung disease (COPD), chronic bronchitis, cardiovascular disease, or lung cancer.”

“Exposure to wood smoke may also be harmful to respiratory immune responses, leaving people more at risk for infectious lung disease. In high concentrations, wood smoke can permanently damage lung tissue.”

“When burning wood, it is not only your family and those near the fire who may be exposed, but also neighbors in the surrounding area, some of whom may have underlying health problems. Wood smoke particles are so tiny that they remain suspended for long periods of time and easily penetrate into buildings with incoming cold air. Young children, the elderly, and people with asthma, lung, or heart disease are especially vulnerable to wood smoke in the air.”

“Stagnant conditions and winter temperature inversions result in wood smoke staying close to the ground, where it can enter neighbors' homes through tiny cracks, open windows, and vents. Wood smoke often settles into low-lying areas, and can become trapped and build up to unusually high concentrations.”

HEALTH HAZARDS OF SYNTHETIC LOG PRODUCTS

Those horrible duralog & other synthetic log products should be immediately banned in Berkeley. They are nothing but chemicals and are even more harmful than wood burning. The smoke and stench from synthetic logs can engulf an entire neighborhood. Besides making people ill and triggering asthma attacks, breathing this smoke can cause insomnia.

According to a report on the University of North Carolina Gillings School of Global Public Health web site, synthetic logs are associated with an increased risk of breast cancer -<https://sph.unc.edu/sph-news/burning-synthetic-fireplace-logs-increases-breast-cancer-risk>.

Alexandra White, MSPH, epidemiology doctoral student at the Gillings School, is the author of the study, “Indoor Air Pollution Exposure from Use of Indoor Stoves and Fireplaces in Association with Breast Cancer: A Case-Control Study,” published online Dec. 12, 2014 in “Environmental Health.”

“Wood and synthetic logs are sources of polycyclic aromatic hydrocarbons (PAHs), which cause mammary cancer in animal experiments. Both contribute to residential air pollution, but researchers found that only the synthetic logs were found to be associated with an increased risk of breast cancer.

“Certainly the burning of real or synthetic logs releases toxic pollutants into the air,” White said, “but we found that burning synthetic logs significantly increased the risk of developing breast cancer, whereas burning the wood logs did not.”

It is ridiculous to call synthetic log products “eco” just because they don’t contain wood. DDT and arsenic don’t contain wood either. Are they therefore “eco?” Synthetic logs produce a horrible smell when burned, that can take over an entire city block, and can engulf neighbors’ houses even with windows closed.

Why do well connected lobbyists always have to get their way in Berkeley?
Why can’t the common good take precedence for once?

Almost all burning in Berkeley is for ambiance, and not because it is someone's only source of heat.

Please keep in mind that the BAAQMD does not respond to wood smoke complaints except on Spare the Air Days, and rarely even then. Very few Spare the Air Days are called each year. Even if the BAAQMD gets a wood smoke complaint on a Spare the Air Day, they are terribly understaffed, and do not work on evenings, nights and weekends, the very time that most burning occurs.

In Davis, California and the entire State of Washington, it is strictly illegal to smoke out your neighbors.

The Davis California police department is charged with investigating nuisance wood smoke and can shut offenders down and issue criminal citations.

Please visit <https://cityofdavis.org/city-hall/police-department/code-enforcement/nuisance> -burning.

Also in Washington State, state law authorizes local police departments to shut down wood burning that is adversely effecting neighbors. Please refer to the Washington State Puget Sound Clean Air Agency web site - pscleanair.org - Legal Overview - Wood Burning and the Law.

A friend of ours in Washington State with asthma tells us that when a neighbor's wood smoke comes into her house, she calls the police. The police will promptly show up at the neighbor's house and order them to stop burning.

If Davis California and Washington State can make it strictly illegal to smoke out your neighbors, why can't Berkeley? In fact, our winters are milder than those of Davis and Washington State.

Neither the City of Berkeley Police Department nor the Berkeley Fire Department will respond to wood smoke complaints.

On an evening when the air is thick with smoke, people assume that the smoke is from one or more fireplaces and/or wood stoves, when in fact it could be an actual house fire.

Loss of life can result because people would not realize they were smelling was an actual house fire.

It is difficult to understand how the Berkeley City Council can declare a Climate Change Emergency, and yet be indifferent to the terrible health hazards of breathing wood smoke and synthetic log smoke.

Why isn't clean air a progressive value?

I hope your Commission will take the lead in getting wood burning and synthetic log burning banned in Berkeley.

Thank you,
Clifford Fred
Berkeley California



Friends of Five Creeks

*Volunteers preserving and restoring watersheds of
North Berkeley, Albany, Kensington, south El Cerrito and Richmond since 1996
1236 Oxford St., Berkeley, CA 94709
510 848 9358 f5creeks@gmail.com www.fivecreeks.org*

June 17, 2024

Berkeley Transportation and Infrastructure Commission, via Noah Budnick
Srinivas Muktevi, Berkeley Public Works Supervising Civil Engineer, Storm Water Plan Project Director
Cc: Ron Nevels, City Engineer; Terrance Davis, Berkeley Public Works Director
Cc: Berkeley City Mayor and Council, Berkeley City Clerk
Cc: Berkeley Parks, Recreation, and Waterfront Commission, via Roger Miller; Berkeley Environment and Climate Commission, via Sarah Moore; Berkeley Disaster and Fire Safety Commission, via Keith May

Re: Comments on [Berkeley Storm Water Master Plan, Specification 22-11505-C](#)

This letter updates and supplements Friends of Five Creeks' May 24 comments to the Transportation and Infrastructure Commission on the \$1.9 million Berkeley Storm Water Master Plan, under development with Wood Rodgers, Inc., consultants ([Berkeley Specification 22-11505-C](#)).

As a volunteer group that has dealt with the challenges of Berkeley creeks and watersheds for 27 years, we continue to applaud the proposal's innovative and cost-saving elements, emphasis on accurate data and modeling, and promise of a prioritized and timely maintenance plan. A new plan is much needed.

We are distributing these comments widely because two aspects alarm us:

1. Critical work apparently is being performed and decisions made without (a) public or stakeholder information or input or (b) coordination with other affected city departments or commissions, including Parks, Recreation, and Waterfront; Disaster and Fire Safety; and Environment and Climate. These are the opposite of [Vision 2050's](#) goal of public engagement and planning done by departments in coordination, not in silos.
 2. Important effects and recent research on climate change and sea-level rise must be included.
- Item 3 lists other concerns that flow from these.

1. Lack of public, stakeholder, and other city department and commission input:

[Task 1.1 in the city's specification for the work](#) says, "Prior to commencing any work, the Wood Rodgers' Team will meet with the City and any other stakeholders. The purpose of this kickoff meeting is to clearly define the goals of the project, to establish an understanding of the City's needs, to determine the standards and policies that apply to the project, and to refine the project's scope of work and budget...." **This promised kickoff meeting has not been held. The department's schedule envisions no public meetings until February 2026, three months before approval.**

Wood Rodgers routinely holds these kickoff meetings. [Albany's contract for a new stormwater plan, signed in June 2024 \(task 1.2, p. 13\), has identical wording.](#) Albany's public works director has assured me that they plan to hold the meeting.

The public could not know that work was underway. Outreach to relevant commissions appears minimal to nonexistent. The city's web site offers nothing but the brief July 2023 consent item. The project has not appeared on the Transportation and Infrastructure Commission's agenda since before it was approved.

Friends of Five Creeks is a partner project of 501(c)3 Berkeley Partners for Parks

After repeatedly asking various staff members over months, Friends of Five Creeks discovered that a subcommittee existed only by speaking at public comment at the Transportation and Infrastructure Commission's May meeting. Outreach to other relevant commissions appears minimal to nonexistent. The Parks, Recreation, and Waterfront Commission (concerned with creeks and Aquatic Park) was informed in recent days by stakeholders; it now plans to discuss the project in July.

Public information and input are essential to governing a city. Residents need to know about unseen water and flood infrastructure – why it matters, how it works, and what residents' taxes and fees support. Berkeley urgently needs to update its aged and neglected system for handling storms and other urban runoff, and make key changes to deal with rising sea- and groundwater levels and larger storms. Informed, experienced stakeholders can offer important information and history to an understaffed Public Works Department with new leadership. **A stakeholder meeting should be held as soon as possible, before any important decisions are finalized. Ongoing communication channels should be announced and kept open.**

2. The Wood Rodgers proposal does not adequately deal with climate change.

A. The consultants' Berkeley proposal does not mention [rising groundwater levels – which current research shows are likely to have serious effects in the low-lying East Bay plain](#). Rising with sea level, not deterred by barriers or green infrastructure, this groundwater will increase flooding, decrease infiltration, and corrode and weaken the built environment. **[Wood Rodgers' recent contract with Albany clearly addresses this](#)** (Section 3.3. pp. 11-12), citing the study linked above.

B. Wood Rodgers' Albany contract promises to use recent climate information and models not included in Berkeley's proposal. In the Albany plan, "Pathways and LBNL's [Lawrence Berkeley National Laboratory] completed Extreme Precipitation Study" (p. 12) are to be used to analyze how climate change may change intense storms. Tide and sea-level -rise data are to be based on "data sources highlighted in the Flood Risk and Sea Level Rise Adaptation Report, and the State of California *Sea Level Rise Guidance 2024 Science and Policy Update...*" (p. 12). The one-year gap between Berkeley's and Albany's contracts may explain these differences. But Berkeley needs the most current information in a plan likely to be used for 20-30 years in a fast-changing climate. As in Albany, this information should be used to determine **both** capacity deficiencies and high-priority capital improvements. It's worth noting that Albany hopes to also use the design storm that Wood-Rodgers is developing for Berkeley to make these calculations. **Berkeley must plan for climate change using use up-to-date inputs and methods .**

3. The comments below illustrate matters that stakeholders and other commissions and departments should be able to raise with consultants before decisions are made.

A. The Public Works Department schedule says that "Criteria Review and Recommendations" will be complete by July 12. All the above issues regarding climate change should be clarified in binding form before any such decisions.

B. The Public Works Department schedule says that inspection schedules will be final by July 26. Some inspections, especially of storm drains on private property, are likely to face issues and challenges. Stakeholders and commissioners should be able to weigh in on focus and adequacy.

C. **Aquatic Park depths (bathymetry) are to be surveyed between July 29 and Aug. 19.** Aquatic Park has three lagoons -- Wood Rodgers mentions only one. It is vital to measure the rapidly shallowing Middle/Model Yacht Basin, critical to flood protection. Data also must be easily comparable to bathymetry in the 2008-11 Aquatic Park Improvement Program, to show change over time.

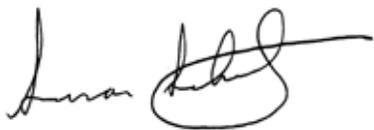
D. **Data collection is scheduled to be complete by Sept. 6** (except for vegetation management, below). **The design storm is to be decided by Sept. 13.** The design storm is basically how big a storm or range of storms the system should be able to handle. It is unacceptable to make these decisions with no public information or input, based on a document that does not mention more up-to-date information, at a time when changing climate is increasing the threat of much larger storms.

E. **A drone survey is scheduled December 2024 to January 2025 to measure vegetation and capacity in open creek channels – basically, private back yards.** At minimum, residents – including those in Albany and Kensington where creeks form Berkeley's borders – need notice and the ability to ask questions. Other attempts to survey have sometimes met stiff resistance. **If this drone survey is done, Berkeley should consult and share data with the Fire Department, appropriate commissions, and regional wildfire agencies .** Creek canyons, such as the deep Cerrito Creek canyon on Berkeley's northeast border, can funnel fire.

F. Friends of Five Creeks is delighted that lidar and other tools are to be used to model creek channels and flood plains for flood risk and perhaps needs for vegetation management (Wood Rodgers proposal p. 13). Managing vegetation on creek channels, however, requires considering erosion, slides, habitat, privacy, and fire hazard –as well as complex multi-agency permits. **Consultants and Public Works staff should work with other commissions, departments, and agencies to avoid contradictory or unworkable recommendations.**

These examples clearly show that this plan should be developed with both robust exchange of ideas, including with stakeholders, and the most current available information on climate change. We look forward to working with the city to create the plan it needs.

Sincerely,

A handwritten signature in black ink, appearing to read "Susan Schwartz", with a large, stylized flourish at the end.

Susan Schwartz, President, Friends of Five Creeks