

## Summary of Changes to the City of Berkeley's 2024 First Draft Local Hazard Mitigation Plan

This document outlines the revisions made to Berkeley's 2024 First Draft Local Hazard Mitigation Plan (2024 First Draft) that are present in the 2024 Final Draft Local Hazard Mitigation Plan.

1. In the Executive Summary, on page ES-5, the following information has been added about the link between growing WUI fire risk and climate change:

Climate change is resulting in longer and drier summer conditions leading to wildfires of greater frequency and duration. Increased drought conditions cause fuels to become extremely dry and more fire prone. Additionally, climate change causes more frequent bouts of extreme weather, including low humidity and high winds associated with fire weather.

2. In the Executive Summary, on page ES-6, the following information has been added:

The fire risk facing the people and properties in the eastern hills is compounded by the area's mountainous topography, **hazardous vegetation**, minimal access and egress routes, and location, overlaid upon the Hayward Fault. Berkeley's flatlands are also exposed to a fire that spreads west from the hills.

3. In Element A: Planning Process, on page A-3 the following information has been added about the Public Review of the First Draft Plan:

In response to this offer, Council Members suggested a presentation to the Safety Committee, which staff gave in July 2024.

4. In Element B: Risk Assessment, on page B-57 the following text was added:

Locations of WUI Fires and Related Hazards.

5. In Element B: Risk Assessment, on page B-68, the following text was added:

### Hazardous Vegetation

Certain plant species, including native and non-native species, have characteristics that make them ignite readily and burn intensely contributing to wildfire risk. Characteristics may include being biologically prone to burn due to chemical composition, being difficult to maintain in a fire-resistant state, presenting challenges to routine maintenance, having high surface area to volume ratio, or being prone to rapid changes in moisture content in response to environmental conditions. While these characteristics make some plants more fire-hazardous, all plants can burn if they are dead, poorly maintained, or drought stressed.<sup>i</sup>

Historically, the East Bay Hills ecosystem burned regularly. Researchers have proposed that under indigenous land management, fires due to both natural and anthropogenic ignitions occurred every 5-15 years.<sup>ii</sup> Fire is this ecosystem's natural way of clearing dead vegetation and maintaining forest health. Many California native plant species present in the East Bay Hills also need fire in order to reproduce.

Living in a fire-prone area means taking steps to mitigate risks while also recognizing that it's infeasible to remove all of our vegetation. The mere presence of a certain fire hazardous species does not always mean it must be removed. Other factors, such as maintenance and placement, are more important than the plant itself. For property owners thinking about their own landscaping, it's great to focus on California native or other pollinator friendly plants that require little water and are easy to maintain. However, "There are no published fire-wise or fire-resistant plant lists that are science based or peer reviewed. Design and maintenance are more important than plant selection."<sup>iii</sup>

To protect life and property, the Berkeley Fire Department inspects all properties in the Very High Fire Danger Severity Zone for Defensible Space, which is the buffer created between a structure on your property and the grass, trees, shrubs, or other vegetation that surrounds it. This may include the removal of certain vegetation within 100 feet from any structure. These mitigation measures, along with home hardening, are the scientifically validated actions that have the most impact on reducing the ignition potential of homes. Failure to comply with recommendations results in citations and fines.

The City, often in collaboration with regional partners, works to remove and or clean up the understory of hazardous trees that are likely to burn and potentially impact people and infrastructure. For more information on these programs, review Element C: Mitigation Strategy.

6. In Element B: Risk Assessment, on page B-87, the following section was deleted and added to Element C: Mitigation Strategy, C.5 Household Mitigation Actions (see # below for what was added):

#### B.3.i Berkeley Household Risk Reduction

7. In Element B: Risk Assessment, on page B-111, the following section was deleted and added to Element C: Mitigation Strategy, C.5 Household Mitigation Actions (see # below for what was added):

#### B.4.h Berkeley Household Risk Reduction

8. In Element B: Risk Assessment, on page B-126, the following section was deleted and added to Element C: Mitigation Strategy, C.5 Household Mitigation Actions (see # below for what was added):

#### B.5.h Berkeley Household Risk Reduction

9. In Element B: Risk Assessment, on page B-138, the following section was deleted and added to Element C: Mitigation Strategy, C.5 Household Mitigation Actions (see 21 below for what was added):

#### B.6.h Berkeley Household Risk Reduction

10. In Element B: Risk Assessment, on page B-151, the following section was deleted and added to Element C: Mitigation Strategy, C.5 Household Mitigation Actions (see 21 below for what was added):

#### B.7.h Berkeley Household Risk Reduction

11. In Element B: Risk Assessment, on page B-167, the following section was deleted and added to Element C: Mitigation Strategy, C.5 Household Mitigation Actions (see 21 below for what was added):

#### B.8.h Berkeley Household Risk Reduction

12. In Element B: Risk Assessment, on page B-210, the following section was deleted and added to Element C: Mitigation Strategy, C.5 Household Mitigation Actions (see 21 below for what was added):

#### B.10.h Berkeley Household Risk Reduction

13. In Element B: Risk Assessment, on page B-220, the following section was deleted and added to Element C: Mitigation Strategy, C.5 Household Mitigation Actions (see 21 below for what was added):

#### B.11.h Berkeley Household Risk Reduction

14. In Element C: Mitigation Strategy, on page C-5, the following text was added:

Measure T1 provides \$100 million of funding from bond revenue to pay for improvements to City infrastructure and facilities. Berkeley voters passed Measure T1 in November 2016. Measure T1 funds are used for a variety of infrastructure improvements, including upgrading Senior Centers and Community Centers to immediate occupancy and increase their ability to serve the community regularly and during disasters. Future mitigation actions could include upgrading additional buildings and or building new ones.

15. In Element C: Mitigation Strategy, on page C-10 for Expanded Inventory of **Potentially** Seismically Vulnerable Buildings, the following text was added:

With the launch of the Retrofit Grants Program, staff conducted extensive research to update and refine the City's inventory of **potentially** seismically vulnerable buildings. In

addition to soft story buildings not currently subject to mandatory retrofit such as those with 3-4 residential units or commercial uses, Berkeley has numerous non-ductile concrete and tilt-up or other rigid wall-flexible diaphragm (RWFD) buildings. **Future expansion includes conducting research to determine other hazardous buildings that should be inventoried and exploring additional mandatory retrofit ordinances.**

16. In Element C: Mitigation Strategy, on page C-12 for Fire Department: WUI Division, the following text was added:

City of Berkeley Fire Department instituted a WUI division in 2021 supported with funding from Measure FF. The WUI Division is primarily responsible for the coordination of wildland mitigation efforts and related inspection activities. **The ability for the Division to expand on mitigation activities is outlined in the Action Plan of the Community Wildfire Protection Plan (CWPP).**

17. In Element C: Mitigation Strategy, on page C-26 the following text was deleted:

Currently, the City is identifying funding to upgrade the MLK Junior Youth Services Center, the Willard Clubhouse, the African American Holistic Resources Center, and the South Berkeley Senior Center.

This text was replaced with:

Currently, the City is using T1 Funds on the MLK Jr. Youth Services Center Retrofit and Renovation project and the Willard Park Clubhouse and Restroom Replacement Project. Both of these facilities will be upgraded to immediate occupancy status, meaning that post earthquake, only limited structural damage will have occurred. The Willard Park Clubhouse is currently under construction and the MLK Jr. Youth Services Center is in the design part of the process. Using T1 and General Funds, the African American Holistic Resource Center is currently in the design part of the process. The African American Holistic Resource Center (AAHRC) will be a facility to house culturally relevant services to help eliminate inequities within Berkeley's African American Community. The vision for the African American Holistic Resource Center is to host services to benefit the community with education, employment, health, mental health, and housing advocacy and supports. It will be built to immediate occupancy status.

Using funds from Measure T1 and funding from a FEMA grant, the South Berkeley Senior Center is being renovated to include disaster preparedness, electrification, energy efficient building systems, and other enhancements to the community building. It's in the design phase.

The City is currently seeking opportunities for funding and grants to develop the design and complete construction for the Frances Albrier Community Center.

18. In Element C: Mitigation Strategy, on page C-39, the following text was added

## Inventory of **Potentially** Seismically Vulnerable Buildings

19. In Element C: Mitigation Strategy, on page C-43, the following text was added under Resident Assistance Program:

In 2024 CalFIRE announced that the BFD was awarded a grant to fund its Defensible Space Resident Assistance Program (RAP) in the VHFHSZ over a three-year period to interrupt the contiguous vegetative fuel in these pathways and inhibit the transmission of wildfires. The RAP will provide financial assistance to Berkeley Hills residents who are low-income, senior citizens 65 years or older, and those with physical disabilities to help achieve defensible space within Zone 0, Zone 1

20. In Element C: Mitigation Strategy, on page C-44, the following text was added under Vegetation Management Programs:

The Eucalyptus Understory Cleanup is a program that provides a one-time service to bring properties into compliance with best practice hazardous vegetation management practices. Planted in plantations over 100 years ago, eucalyptus groves can produce between 10 to 30 tons of dry matter per acre per year, increasing the potential to spread a ground fire. Eucalyptus trees can be extremely expensive to remove due to their size and age. Following participation in this program, residents will be required to maintain properties in adherence with the Fire Code.

21. In Element C: Mitigation Strategy, on page C-66, the following section and text was added:

### C.5 Household Mitigation Actions

The Local Hazard Mitigation Plan is designed to address and recognize how the whole community can and does work together to mitigate Berkeley's natural hazards. The following steps are ways that individual community members and households reduce their own risks and contribute to Berkeley's collective mitigation efforts:

## Earthquakes

### Secure your home

- Store heavy and breakable objects on low shelves
- Bolt bookshelves and heavy furniture to the wall
- Move or secure hanging objects over beds, sofas, and chairs
- Use quake gel or putty to secure breakable objects in place

### For homeowners

- Assess your home by hiring a structural engineer
- Retrofit your home if needed
- Understand available retrofit grants, including the City's Brace and Bolt program
- Consider earthquake insurance

### For renters

- Talk to your landlord:
- When was the house built?
- What materials were used?
- Is the building retrofitted?
- Does it require retrofitting?
- Consider earthquake insurance

### Prepare to be safe at home

- Store water (enough for 1 gallon per person per day for 3 days)

### Practice what to do during an earthquake

- Drop, cover, and hold on
- Do not stand in a doorway, run, or get into the "triangle of life". The 'Triangle of Life' is a misguided idea about the best location a person should try to occupy during an earthquake. Based on observations of past earthquakes, this idea doesn't apply to buildings constructed within the United States. Please do not consider this as a safe hiding spot.
- Learn how to turn off gas, electricity, and water at your house. If you rent, check in with your landlord.

- If after an earthquake you smell gas, contact PG&E and tell them to shut it off or call 9-1-1

## Wildland-Urban Interface Fire

Berkeley hills residents (Fire Zone 2 & 3):

- Review home's Defensible Space Report and follow the instructions on defensible space and home hardening.
- Create Defensible Space: Understand that all of Berkeley is at risk of wildland-urban interface fire. Further, 95% of property in Berkeley is privately owned, meaning that owners have to act to make their properties defensible.
- Defensible space is the area around a home where vegetation has been specifically maintained, and flammable items have been specifically positioned, in order to reduce the spread of wildfire.
- Keep Zone 0, or the first five feet from your home, clear of combustible materials. Use hardscape like gravel or concrete, remove dead or dying plants, remove branches from chimneys, limit combustible items like patio furniture, relocate firewood, replace any combustible fencing, and consider relocating garbage containers outside this zone.
- In Zone 1, or five to 30 feet around your home, remove all dead plants and dry leaves, and trim trees regularly. Create a separation between items like shrubs and items that catch fire like patio furniture and swing sets.
- In Zone 2, or 30 to 100 feet from your home, reduce potential fuel within 100 feet of the property line. This includes cutting annual grass, creating space between shrubs and trees, removing fallen leaves, and keeping clearance around exposed wood piles.
- Harden your home to decrease the likelihood of fire igniting the structure. The highest priority items are:
  - Install a fire resistive roof
  - Clear and maintain decks and covered porches
  - Regularly clear tree debris

## Internal

- Remove large rugs and combustible wood, wicker, or plastic furniture
- Ensure any small items like cushions are small enough to be moved inside on Red Flag or Extreme Weather days
- Remove anything stored under the deck or stairs
- Include a five-foot noncombustible buffer around deck and stairs
- Install non-combustible gutter guards to keep tree debris out
- Ensure the vents to your attic, basement, and crawlspace will block wind-blown embers from entering your home. You can install ember-resistant vents or cover Be ready to receive emergency information.

For all Berkeley residents:

- Use the free [Berkeley Chipper Day Program](#) for curbside pickup, chipping, and disposal of vegetation material from your residential property.
- [Sign up for AC Alert](#)
- Bookmark and get familiar with [Berkeley's Emergency Map](#)
- Get familiar with the test and emergency tones from [Berkeley's Outdoor Warning System](#)
- Make your [household fire weather plan](#).
- Stay out of the hills during extreme fire weather days.

## Extreme Heat

Prepare to be safe at home

- Gather supplies to keep yourself cool, including:
  - Ice – fill up all your ice trays and freeze them and any ice packs overnight

- Spray bottle – to spray mist on yourself to keep cool
- Personal fan – fan to point at yourself
- Towel – to wet and put on your body
- Plan to [keep your home cool on hot days without air conditioning](#), using:
  - A larger fan – to move hot air out of your home
  - An indoor/outdoor thermometer – set this up to know when to let cooler outside air into your home
  - Be ready to block sunlight and heat, using blackout curtains, reflective film, solar blankets or cardboard. Blocking your windows with a light-colored sheet facing out, followed by a dark-colored sheet facing in, can help to reflect light away and keep your home cooler.
- Prepare for potential power outages (*see utility disruption section*)

Make a plan for where to go (and how to get there) if your home gets too hot.

- Consider locations you could visit that have air conditioning, like malls, stores, or community cooling centers.
- Make a transportation plan – consider using friends and family, public transit, carpooling, or using a taxi or rideshare service.
- If you use a wheelchair or other mobility device, you may also consider:
- Pre-scheduling a paratransit trip to a cool location before the hottest hours of the day
- Using [Easy Does It](#) for a Rescue Ride or Routine Transportation ([BRSD members](#) only)

Buddy up with your friends, family, and neighbors:

- Make a plan to check on friends, family and neighbors at least twice a day during a heat wave. Check to see if people are developing signs of heat exhaustion or heat stroke. Remember that people who live alone are at the

greatest risk in a heat wave because no one will notice if they develop heat stroke.

- Think about how to work together to get to a location with air conditioning or a community cooling center if someone's home gets too hot.

Monitor the heat

- The Occupational Health and Safety Administration (OSHA) [Heat Safety Tool](#) helps you understand how hot it is where you are located.

During a heat wave

- Get Plenty to Drink: Sweating removes needed salt and minerals from the body. When it is hot, drink more water, juice and sports drinks. Avoid drinks with caffeine (tea, coffee, and cola) and alcohol. Be sure to eat regularly.
- Stay safe in your home:
  - Wear as little clothing as possible when you are at home. Choose lightweight, loose-fitting clothing.
  - Spray yourself with water or make your skin wet with towels, then stand in front of a fan. When the water evaporates it will pull heat away from your body.
  - Keep windows open at night to capture the cool air. Closing windows to trap the cool air in the morning can be helpful before the heat of the day comes. If you have an indoor/outdoor thermometer, monitor temperatures inside and outside your home. When it is cooler outside, open windows and doors to let in cool air. When temperatures are equal, close windows and doors to keep cool air in as the outdoors heats up.
- If you must go outside:
  - Choose lightweight, light-colored, loose-fitting clothing. In the hot sun, a wide-brimmed hat will keep the head cool. If you will be in direct sun, use a sunscreen with a sun protection factor (SPF) of 15 or higher and follow package directions. Reapply every 2 hours while in the sun.
  - Schedule Outdoor Activities Carefully: Try to be less active during

the hottest part of the day, late afternoon. If you must be out in the heat, plan your activities so that you are outdoors either before noon or in the evening. While outdoors, rest often in a shady area.

- Never leave children or pets in a parked car.
- Pace Yourself: If you are not used to working or exercising in hot weather, start slowly and pick up the pace gradually. Take frequent, regularly scheduled breaks. If activity in the heat makes your heart pound or leaves you gasping for breath, stop activity, get into a cool or shady area, and rest. Especially if you become lightheaded, confused, weak or feel faint.

## Poor Air Quality

Get air quality information

- Be familiar with the [Air Quality Index](#)
- Bookmark websites with key air quality information:
- Forecasts: [AirNow.gov](#)
- Real-time readings: [US EPA/US Forest Service Fire and Smoke Map](#)

Prepare your home for poor air quality

- Keep outside pollution outside by replacing or sealing leaky windows and doors. This will also make your home more energy efficient and comfortable.
- People on limited incomes should check out California Weatherization Assistance Program services offered by [Spectrum Community Services](#).
- Purchase equipment to clean the air inside your home, with filters for your HVAC system or portable air cleaners.
- HVAC system filters: If properly configured and maintained, air cleaners and specialized filters designed for use in HVAC systems may have the greatest potential to improve your entire home's air quality because most HVACs circulate very large volumes of filtered air throughout the home.
- Install a high-efficiency filter (MERV 13 rating or higher) with a MERV rating

as high as your system can handle, based on manufacturer recommendations.

- Portable air cleaners: These units are usually best for single room use, rather than multiple room or whole-house use, because of their limited capacity to circulate large volumes of filtered air.
- Purchase one or more [California Certified Air Cleaners](#) for room(s) in your home. Make sure your cleaner is on this certified list so you can be sure it will not emit harmful ozone when you use it.
- Use the “Clean Air Delivery Rate” (CADR) to [calculate the correct size portable air cleaner for the room](#).
- If an air cleaner is out of your price range, you can [construct one with a box fan](#) for a cost of \$45-\$75.

Key Actions during poor air quality events (see the California Air Resources Board’s [Smoke Ready California](#) site for details)

- **Stay inside:** The best way to prevent breathing harmful particles is to stay indoors with windows and doors closed.
- If you have a central-ducted heating/air conditioning and heating system, be sure to set the system to “on” to ensure air is being filtered constantly, rather than “auto,” which runs the system intermittently.
- If your system brings fresh air into the home, close the fresh-air intake so that it operates in in recirculation mode to prevent outdoor smoke from getting inside.
- Filter the air: Use a CARB-certified portable air cleaner and run continuously on the highest setting. This can greatly reduce indoor particle levels to further reduce impacts from smoke.
- Gather people in a room with the air purifier. A portable air cleaner will clean the air around it, but cannot is not designed to clean the air in your whole home.
- Do not run whole house fans or swamp coolers.

- Avoid activities that increase indoor pollution, such as burning candles, using gas stoves and vacuuming.
- Use a damp cloth or mop to trap settled dust and particles.
- Stay cool. Run fans, or run air conditioning on “recirculate” setting with a new filter. NOTE: If poor air quality happens at the same time as extreme heat, do whatever you need to stay cool, even if it means opening windows and doors. Heat will kill more quickly than air pollution.
- **If you must go outdoors** for long periods of times in areas of heavy smoke, you may want to wear a NIOSH-certified N95 respirator mask. Those with existing respiratory, lung or heart conditions should limit their exposure by staying indoors. Since wearing a respirator can make it harder to breathe, those with lung or heart conditions should check with their doctor before using one.
- If you purchase N95 masks, make sure they are [NIOSH-approved](#). Choose a size and model that fits your face and has no gaps. Test it by doing a [seal check](#).
- Keep a very close eye on children, who are less likely to notice or report symptoms than adults, even when they are affected.
- Look out for [signs that you or those around you need cleaner air](#). Symptoms can include:
  - Coughing
  - Throat irritation
  - Pain, burning, or discomfort in the chest when taking a deep breath
  - Chest tightness, wheezing, or shortness of breath

## High Wind

Keep trees properly maintained.

- City trees:

City trees grow between the sidewalk and the street, in a street median, in

a public park, or on any other property owned by the City of Berkeley. View a [map of Berkeley City trees](#).

- To submit a request for pruning or removal of a City tree, call 311 or email [trees@berkeleyca.gov](mailto:trees@berkeleyca.gov).

#### Privately owned trees

- All other trees are privately owned, and maintenance is the responsibility of the owner. Similarly, if a private tree or limb falls, cleanup and damages are also the responsibility of the homeowner.
- Get a professional arborist assessment to identify any signs of decay, dead branches, or other structural issues that could lead to problems in the future.

#### Before a wind event

- Bring any loose outdoor items such as holiday decorations and chairs inside, or securely tie them up. Beside the risk of these items being blown away or damaged, airborne debris can be dangerous.
- Be ready for power outages. In winter months, consider raising the temperature on your thermostat, in case you lose power for a few hours or longer.

#### During high winds

- If you must be outdoors, keep your distance from trees.
- Avoid driving during the strongest winds, especially in high-profile vehicles. Your vehicle could be blown off the road. Trees could fall in the road ahead of you, which could be hard to see at night until it's right in front of you, or they could fall on your vehicle.

## Landslide

#### Protect your home

- Have flexible pipe fittings installed to avoid gas or water leaks, as flexible fittings are more resistant to breakage. (Note, only PG&E or other professionals should install gas fittings).

- Plant ground cover on slopes and build retaining walls.
- In mudflow areas, build channels or deflection walls to direct the flow around buildings. Remember: If you build walls to divert debris flow and the flow lands on a neighbor's property, you may be liable for damages.
- If you live in an area susceptible to landslide (See Maps 23 and 24), familiarize yourself with [Landslide Warning Signs](#) and preparedness/response actions.
- Remember that landslide damage on private property is the homeowner's responsibility. Homeowner's insurance does not typically cover landslide damage. A Difference in Coverage Insurance Policy can help cover this gap, if you live in an area susceptible to landslide.

## Tsunami

For all Berkeley residents

- Understand Berkeley's tsunami inundation area (Map 25 in the Risk Assessment) to identify whether you might find yourself in the tsunami inundation zone
- If your home or business is in the tsunami inundation zone, consider purchasing flood insurance.
- Be ready to act on tsunami alerts
- [Sign up for AC Alert](#)
- Bookmark and get familiar with [Berkeley's Emergency Map](#)
- Get familiar with the test and emergency tones from [Berkeley's Outdoor Warning System](#)

If you live in the tsunami inundation zone, make your household evacuation plan for tsunami, including:

- Where will you go – east, out of the tsunami zone
- What will you pack

- How will you get there, using which routes
- Who can help if you need it
- Know nature's warning signs of a near-source tsunami:
  - Earthquake with strong ground shaking for 20 seconds or more (making it difficult to stand or walk)
  - Loud ocean roar
  - Quickly receding water
  - If you are near the water and see these signs, move inland and to higher ground immediately. If there is time (a distant source tsunami) officials will send out alerts and instructions.
- If a tsunami alert is issued
  - Monitor your phone, the Outdoor Warning System, Berkeley's Emergency Map, and TV and radio for updates
  - Follow evacuation orders – as scientists get more information about what created the tsunami, the area that needs to evacuate will become more clearly defined
  - Do not go towards the tsunami – it makes things harder for first responders and for your fellow residents.

### Maritime Community

- The City of Berkeley will evacuate docks and shut them down within 1 hour of a tsunami's estimated arrival.
- Make a plan for your boat
- Should you take your boat OFFSHORE?
- Generally, it is safer to keep your boat docked during a tsunami because most tsunamis are relatively small. On the rare occasion when a larger tsunami is expected (Warning level), you may consider taking your boat offshore. Berkeley's Harbormaster may provide the best advice,

considering

- The SIZE of the tsunami,
- How much TIME until it arrives onshore, and
- The PREPAREDNESS of the boat and its captain.
  
- You may consider hauling your boat out of the water when possible for smaller events. Expect congested boat ramps and remember that you have to get your boat out of the water and to the trailer, and out of the tsunami zone before the tsunami arrives (or before officials close the docks).
  
- Understand whether or not your boat insurance will cover damage caused by a tsunami. Tsunami coverage is entirely dependent on your policy and how much comprehensive coverage you have purchased.
  
- Make sure your boat is secured and ready. Keep in mind that the City will shut down the dock 1 hour before the tsunami's anticipated arrival time.
  
- Secure your boat to the dock and tie down any loose gear.
  
- Check your dock line condition and replace any worn dock lines.
  
- Do not install fendering to the dock.
  
- Remove as much loose boating gear onboard as possible, especially electronics and important documents. Any gear that will remain on your boat should be secured.
  
- Turn off and disconnect shore power cords, water supply hoses and propane or other gas valves.
  
- Secure and lock all hatches and port holes. Check for leaks, and seal them as necessary.
  
- Prepare a go-bag or backpack that you can grab and bring with you if you need to evacuate quickly for a near-source tsunami. Include:
  - Flashlight/headlamp

## Internal

- Area map, marked with driving/walking evacuation routes
- Printed list of phone numbers and email addresses for important contacts
- Battery-powered radio and extra batteries
- Prescriptions or critical medications
- Extra eyeglasses or contact lenses
- Extra set of keys
- Cell phone charger
- Copies of important documents
- Toiletries and change of clothing
- Hand sanitizer
- As you leave, grab your wallet and cell phone
- Make a list of the other items you will want to bring if you have more time to prepare to evacuate. Consider:
  - Items to be safe and comfortable while you are away
  - Medications, prescriptions, and medical devices
  - Computers, electronics and chargers
  - Irreplaceable items (family treasures, art, photo albums)
  - Other valuables

## Floods

For all Berkeley residents, protect your home and neighborhood

- Flooding often occurs due to storm drain blockage. Protect your neighborhood and keep water flowing by participating in the [adopt a drain program](#).
- Direct water away from your building.
- Routinely clean and maintain gutters, downspouts, and splash blocks so that rainwater from your roof flows easily away from your home.
- During an average rainstorm, watch how water flows or accumulates around your home to identify potential trouble spots. If stormwater does not drain away from the building, change your landscaping to improve runoff. This may include building up any sunken areas around the foundation, digging small depressions to properly channel water, and otherwise improving the yard so that it slopes away from your home.
- If you have a sump pump, make sure it has a battery-operated backup in case of power failure during a rainstorm.

Residents near Berkeley creeks, or who have experienced flooding in the past

- Implement [low-cost projects to reduce your flooding risk](#)
- Make your sandbag plan
- Learn [how to sandbag](#) and whether sandbags will be protective for your property
- If you are unable to sandbag, connect with neighbors and friends who can assist you in sandbagging to protect your home during severe storms
- Make a plan for where you'll get sandbags in significant storms. The City usually offers sandbags, and they are also available at a low cost from hardware stores.
- Consider flood insurance, since typical homeowners insurance policies do not cover flooding.
- During heavy rains

- Elevate important items, if possible, during heavy rains, especially from first floor/garage.
- Do not walk, swim or drive through flooded waters. Turn around, don't drown.
- experienced flooding in the past

#### After a flood

- If your home floods, review this [Field Guide for Flooded Home Cleanup](#).

## Utility Interruption

### Power Outage

- Know the location of your circuit breakers and/or fuse boxes and how to check them.
- Make sure PG&E can reach you and alert you of an outage by calling 1-800-743-5000 and updating your contact information.
- Make a plan to stay safe and comfortable during power outages.
- First, think about your household's emergency power needs. What will you need to stay warm? To keep food cool? To operate any medical devices?
- Determine the power draw of the devices that you want to keep operating, and how long you want to operate them.
- Consider purchasing a power bank or generator to provide the power you need to stay safe in your home in short-duration outages.
- Make a plan to stay with family, friends, or at a hotel if your home is affected by a long-term power outage.
- When power outages are planned or likely (for example, severe storms or heat waves are forecast):
- Fully charge your phone and any chargeable devices including battery

packs and even electric vehicles.

- Make sure you have flashlights and fresh batteries close at hand.
- Prepare to use your alternate plans for refrigerating medicines or operating power-dependent medical devices.
- When a power outage occurs:
  - Unplug all electric appliances to avoid overloading circuits or damaging devices when the power turns back on.
  - Leave 1 lamp plugged in with the switch “on.” When the lamp turns back on you’ll know your home has power again. Turn your appliances back on one at a time when power is restored.
  - If you encounter a downed power line, always stay away and call 9-1-1 immediately. Do not touch anything that touching the lines or drive over them.

### Water Outage

- Each person in your household will need 1-2 gallons of water daily for drinking, washing, and cooking. Store as much water as you can. At minimum, store water for 3 days (3-6 gallons per person).
- Options for storing water include: single gallons of water, water barrels, water cubes, or canned water. When choosing the best option for your household, consider cost, ease of storage, required maintenance, and how easy it will be to access and use during an emergency.

### Wastewater Outage

If you don't have water to flush with or your sewage system isn't working:

- Modify your own toilet to collect waste without flushing. Turn the water valve to off. Flush out any water still in the bowl (the toilet shouldn't refill). Put some kitty litter, peat moss, lime, or something similar that will absorb liquid and help reduce odors into the inner bag. Go to the bathroom in the inner bag. You may be able to use the same bag more than once before replacing. Once the inner bag is full or you feel it needs to be replaced, tie it up. Insert a new inner bag and add absorbent/odor reducer for the next use.

- Use a 5-gallon bucket. You can add a toilet seat and set it up as described above.
- If sewage from plumbing fixtures backs up into your home, avoid contact with the sewage as it may contain harmful pathogens.

#### Telecommunications Outage

- Establish a backup communication with your family. Choose a meeting place and time in case you can't call each other.
- Keep a battery-powered AM/FM radio handy to receive emergency alerts if internet, phone, and television aren't working.
- Print important documents or save them to a thumb drive in case of internet outage.
- During emergencies or large events, high demand for cellular networks can make it hard to place a call. A text message may go through when voice calls cannot, because text messages require less bandwidth from the cellular network.
- If you lose cellular service completely to your phone but the internet is still working, you can switch your phone's settings to turn on "Wi-Fi" calling to make calls through the internet.

22. In the 2024 Strategy Actions Spreadsheet, the following action was added:

Reduce fire risk in existing development through vegetation management: Manage the Eucalyptus Understory Cleanup Program.

23. In the 2024 Strategy Actions Spreadsheet, the following action was added:

Evaluate potential land use controls impacts on emergency services: Ensure that Fire Department staff have the opportunity to review any proposed revisions to land use controls that would increase allowed densities, evaluate how the revised land use controls could impact the provision of emergency services, and convey that information to City Council prior to final action.

24. In Element G: Community Education, on page G-1, the following text was deleted and added:

To support this work further, ~~each hazard section~~ at the end of Element C: Mitigation Strategy has a list of individual and household actions to reduce risks associated with that hazard.

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- 1 <https://firesafemarin.org/>
  - 2 Stanford B, Grossinger RM, Askevold RA, Whipple AW, Leidy RA, Beller EE, Salomon MN, Striplen CJ. 2011. East Contra Costa County Historical Ecology Study. Prepared for Contra Costa County and the Contra Costa Watershed Forum. A Report of SFEI's Historical Ecology Program, SFEI Publication #648, San Francisco Estuary Institute, Oakland, CA.
  - 3 <https://firesafemarin.org/create-a-fire-smart-yard/plants/fire-hazardous-plants/>