



Office of the City Manager

February 8, 2022

To: Honorable Mayor and Members of the City Council

From: *Dee* Dee Williams-Ridley, City Manager

Subject: Scope of Work and Project Overview of Community Wildfire Protection Plan,  
Council Item 9, February 8, 2022 Meeting

This memo provides City Councilmembers with an in-depth scope of work and project overview for Agenda Item 9, Contract - Wildland Res Mgt for Community Wildfire Protection Plan (CWPP). This plan focuses on the City of Berkeley and develops a comprehensive analysis of risk in the wildland-urban interface.

The plan does the following:

1. Describes the fire environment of the area;
2. Identifies values at risk as defined by the stakeholders;
3. Provides maps that show Very High Fire Hazard, High Fire Hazard Zones, and Wildland Urban Interface Fire Areas, as defined by state and local authorities;
4. Establishes the rationale for prioritization of fuel management projects and treatment methods, as well as outlines principles for the selection of projects when funding is available;
5. Describes measures communities and homeowners can take to reduce the ignitability of structures; and
6. Identifies sources for best management practices for fuel reduction treatments included in the plan.

Attachment: Community Wildfire Protection Plan Scope of Work, and Project Overview.

cc: Paul Buddenhagen, Deputy City Manager  
LaTanya Bellow, Interim Deputy City Manager  
Abraham Roman, Fire Chief  
Jenny Wong, City Auditor  
Mark Numainville, City Clerk  
Matthai Chakko, Assistant to the City Manager

## Scope of Work & Deliverable Products

### For Berkeley Community Wildfire Protection Plan Support

*The Berkeley Community Wildfire Protection Plan (CWPP) will review the threat of wildfire, values at risk, need for action, and community support. The CWPP will provide detailed next steps, “buy-in” for project actions and further actions. The task will meet or exceed the required steps outlined in the handbook “Preparing a Community Wildfire Protection Plan.”*

<https://www.forestsandrangelands.gov/communities/documents/cwpphandbook.pdf>

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

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

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

themes will result in both a geospatial hazard assessment and a geospatial risk assessment, based on the relative importance of each theme, and the values assigned to the classes in each of the themes.

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

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

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

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

A written summary will be prepared following the working session.

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

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

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

- Fuel Management
- Wildfire response support
- Community education and outreach
- Planning

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

Task 5. Working Session #5 - Plan Review & Develop Admin Draft Plan (Step 8): An Administrative Draft Berkeley CWPP will be prepared to document the hazard assessment, risk assessment, mitigation strategies and action plan developed with the stakeholders in the first three sessions. The Administrative Draft Berkeley CWPP will be presented at the working session #5. Comments from working session #4 on the Administrative Draft will be incorporated into a Public Draft CWPP document that will be posted on the BFD website and circulated electronically for public comment.

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

Deliverables:

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

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

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

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

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

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

Link 1: Berkeley Community Wildfire Protection Plan

Link 2: Berkeley wildfire Hazard and Risk Assessments

- Link 3: Berkeley CWPP Project Action Plan
- Link 4: Berkeley CWPP Project Map with tools and layers
- Link 5: Berkeley CWPP Community Base Map annex (Annexed to existing wildfire threat mapping from surrounding fire jurisdictions)
- Link 6: Berkeley Firewise Neighborhood Groups Fire Reduction Projects (geodata based)
- Link 7: Vision 2050

Hub Section 2 - Contains "What's Here links" and "How To with link to Video tutorial"

Hub Section 3 - Contains "Frequently Asked Questions"

#### Services to be Provided by City of Berkeley

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

City of Berkeley  
 Community Wildfire Protection Plan  
 Project Overview

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

Tasks	Timeframe	Outcome/ Results/ Deliverables
<p><b>Plan Review (Step #8)</b> Develop Admin Draft Plan.</p> <p>Circulate Draft Plan for Public Review and Comment.</p>	<p>Date and location to be determined</p>	<p>Project Working Session #5 Admin Draft Plan</p> <p>Public Comment on Draft Plan.</p>
<p><b>Final Berkeley CWPP (Step #9)</b> Finalize the “Community Wildfire Protection Plan” and present for approvals.</p>	<p>Final Plan for Approvals</p>	<p>Presentations to adopting bodies – Berkeley City Council &amp; Cal Fire.</p> <p>Update of Final Plan Materials.</p>