

AGENDA

**Regular Meeting of the Bradbury City Council
To be held on Tuesday, March 15, 2022
Closed Session Immediately Following
at the Bradbury Civic Center
600 Winston Avenue, Bradbury, CA 91008**

Pursuant to California Government Code section 54953(e)(1), the City is allowing Council Members, Staff and the public to participate in this City Council meeting by means of a Zoom video or telephone call. You will be able to hear the entire proceedings (other than the Closed Session) and to speak during Public Comment, Public Hearing, and other authorized times. Members of the public must maintain silence and mute their microphones and telephones except during those times. The Zoom information is <https://us02web.zoom.us/j/86722404353>, One tap mobile +16699009128, 86722404353#, or dial (669) 900-9128 and enter code 867 2240 4353#.

OPEN SESSION 7:00 PM

Each item on the agenda, no matter how described, shall be deemed to include any appropriate motion, whether to adopt a minute motion, resolution, payment of any bill, approval of any matter or action, or any other action. Items listed as "For Information" or "For Discussion" may also be subject of an "action" taken by the Board or a Committee at the same meeting.

CALL TO ORDER/PLEDGE OF ALLEGIANCE

ROLL CALL: Mayor Bruny, Mayor Pro-Tem Lathrop, Councilmembers Barakat, Hale and Lewis

APPROVAL OF THE AGENDA: Majority vote of City Council to proceed with City Business

DISCLOSURE OF ITEMS REQUIRED BY GOVERNMENT CODE SECTION 1090 & 81000 ET. SEQ.

PUBLIC COMMENT

Anyone wishing to address the City Council on any matter that is not on the agenda for a public hearing may do so at this time. Please state your name and address clearly for the record and limit your remarks to five minutes.

Please note that while the City Council values your comments, the City Council cannot respond nor take action until such time as the matter may appear on a forthcoming agenda.

Routine requests for action should be referred to City staff during normal business hours, 8:30 am - 5:00 pm, Monday through Friday, at (626) 358-3218.

The City of Bradbury will gladly accommodate disabled persons wishing to communicate at a City public meeting. If you require special assistance to participate in this meeting, please call the City Manager's Office at (626) 358-3218 at least 48 hours prior to the scheduled meeting.

ACTION ITEMS*

1. CONSENT CALENDAR

All items on the Consent Calendar are considered by the City Council to be routine and will be enacted by one motion unless a Council Member request otherwise, in which case the item will be removed and considered by separate action. All Resolutions and Ordinances for Second Reading on the Consent Calendar, the motion will be deemed to be "to waive the reading and adopt."

- A. Minutes: Adjourned Meeting of February 7, 2022
- B. Minutes: Regular Meeting of February 15, 2022
- C. Resolution No. 22-07: Demands & Warrants for March 2022
- D. Monthly Investment Report for the month of February 2022

2. Presentation by DUSD Superintendent

3. Approval of the City of Bradbury's Community Wildfire Protection Plan

The City has retained the services of Dudek to develop a grant funded Community Wildfire Protection Plan to mitigate wildfire risk in the City of Bradbury. The final draft is ready and it is recommended that the City Council approve and adopt the CWPP.

4. Recommendation for Award of Bid to Fresh Coat of Monrovia for \$17,663.31 for Interior and Exterior Painting of the Bradbury Civic Center

It is recommended that the City Council award of bid to Fresh Cost of Monrovia in the amount of \$17,663.31 for interior and exterior painting of the Bradbury Civic Center. It is also recommended that the City Council approve an appropriation to account #101-16-6470 in the amount of \$20,000 for FY 21-22, which would cover painting services and any contingency that may arise.

5. Discussion on Electric Charging Stations at the Bradbury Civic Center

Staff has been working with Mayor Pro-Tem Lathrop in exploring the construction of electric charging stations at the Bradbury Civic Center. It is recommended that the City Council discuss installing such stations. If the City Council desires to move forward, Staff will work with a contractor to develop plans and costs.

6. Resolution No. 22-08: Resolution of the City Council of the City of Bradbury of Vote of No Confidence in Los Angeles County District Attorney George Gascon.

This item discusses the performance of the Los Angeles County District Attorney. It is recommended that the City Council adopt Resolution No. 22-08, which casts a vote of no confidence in the Los Angeles County District Attorney.

7. Matters from the City Manager

8. Matters from the City Attorney

9. Matters from the City Council

Mayor Bruny

Duarte Community Education Council (CEC)

Mayor Pro-Tem Lathrop

*League of California Cities
Duarte Education Foundation*

Councilmember Barakat

*LA County Sanitation Districts
San Gabriel Valley Council of Governments (SGVCOG)
San Gabriel Valley Mosquito & Vector Control District
Foothill Transit*

Councilmember Hale

Councilmember Lewis

California JPIA

Director of Bradbury Disaster Committee

Area "D" Office of Disaster Management

10. ITEMS FOR FUTURE AGENDAS

CLOSED SESSION

CALL TO ORDER/ROLL CALL

PUBLIC COMMENT – REGARDING CLOSED SESSIONS ONLY

RECESS TO CLOSED SESSIONS REGARDING:

- A. Public Employee Performance Evaluation**
Government Code Section 54957 (b)(4)
Title: Building & Safety

- B. CONFERENCE WITH LABOR NEGOTIATOR**
Agency Negotiator: Cary S. Reisman, City Attorney
Unrepresented Employee: City Manager
Authority: Government Code Section 54957.6

ADJOURNMENT

The City Council will adjourn to a Regular Meeting at the Bradbury Civic Center, 600 Winston Ave., Bradbury, CA 91008 on Tuesday, April 19, 2022 at 7:00 p.m.

* **ACTION ITEMS** Regardless of a staff recommendation on any agenda item, the City Council will consider such matters, including action to approve, conditionally approve, reject or continue such item. Further information on each item may be procured from City Hall.

"I, Claudia Saldana, City Clerk, hereby certify that I caused this agenda to be posted at the Bradbury City Hall entrance gate on Friday, March 11, 2022 at 5:00 p.m."



CITY CLERK - CITY OF BRADBURY

**MINUTES OF AN ADJOURNED MEETING OF THE
CITY COUNCIL OF THE CITY OF BRADBURY
HELD ON MONDAY, FEBRUARY 7, 2022**

EXECUTIVE ORDER NO. 25-20:

Pursuant to Governor Newsom's Executive Order N-25-20, the City is allowing Council Members, Staff and the public to participate in this City Council meeting by means of a Zoom video or telephone call. Participants will be able to hear the entire proceedings (other than the Closed Session) and be able to speak during Public Comment, Public Hearing, and other authorized times. Members of the public must maintain silence and mute their microphones and telephones except during those times.

MEETING CALLED TO ORDER:

The Adjourned Meeting of the City Council of the City of Bradbury was called to order by Mayor Bruny at 6:00 p.m.

ROLL CALL:

PRESENT: Mayor Bruny (remote), Mayor Pro-Tem Lathrop, Councilmember Barkat (remote), Hale and Lewis

ABSENT: None

STAFF: City Manager Kearney, Assistant City Attorney Kranitz, City Clerk Saldana, Management Analyst Musa

PUBLIC COMMENT:

No public present

STUDY SESSION:

**DISCUSSION ON PLANNING MATTERS RELATED TO THE
HOUSING ELEMENT AND DEVELOPMENT CODE**

City Planner Kasama stated that at the January 18, 2022 City Council Meeting, the Council scheduled a Study Session on February 7, 2022 to discuss planning matters related to the Housing Element and other Development Code items, including a regular ordinance to replace Urgency Ordinance No. 380, which was adopted to comply with Senate Bill 9, which took effect on January 1, 2022, and other planning, land use and development code issues.

RECOMMENDATION:

It is recommended that the City Council discuss these matters and any others the Council wishes to raise, and direct staff on how to proceed.

**HOUSING ELEMENT
SCHEDULE:**

City Planner Kasama stated that the current Housing Element (6th Cycle) was due on October 15, 2021. The State has extended this deadline to October 15, 2022. To meet this deadline, the Housing Consultant, Veronica Tam and Associates, Inc. has outlined the following schedule:

- Administrative Draft to Staff by Friday, March 11, 2022
- 30-day Public Review of Initial Draft – Friday, March 19 to Sunday, April 17, 2022
- City Council Review of Initial Draft at the April 19 Regular Meeting
- Revise Draft based on public review and City Council Review – Monday, May 2, 2022
- Submit Draft to State for 90-day Review – May 2 to August 1, 2022

- Revise Housing Element based on State comments and post for 30-day public review by September 2, 2022
- ~~City Council and Planning Commission to review and adopt Revised Housing Element at a joint Special Meeting during the first week of October 2022~~
- Submit adopted Housing Element to the State by Tuesday, October 15, 2022

HOUSING ELEMENT ISSUES:

City Planner Kasama stated that a significant issue required for the new Housing Element is the designation of a least one site that will allow for multiple-family housing at a density of at least 20 units per acre. The purpose of this requirement is to enable diverse types of housing, which tend to be relatively affordable in comparison to single-family, detached housing.

Another issue are the standards for Single-Room-Occupancy (SRO) Units. For these to be considered dwelling units, the State is requiring that such units have cooking facilities. The City's current standards do not allow cooking facilities.

Concurrent with the adoption of the Housing Element, the City is required to update its Safety Element.

URGENCY ORDINANCE NO. 380 AND SENATE BILL 9:

Senate Bill 9 (SB 9) was signed by the Governor on September 16, 2021, and took effect on January 1, 2022. SB 9 added two new sections to the Government Code requiring cities to ministerially approve the development of up to two units of single-family-zoned lots and requiring cities to ministerially approve certain lot splits. The approval of such developments is subject to certain requirements, but without a local ordinance in place, those standards are based on the State legislation and not local standards. In order to have such developments comply with local standards, the City Council adopted Urgency Ordinance No. 380 at the December 21, 2021 meeting. As an urgency ordinance, it was adopted without public hearing by the Planning Commission and City Council, and should be replaced by a regular ordinance that is reviewed through public hearings.

FAMILY CHILD CARE HOMES:

Senate Bill 234 prohibits cities from requiring any type of zoning permit or business license for all family child care homes for up to 14 children. This has been a requirement for many years, but the legislation now requires that these family child care homes be considered residential uses by all local ordinances and be listed as allowed uses.

DISCUSSION:

City Planner Kasama stated that the City Council needs to identify a specific site in the City for multiple family housing.

The City Council discussed amending SRO development to allow kitchens and legalize SROs that already have a kitchen.

Councilmember Lathrop inquired if the City can require all new 10,000 square foot homes to have an SRO. Assistant City Attorney Kranitz replied yes.

Lisa Kranitz stated that in most cities SROs are not single room units. The Council asked about the difference between SRO and ADU. Ms. Kranitz stated that an SRO can be up to 250 square feet and an ADU up to 1,000 square feet in size. SROs are required to have a bathroom. Councilmember Lathrop stated that the City Council allowed ADUs in the R-20,000 to be 1,200 square feet, because we don't allow guest houses in that zone anymore.

Councilmember Hale inquired if the City could eliminate SROs in the 7,500 Zone. Lisa Kranitz replied no. Councilmember Hale inquired if the City could require a minimum 20-foot wide driveway? Lisa Kranitz replied yes, however, the City cannot put preventative standards in place that make it impossible to build an SRO. An SRO cannot be a freestanding building. It must be part of the house.

Is an EADU the same as a guest house? Lisa Kranitz stated that an EADU would only be allowed in the R-7,500 Zone.

Councilmember Lewis suggested a matrix that would show what is allowed in each zone (A-5, A-2, A-1, R-20000 and R-7,500).

City Planner Kasama and Assistant City Attorney Kranitz stated that they had an understanding of the direction the City Council wants to go and stated that the City Council needs to schedule another Study Session (before the March City Council meeting) with the Housing Element Consultant, Victoria Tam and Associates.

**SECOND STUDY SESSION SCHEDULED
FOR MARCH 7, 2022:**

The City Council scheduled a second Study Session with the City's Housing Element Consultant, Veronica Tam and Associates, on Monday, March 7, 2022 at 6:00 p.m.

ADJOURNMENT:

At 7:15 p.m. Mayor Bruny adjourned the meeting to a Regular Meeting on Tuesday, February 15, 2022 at 7:00 p.m.

MAYOR – CITY OF BRADBURY

ATTEST:

CITY CLERK – CITY OF BRADBURY

**MINUTES OF A REGULAR MEETING OF THE
CITY COUNCIL OF THE CITY OF BRADBURY
HELD ON TUESDAY, FEBRUARY 15, 2022**

EXECUTIVE ORDER NO. 25-20:

Pursuant to Governor Newsom's Executive Order N-25-20, the City is allowing Council Members, Staff and the public to participate in this City Council meeting by means of a Zoom video or telephone call. Participants will be able to hear the entire proceedings (other than the Closed Session) and be able to speak during Public Comment, Public Hearing, and other authorized times. Members of the public must maintain silence and mute their microphones and telephones except during those times.

MEETING CALLED TO ORDER:

The Regular Meeting of the City Council of the City of Bradbury was called to order by Mayor Bruny at 7:00 p.m. followed by the Pledge of Allegiance.

ROLL CALL:

PRESENT: Mayor Bruny (remote), Mayor Pro-Tem Lathrop, Councilmembers Barakat, Hale and Lewis

ABSENT: None

STAFF: City Manager Kearney, City Attorney Reisman, City Clerk Saldana and Management Analyst Musa

APPROVAL OF AGENDA:

Councilmember Hale made a motion to approve the agenda to proceed with City business. Mayor Pro-Tem Lathrop seconded the motion, which carried unanimously.

**DISCLOSURE OF ITEMS REQUIRED BY
GOV. CODE SECTION 1090 & 81000
ET SEQ.:**

In compliance with the California Political Reform Act, each City Councilmember has the responsibility to disclose direct or indirect potential for a personal financial impact as a result of participation in the decision-making process concerning agenda items. City Manager Kearney stated that staff was not aware of any potential conflicts.

PUBLIC COMMENT:

None

CONSENT CALENDAR:

All items on the Consent Calendar are considered by the City Council to be routine and will be enacted by one motion unless a Councilmember requests otherwise, in which case the item will be removed and considered by separate action. All Resolutions and Ordinances for Second Reading on the Consent Calendar are deemed to "waive further reading and adopt."

- A. Minutes: Regular Meeting of January 18, 2022
- B. Resolution No. 22-05: Demands & Warrants for February 2022
- C. Monthly Investment Report for the month of January 2022
- D. Resolution No. 22-06: Approving the Renewal of the General Services Agreement with the County of Los Angeles, ending June 20, 2027

E. Second Reading and Adoption of Ordinance No. 382:
AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF
~~BRADBURY AMENDING THE BRADBURY MUNICIPAL CODE~~
TO ENACT CALIFORNIA STATE ORGANIC WASTE DISPOSAL
REQUIREMENTS

**MOTION TO APPROVE
CONSENT CALENDAR:**

Councilmember Hale made a motion to approve Consent Calendar as presented. Councilmember Barakat seconded the motion, which was carried by the following roll call vote:

APPROVED:

AYES: Mayor Bruny, Mayor Pro-Tem Lathrop,
Councilmembers Barakat, Hale and Lewis

NOES: None

ABSENT: None

Motion passed 5:0

**PRESENTATION: AN UPDATE BY
CALIFORNIA AMERICAN WATER CO.
ON THE LEMON AVENUE RESERVOIR:**

City Manager Kearney stated that California American Water Company (Cal-Am) has been coordinating with Staff on the demolition, filling, and landscaping of the Lemon Avenue Reservoir site. Current estimates suggest there will be 26,000 cubic yards of import soil transported by approximately 3,250 truck hauls to fill the reservoir. It is assumed soils import and grading would take place over 25 days, which translates to about 130 truckloads per day.

The current haul route from the project site is west on Lemon Avenue, then south on Mountain Avenue to the 210 Freeway. The route passes by Wildrose Avenue Elementary School in Monrovia, and an additional assessment would be conducted on the health risks.

It is unknown at this time what will happen to the Reservoir site in the long term. Cal-Am is currently conducting a study on system-side water storage, and it is possible the results of the study would pinpoint the Reservoir as a site for additional water storage. However, Staff has been told that the study might not be completed for a few months.

CAL-AM REPRESENTATIVES:

Brian Baretto, External Affairs Manager, and Mark Reifer, Engineering Manager, were present online to entertain questions from the City Council.

DISCUSSION:

Councilmember Hale stated that he is opposed to Cal-Am bringing in 26,000 cubic yards of dirt. Councilmember Hale also stated that the site could be used as open space for the community or to split the lot and put in a home.

Councilmember Hale stated that the water tank should be in the ground as low as possible because it looks ugly. Mark Reifer stated that the current water tank is 12 feet above and 20 feet below ground. Cal-Am is considering to remove the reservoir and add a new tank. The current tank used to be part of the old agricultural water system.

Mayor Pro-Tem Lathrop inquired if the plans for the site will go the Planning Commission for review. City Manager Kearney replied ~~yes, eventually. Councilmember Hale stated that he~~ would like to see the plans before they go to the Planning Commission.

Mark Reifer stated that Cal-Am can work with the City's landscape architect.

ACTION:

City Manager Kearney stated that staff will work with Cal-Am on the new plan and bring it back to the City Council for review.

DISCUSSION ON CITY COUNCIL COMMITTEE ASSIGNMENTS:

City Manager Kearney stated that Councilmember Barakat recently became aware that Mayor Bruny is the Representative for Foothill Transit and he the Alternate and asked if that was Council's desire when they made the appointments in June of 2021. Mayor Bruny stated that she had no issue with switching positions.

MOTION TO MAKE APPOINTMENTS TO FOOTHILL TRANSIT:

Councilmember Hale made a motion to appoint Councilmember Barakat as the Representative, and Mayor Bruny as the Alternate to Foothill Transit. Mayor Pro-Tem Lathrop seconded the motion, which carried unanimously.

MATTERS FROM THE CITY MANAGER:

Nothing to report

MATTERS FROM THE CITY ATTORNEY:

Nothing to report

MATTERS FROM THE CITY COUNCIL:

MAYOR BRUNY:

Nothing to report

MAYOR PRO-TEM LATHROP:

Mayor Pro-Tem Lathrop reported a burglary on Fairlee Avenue on Friday, February 11, 2022. Councilmember Barakat inquired about the License Plate Readers the City installed. City Manager Kearney stated that the Sheriff's Department is checking those and neighbors' cameras too.

COUNCILMEMBER BARAKAT:

Nothing to report

COUNCILMEMBER HALE:

Nothing to report

COUNCILMEMBER LEWIS:

Nothing to report

ITEMS FOR FUTURE AGENDAS:

None

ADJOURNMENT:

At 7:25 p.m. Mayor Bruny adjourned the meeting to a Study Session (to discuss Planning Matters related to the Housing Element Update) on Monday, March 7, 2022 at 6:00 p.m.

MAYOR – CITY OF BRADBURY

ATTEST:

CITY CLERK – CITY OF BRADBURY

RESOLUTION NO. 22-07

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BRADBURY, CALIFORNIA,
APPROVING DEMANDS AND WARRANTS NO. 16730 THROUGH NO. 16847
(PRE-RELEASED CHECKS)
AND DEMANDS AND WARRANTS NO. 16848 THROUGH NO. 16864
(REGULAR CHECKS)**

The City Council of the City of Bradbury does hereby resolve as follows:

Section 1. That the demands as set forth hereinafter are approved and warrants authorized to be drawn for payment from said demands in the amount of \$1,704.43 (pre-released Checks) and \$47,530.58 at March 15, 2022 from the General Checking Account

PRE-RELEASED CHECKS (due before City Council Meeting):

<u>Check</u>	<u>Name and (Due Date)</u>	<u>Description</u>	<u>Amount</u>
16830	Personnel Concepts (2/22/22)	All-On-One CA and Federal Labor Law Poster for 2022 Acct. 101-16-6200	\$17.53
16831	U.S. Bank (1/31/22)	Custody Charges for Jan 2022 Safekeeping Fees Acct. 101-14-7010	\$29.75
16832	Molly Maid (2/15/22)	07-Feb-2022 Cleaning 14-Feb-2022 Cleaning Acct. 101-16-6460	\$105.00 <u>\$105.00</u> \$210.00
16833	Post Alarm Systems (2/10/22)	City Hall Monitoring for March 2022 Fire & Intrusion Systems Acct. 101-23-7420	\$128.46
16834	California American Water (3/1/22)	<u>Service Address:</u> 600 Winston (City Hall) Acct. 101-16-6400 1775 Woodlyn (Royal Oaks Trail) Acct. 200-48-6400	\$189.02 <u>\$88.16</u> \$277.18
16835	California American Water (3/2/22)	<u>Service Address:</u> 301 Mt Olive Drive Irrigation 2410 Mt Olive Lane Irrigation 2256 Gardi Street Acct. 200-48-6400	\$92.07 \$36.14 <u>\$22.05</u> \$150.26
16836	San Gabriel Valley City Managers' Association (3/16/22)	March 16, 2022 City Managers' Meeting Acct. 101-12-6020	\$35.00

<u>Check</u>	<u>Name and (Due Date)</u>	<u>Description</u>	<u>Amount</u>
16837	LA County Registrar-Recorder/County Clerk (3/7/22)	Filing Fee to Register and Files as a new or renewing Notary Public in Los Angeles County <i>Acct. 101-30-6030</i>	\$43.00
16838	U.S. Bank (2/28/22)	Custody Charges for Feb 2022 Safekeeping Fees <i>Acct. 101-14-7010</i>	\$29.75
16839	Vision Service Plan (3/1/22)	<u>Vision Insurance:</u> City Manager (family) <i>Acct. 101-12-5100</i> City Clerk <i>Acct. 101-13-5100</i> Management Analyst <i>Acct. 101-13-5100</i>	\$61.07 \$23.66 <u>\$23.66</u> \$108.39
16840	The Standard (3/1/22)	<u>Basic Life and AD&D:</u> City Manager <i>Acct. 101-12-5100</i> City Clerk <i>Acct. 101-13-5100</i> Management Analyst <i>Acct. 101-13-5100</i>	\$9.25 \$9.25 <u>\$9.25</u> \$27.75
16841	Spectrum (3/12/22)	Business Internet <i>Acct. 101-16-6230</i>	\$169.98
16842	Southern California Edison (3/15/22)	2298 Gardi Street <i>Acct. 200-48-6400</i>	\$40.66
16843	Southern California Edison (3/15/22)	City Hall Utilities <i>Acct. 101-16-6400</i>	\$228.70
16844	The Gas Company (3/18/22)	City Hall Utilities <i>Acct. 101-16-6400</i>	\$51.42
16845	Staples (3/15/22)	Office Supplies <i>Acct. 101-62-6200</i>	\$14.22
16846	Frontier (3/18/22)	Fire Alarm Line <i>Acct. 101-23-7420</i>	\$110.38
16847	T-Mobile (3/18/22)	Mobile Internet (Hot Spot) <i>Acct. 113-20-8120</i>	\$32.00

Total Pre-Released Checks **\$1,704.43**

REGULAR CHECKS:

<u>Check</u>	<u>Name and (Due Date)</u>	<u>Description</u>	<u>Amount</u>
16848	Best Best & Krieger (2/14/22)	Rio Hondo-San Gabriel Watershed Advocacy Jan 2022 Professional Services <i>Acct. 102-42-7630 (UUT)</i>	\$943.59
16849	Revize LLC (3/7/22)	Annual Website Hosting & Maintenance <i>Acct. 113-20-7730</i>	\$1,800.00
16850	Southern California News Group (2/28/22)	Legal Advertising: Notice of Election <i>Acct. 101-13-6220</i>	\$551.00
16851	City of Monrovia (2/9 & 3/322)	Bradbury Transportation Services for Jan and Feb 2022 <i>Acct. 204-48-7325 (Prop C)</i>	\$1,408.14
16852	Pasadena Humane Society (2/28/22)	Animal Control Services for Feb 2022 <i>Acct. 101-25-7000</i>	\$954.17
16853	Post Alarm Systems (3/1/22)	City Hall Monitoring for April 2022 Fire & Intrusion Systems <i>Acct. 101-23-7420</i>	\$128.46
16854	BURRTEC (1/31/22)	Street Sweeping for Jan 2022 <i>Acct. 200-48-7290</i>	\$313.14
16855	BURRTEC (2/28/22)	Street Sweeping for Feb 2022 <i>Acct. 200-48-7290</i>	\$313.14
16856	Southern California Edison (3/2/22)	Street Lights <i>Acct. 200-48-6410</i>	\$962.53
16857	Priority Landscape Services (2/1/22)	Installed Yards of D.G. with Stabilizer to unlevel damaged surface due to rainfall run-off <i>Acct. 101-21-7035</i>	\$2,925.00

<u>Check</u>	<u>Name and (Due Date)</u>	<u>Description</u>	<u>Amount</u>	
16858	Priority Landscape Services (3/1/22)	<u>March 2021 Landscape Services:</u> Bradbury Civic Center <i>Acct. 101-21-7020</i>	\$220.45	
		Royal Oaks Drive North <i>Acct. 101-21-7015</i>	\$434.59	
		Lemon Trail <i>Acct. 101-21-7045</i>	\$144.87	
		Mt. Olive Drive Entryway & Trail <i>Acct. 101-21-7035</i>	<u>\$585.77</u>	\$1,385.68
16859	TeamLogic IT (3/1/22)	Computer Services <i>Acct. 113-20-8120</i>		\$684.00
16860	RKA Consulting Group (2/22/22)	Bradbury/Wild Rose Street Widening <i>Acct. 201-48-7750</i>	\$7,344.90	
	(2/23/22)	City Engineering Services <i>Acct. 101-19-7230</i>	\$735.00	
	(2/23/22)	Development Projects <i>Acct. 101-19-7230</i>	<u>\$4,305.00</u>	\$12,384.90
16861	LA County Sheriff's Dept. (2/9/22)	Jan 2022 Law Enforcement Services <i>Acct. 101-23-7410</i>		\$10,578.30
16862	Jones & Mayer (1/31/22)	<u>City Attorney:</u> February Retainer <i>Acct. 101-15-7020</i>	\$2,650.00	
		243 Barranca Receivership <i>Acct. 101-15-7070</i>	\$1,072.50	
		Chadwick Ranch <i>Acct. 103-00-2039</i>	\$2,730.00	
		Code Enforcement <i>Acct. 101-23-7450</i>	\$300.00	
		Zoning/General Plan <i>Acct. 101-15-7075</i>	<u>\$3,175.00</u>	\$9,927.50

<u>Check</u>	<u>Name and (Due Date)</u>	<u>Description</u>	<u>Amount</u>
16863	U.S. Bank Corporate Payment Systems (2/22/22)	<u>Kevin Kearney Visa Card:</u> B&H Photo (Ethernet Kit) <i>Acct. 113-20-8120</i> Quiver MXL (tech Funds) <i>Acct. 113-20-8120</i> United (baggage fee) <i>Acct. 101-12-6020</i> Hyatt Regency Monterey <i>Acct. 101-12-6020</i> Target (hand soap) <i>Acct. 101-16-6450</i> USPS (stamps for code enf.) <i>Acct. 101-23-7450</i> ZOOM (tech funds) <i>Acct. 101-16-6450</i> Quiver MXL (tech Funds) <i>Acct. 113-20-8120</i>	\$65.69 \$338.34 \$35.00 \$826.62 \$3.96 \$62.00 \$27.77 <u>\$119.45</u> \$1,478.83
16863	U.S. Bank Corporate Payment Systems (2/22/22)	<u>Claudia Saldana Visa Card:</u> Big Lots Store bottled water) <i>Acct. 101-16-6450</i> USPS (stamps) <i>Acct. 101-20-6120</i>	\$14.56 <u>\$116.00</u> \$130.56
16863	U.S. Bank Corporate Payment Systems (1/22/22)	<u>Sophia Musa Visa Card:</u> Big Lots Store (paper towels, etc.) <i>Acct. 101-16-6450</i> Amazon.com (ethernet cable) <i>Acct. 113-20-8120</i> CPJIA Leadership Academy <i>Acct. 101-16-6020</i> Broadvoice (City Hall Telephone) <i>Acct. 101-16-6440</i> Target (bottled water, paper towels) <i>Acct. 101-16-6440</i>	\$15.38 \$6.39 \$375.00 \$167.99 <u>\$21.88</u> \$586.64
			\$2,196.03
16864	Kevin Kearney (Mar 2022)	Monthly Cell Phone Allowance <i>Acct. 101-12-6440</i>	\$75.00
Total Regular Checks			\$47,530.58

MARCH 2022 PAYROLL:

ACH	Kevin Kearney (Mar 2022)	Salary: City Manager <i>Acct. 101-12-5010</i>	\$10,560.00	
		Withholdings <i>Acct. 101-00-2011</i>	<u>(2,279.65)</u>	\$8,280.35
ACH	Claudia Saldana (Mar 2022)	Salary: City Clerk <i>Acct. 101-13-5010</i>	\$5,583.33	
		Withholdings <i>Acct. 101-00-2011</i>	<u>(1,442.40)</u>	\$4,140.93
ACH	Sophia Musa (Mar 2022)	Salary: Management Analyst <i>Acct. 101-16-5010</i>	\$4,633.75	
		Withholdings <i>Acct. 101-00-2011</i>	(859.91)	
		PERS Employee Share <i>Acct. 101-16-5100</i>	<u>(312.78)</u>	\$3,461.06
			Total Payroll	\$15,882.34

ELECTRONIC FUND TRANSFER (EFT) PAYMENTS FOR MARCH 2022:

EFT	Aetna (Mar 2022)	<u>Health Insurance for March 2022:</u>		
		City Manager <i>Acct. 101-12-5100</i>	\$1,731.46	
		City Clerk <i>Acct. 101-13-5100</i>	\$929.38	
		Management Analyst <i>Acct. 101-16-5100</i>	<u>\$747.00</u>	\$3,407.84
EFT	EDD (Mar 2022)	State Tax Withholdings SDI <i>Acct. 101-00-2011</i>	\$791.38 <u>\$228.55</u>	\$1,019.93
EFT	Dept. of Treasury Internal Revenue Service (Mar 2022)	Federal Tax Withholdings Social Security Medicare (Employee's portion of Social Security and Medicare is matched by the City) <i>Acct. 101-00-2011</i>	\$1,972.58 \$2,576.36 <u>\$602.54</u>	\$5,151.48
EFT	California PERS (Mar 2022)	City Manager <i>Acct. 101-12-5100</i>	\$1,643.31	
		City Clerk <i>Acct. 101-13-5100</i>	\$864.46	
		Management Analyst <i>Acct. 101-16-5100</i>	<u>\$664.48</u>	\$3,172.25

EFT	California PERS (Mar 2022)	Unfunded Accrued Liability		
		UAL Payment (Classic)	\$783.75	
		UAL Payment (PEPRA)	<u>\$16.08</u>	\$799.83
		Acct. 101-16-6240		

MAYOR – CITY OF BRADBURY

ATTEST:

CITY CLERK – CITY OF BRADBURY

"I, Claudia Saldana, City Clerk, hereby certify that the foregoing Resolution, being Resolution No. 22-07, was duly adopted by the City Council of the City of Bradbury, California, at a regular meeting held on the 15th day March, 2022 by the following roll call vote:"

AYES:

NOES:

ABSENT:

CITY CLERK – CITY OF BRADBURY



Remit payment and make checks payable to:
STAPLES CREDIT PLAN
DEPT. 11 - 0005337241
PO BOX 9001036
LOUISVILLE, KY 40290-1036

INVOICE DETAIL

BILL TO:
Acct: 6011 1000 5337 241
CITY OF BRADBURY

SHIP TO:
CLAUDIA SALDANA
CITY OF BRADBURY
600 WINSTON ST
BRADBURY CA 91008

Amount Due:	Trans Date:	DUE DATE:	Invoice #:
\$14.22	01/19/22	03/15/22	3006405761
PO:		Store: 100088887, WESTBORO, MA	

PRODUCT	SKU #	QUANTITY	UNIT PRICE	TOTAL PRICE
HAMMERMILL COPY PLUS PAPE	122374	1.0000 EA	\$69.99	\$69.99
COUPONDISCOUNT	558100	1.0000 ST	-\$25.00	-\$25.00
COUPONDISCOUNT	558100	1.0000 ST	-\$32.00	-\$32.00

Purchased by: CLAUDIA SALDANA
Order #: 9838618819

SUBTOTAL	\$12.99
TAX	\$1.23
TOTAL	\$14.22

Cr # 16845

401422

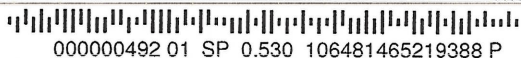




P.O. BOX 6343
FARGO ND 58125-6343



ACCOUNT NUMBER 4246 0445 5575 6224
STATEMENT DATE 02-22-2022
AMOUNT DUE \$2,179.65
NEW BALANCE \$2,179.65
PAYMENT DUE ON RECEIPT



000000492 01 SP 0.530 106481465219388 P

CITY OF BRADBURY
ATTN CLAUDIA SALDANA
600 WINSTON AVE.
BRADBURY CA 91008-1123

AMOUNT ENCLOSED
\$ 2,196.03

Please make check payable to "U.S. Bank"

U.S. BANK CORPORATE PAYMENT SYSTEM:
P.O. BOX 790428
ST. LOUIS, MO 63179-0428

CK # 16863

4246044555756224 000217965 000217965

base tear payment coupon at perforation.

CORPORATE ACCOUNT SUMMARY

CITY OF BRADBURY 4246 0445 5575 6224	Previous Balance	Purchases And Other + Charges	Cash Advances +	Cash Advance Fees +	Late Payment Charges	- Credits	- Payments	New Balance
Company Total	\$2,499.35	\$2,196.03	\$0.00	\$0.00	\$0.00	\$0.00	\$2,515.73	\$2,179.65

CORPORATE ACCOUNT ACTIVITY

CITY OF BRADBURY
4246-0445-5575-6224

TOTAL CORPORATE ACTIVITY
\$2,515.73 CR

Post Date	Tran Date	Reference Number	Transaction Description	Amount
01-31	01-27	74798262031000000000166	PAYMENT - THANK YOU 00000 C	1,835.44 PY
02-22	02-19	74798262053000000000532	PAYMENT - THANK YOU 00000 C	680.29 PY

NEW ACTIVITY

KEVIN KEARNEY
4246-0446-0277-2711

CREDITS
\$0.00

PURCHASES
\$1,478.83

CASH ADV
\$0.00

TOTAL ACTIVITY
\$1,478.83

Post Date	Tran Date	Reference Number	Transaction Description	Amount
01-27	01-26	24906412026139348784826	B&H PHOTO 800-606-6969 800-2215743 NY	65.69
01-28	01-27	24492162027000029695774	QP* MXI. HTTPSQUIVERS. UT	338.34

CUSTOMER SERVICE CALL

800-344-5696

ACCOUNT NUMBER

4246-0445-5575-6224

STATEMENT DATE

02/22/22

DISPUTED AMOUNT

.00

ACCOUNT SUMMARY

PREVIOUS BALANCE 2,499.35

PURCHASES &
OTHER CHARGES 2,196.03

CASH ADVANCES .00

CASH ADVANCE FEES .00

LATE PAYMENT
CHARGES .00

CREDITS .00

PAYMENTS 2,515.73

ACCOUNT BALANCE 2,179.65

SEND BILLING INQUIRIES TO:

U.S. Bank National Association

C/O U.S. Bancorp Purchasing Card Program
P.O. Box 6335
Fargo, ND 58125-6335

AMOUNT DUE

2,179.65

FEB 23 2022



Company Name: CITY OF BRADBURY

Corporate Account Number: 4246 0445 5575 6224

Statement Date: 02-22-2022

Ch# 16863

NEW ACTIVITY

Post Date	Tran Date	Reference Number	Transaction Description	Amount
02-02	01-31	24692162032100718996995	UNITED 0169968913178 800-932-2732 TX KEARNEY /FIRST CHE 0-0-0	35.00
02-07	02-04	24055222036722604682220	HYATT REGENCY MONTEREY MONTEREY CA 34283779 ARRIVAL: 02-01-22	826.62
02-09	02-08	24164072039091017218152	TARGET 00003020 DUARTE CA	3.96
02-10	02-09	24137462041600162592634	USPS.COM POSTAL STORE 800-782-6724 MO	62.00
02-14	02-11	24011342042000049200481	ZOOM.US 888-799-9666 WWW.ZOOM.US CA	27.77
02-14	02-11	24492162042000034059884	QP* MXL HTTPSQUIVERS. UT	119.45

SOPHIA MUSA 4246-0446-5320-2600	CREDITS \$0.00	PURCHASES \$586.64	CASH ADV \$0.00	TOTAL ACTIVITY \$586.64
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Post Date	Tran Date	Reference Number	Transaction Description	Amount
02-01	01-31	24137462031300590791344	BIG LOTS STORES - #4170 DUARTE CA	15.38
02-04	02-03	24431062035083716550128	AMAZON.COM*A43CZ6QP3 AMZN AMZN.COM/BILL WA	6.39
02-11	02-10	24492152041852874420259	CJPIA 562-467-8729 CA	375.00
02-15	02-14	24453512045017027420725	BROADVOICE 888-325-5875 CA	167.99
02-16	02-15	24164072046091007629385	TARGET 00003020 DUARTE CA	21.88

CLAUDIA A SALDANA 4246-0470-0126-4883	CREDITS \$0.00	PURCHASES \$130.56	CASH ADV \$0.00	TOTAL ACTIVITY \$130.56
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Post Date	Tran Date	Reference Number	Transaction Description	Amount
01-26	01-25	24137462025300570459399	BIG LOTS STORES - #4170 DUARTE CA	14.56
02-10	02-09	24137462041001271782184	USPS PO 0522740820 DUARTE CA	116.00

Department: 00000 Total:	\$2,196.03
Division: 00000 Total:	\$2,196.03

City of Bradbury **Monthly Investment Report for the month of February 2022**

CASH ON DEPOSIT BY ACCOUNT

Bank Accounts:	<u>Amount</u>	<u>Maturity</u>	<u>Interest Rate</u>
Wells Fargo Bank - General Checking	\$ 1,300,878.11	n/a	0%

Investments:			
Local Agency Investment Fund (LAIF)	\$ 3,362,756.99	n/a	0.28%

Ally Bank CD	\$ 247,000.00	9/26/2022	1.95%
Texas Exchange Bank Crowley CD	\$ 249,000.00	7/9/2024	0.50%
	\$ 248,000.00	12/10/2024	0.90%

Total \$ 5,407,635.10

CASH & INVESTMENTS ON DEPOSIT BY FUND

Funds	<u>Amount</u>
General Fund (101)	\$3,963,374.89
Utility Users Tax Fund (102)	\$590,504.48
Deposits Fund (103)	\$54,514.91
Long Term Planning Fee Fund (112)	\$4,709.69
Technology Fee Fund (113)	\$24,909.04
Gas Tax Fund (200)	\$8,298.74
SB 1 Gas Tax Fund (201)	\$45,105.70
Prop A Fund (203)	\$19,296.29
Prop C Fund (204)	\$13,971.22
TDA Fund (205)	\$2,919.58
Sewer Fund (206)	\$603.53
STPL Fund (208)	\$1,050.58
Recycling Grant Fund (209)	\$6,292.02
Measure R Fund (210)	\$77,512.35
Measure M Fund (212)	\$52,668.34
Measure W Fund (213)	(\$0.23)
COPS Fund (215)	\$403,461.96
County Park Grant Fund (217)	\$9,212.85
CWPP Grant Fund (219)	\$502.23
Cares Act Fund (220)	\$128,726.93
Total	\$ 5,407,635.10

I hereby certify that there are sufficient funds available to meet the City's obligations for the next three (3) months.
 This report is prepared in accordance with the guidelines established in the Statement of Investment Policy adopted November 21, 2017

Submitted By:



Kevin Kearney
 City Manager

Reviewed By:



Laurie Stiver
 City Treasurer

SIGN HERE

Revenues

Acct. Number	Account Description	2020-21 Budget	2020-21 YTD @ 6/30/21		2021-22 Budget	2021-22 YTD @ 02/28/2022	
General Fund:							
101-00-4000	Operating Transfers In	-	44,815	#DIV/0!	665,476	667,520	100%
101-00-4010	Property Tax-Current Secured	430,000	472,351	110%	481,798	263,676	55%
101-00-4030	Property Tax-Current Unsecured	14,000	20,542	147%	18,000	12,270	68%
101-00-4050	Property Tax Prior Year	-	-	#DIV/0!	-	-	#DIV/0!
101-00-4060	Public Safety Augmentation F	10,000	11,191	112%	11,000	7,388	67%
101-00-4070	Delinquent Taxes	6,000	10,080	168%	8,000	7,699	96%
101-00-4100	Sales & Use Tax	1,200	6,308	526%	3,000	2,025	67%
101-00-4110	Franchise Fee-Cable TV	26,000	23,316	90%	27,000	13,834	51%
101-00-4111	PEG Fees	-	-	#DIV/0!	-	2,774	#DIV/0!
101-00-4120	Franchise Fee-SC Edison	20,000	19,077	95%	19,500	-	0%
101-00-4130	Franchise Fee-SC Refuse	38,000	38,562	101%	39,500	19,015	48%
101-00-4140	Franchise Fee-SC Gas Co.	3,000	3,503	117%	3,550	-	0%
101-00-4150	Franchise Fee-Cal Am Water	40,000	47,376	118%	47,500	-	0%
101-00-4160	AB939 Refuse Admin. Fee	18,000	19,634	109%	20,000	-	0%
101-00-4190	Real Property Transfer Tax	20,000	29,088	145%	22,500	24,687	110%
101-00-4200	Motor Vehicle In-Lieu	140,000	144,160	103%	145,000	73,811	51%
101-00-4210	Dist & Bail Forfeiture	2,000	645	32%	1,200	72	6%
101-00-4220	Fines-City	1,000	4,901	490%	2,500	1,163	47%
101-00-4340	BL Website Link	-	-	#DIV/0!	-	-	#DIV/0!
101-00-4350	Business License	40,000	32,094	80%	40,000	16,295	41%
101-00-4360	Movie & TV Permits	-	34,060	#DIV/0!	-	65,370	#DIV/0!
101-00-4370	Bedroom License Fee	10,000	6,180	62%	10,000	5,150	52%
101-00-4410	Variances & CUPs	1,500	1,635	109%	1,635	-	0%
101-00-4420	Lot Line Adjustment/Zone Changes	-	14,578	#DIV/0!	-	-	#DIV/0!
101-00-4440	Subdivisions/Lot Splits	-	4,844	#DIV/0!	-	-	#DIV/0!
101-00-4460	Planning Dept. Review	70,000	73,539	105%	65,000	13,926	21%
101-00-4470	Building Construction Permit	85,000	103,845	122%	100,000	64,071	64%
101-00-4480	Building Plan Check Fees	90,000	51,245	57%	100,000	83,634	84%
101-00-4485	Landscape Plan Check Permit	3,500	9,913	283%	9,000	8,222	91%
101-00-4490	Green Code Compliance	6,500	7,989	123%	10,000	11,563	116%
101-00-4500	Civic Center Rental Fee	900	900	100%	900	-	0%
101-00-4530	Environmental & Other Fees	1,300	3,240	249%	2,500	371	15%
101-00-4540	City Engineering Plan Check	50,000	98,084	196%	100,000	44,551	45%
101-00-4600	Interest Income	50,000	6,523	13%	50,000	13,969	28%
101-00-4700	Sales of Maps & Publications	200	15	8%	100	-	0%
101-00-4800	Other Revenue	-	-	#DIV/0!	-	82	#DIV/0!
101-00-4850	Cal-Am Loan Repayment	4,820	4,820	100%	4,820	-	0%
101-00-4900	Reimbursements	500	49,766	9953%	2,000	12,647	632%
101-00-4920	Sale of Prop. A Funds	-	48,000	#DIV/0!	-	-	#DIV/0!
101-23-4950	Vacant Property Registry Fee	100	-	0%	100	-	0%
101-24-4610	Donations	-	-	#DIV/0!	500	-	0%
Total General Fund Revenues		1,183,520	1,446,819	122%	2,012,079	1,435,785	71%
Utility Users Tax Fund:							
102-00-4600	Interest	10,000	6,322	63%	5,000	3,458	69%
102-00-4830	Electric	-	2	#DIV/0!	-	-	#DIV/0!
		10,000	6,324		5,000	3,458	69%
Deposits Fund:							
103-00-2039	Chadwick Ranch Development	244,209	78,209	32%	75,000	101,225	135%
		244,209	78,209	32%	75,000	101,225	135%
Long Term Planning Fee Fund:							
112-00-4490	Long-Term Planning Fee	3,000	2,724	91%	4,000	3,156	79%
112-00-4600	LTP Fee Interest Income	300	66	22%	150	18	12%
		3,300	2,790		4,150	3,174	76%
Technology Fee Fund:							
113-00-4520	Technology Fee	7,000	10,182	145%	11,000	5,776	53%

Revenues

Acct. Number	Account Description	2020-21 Budget	2020-21 YTD @ 6/30/21		2021-22 Budget	2021-22 YTD @ 02/28/2022	
113-00-4600	Technology Fee Interest Income	800	364	46%	500	159	32%
		7,800	10,546	135%	11,500	5,935	52%
Gas Tax Fund:							
200-00-4200	TCRA Funds	1,200		0%	-		#DIV/0!
200-00-4600	Interest	-	136	#DIV/0!	200	70	35%
200-48-4260	Gas Tax	22,500	28,435	126%	35,000	18,443	53%
		23,700	28,571	121%	35,200	18,513	53%
SB1 Gas Tax Fund:							
201-00-4000	Transfers In						
201-00-4260	Gas Tax	13,500	19,369	143%	30,000	8,885	30%
201-00-4600	Gas Tax Interest	-	412	#DIV/0!	300	258	86%
		13,500	19,781	147%	30,300	9,143	30%
Prop. A Fund:							
203-40-4260	Prop. A Transit Funds	25,094	21,669	86%	25,000	17,851	71%
203-40-4600	Prop. A Transit Interest	300	444	148%	200	52	26%
		25,394	22,113	87%	25,200	17,903	71%
Prop. C Fund:							
204-48-4260	Prop. C Funds	20,813	17,974	86%	23,000	14,807	64%
204-48-4600	Prop. C Interest	-	171	#DIV/0!	450	121	27%
		20,813	18,145	87%	23,450	14,928	64%
Transportation Development Act Fund:							
205-48-4260	TDA Funds	5,000	9,014	180%	5,000	2,920	58%
205-48-4600	TDA Interest	-	10	#DIV/0!	-	12	#DIV/0!
		5,000	9,024	180%	5,000	2,932	59%
Sewer Fund:							
206-00-4000	Transfers In	240,000	240,000	100%	-		#DIV/0!
206-50-4600	Sewer Fund Interest	11,000	6,319	57%	-	2,640	#DIV/0!
206-50-4606	Winston Ave. Assessment		67,433	#DIV/0!			#DIV/0!
		251,000	313,752		-	2,640	#DIV/0!
STPL Fund:							
208-00-4260	STPL Funds						
208-00-4600	STPL Interest		10	#DIV/0!	10	6	60%
			10	#DIV/0!	10	6	60%
Recycling Grant Fund:							
209-00-4260	Recycling Grant Funds	5,000	-	0%	5,000		0%
209-00-4600	Recycling Grant Interest	50	99	198%	100	36	36%
		5,050	99	2%	5,100	36	1%
Measure R Fund:							
210-48-4260	Measure R Funds	15,572	13,499	87%	18,000	11,105	62%
210-00-4600	Measure R Interest	800	561	70%	300	409	136%
		16,372	14,060	86%	18,300	11,514	63%
Measure M Fund							
212-48-4260	Measure M Funds	16,005	15,295	96%	16,500	10,670	65%
212-00-4600	Measure M Interest	300	335	112%	400	272	68%
		16,305	15,630	96%	16,900	10,942	65%
Measure W Fund							
213-48-4260	Measure W Funds	60,000	50,506	84%	50,500		0%
213-48-4600	Measure W Interest	-	-	#DIV/0!	-		#DIV/0!
		60,000	50,506	84%	50,500	-	0%

Revenues

Acct. Number	Account Description	2020-21 Budget	2020-21 YTD @ 6/30/21		2021-22 Budget	2021-22 YTD @ 02/28/2022	
Citizen's Option for Public Safety (COPS) Fund:							
215-23-4260	COPs Funds	100,000	100,000	100%	100,000	161,285	161%
215-00-4600	COPs Interest	3,000	2,200	73%	2,500	1,965	79%
		103,000	102,200	99%	102,500	163,250	159%
County Park Grant:							
217-00-4210	County Park Grant		324				
217-00-4600	Grant Fund Interest Income	100	539	539%	500	53	11%
		100	863	863%	500	53	11%
Fire Safe Grant:							
219-00-4260	Community Wildfire Protection Plan	45,000	20,148	45%	24,994	3,797	15%
219-00-4600	Fire Safe Grant Interest Income	150	50	33%	75		0%
		45,150	20,198	45%	25,069	3,797	15%
Covid-19 Fund:							
220-00-4215	COVID 19 Revenues	-	177,983	#DIV/0!	100,000		0%
220-00-4600	Interest Income	-	38	#DIV/0!	-	744	#DIV/0!
		-	178,021	#DIV/0!	100,000	744	1%
Total Revenues		2,034,213	2,337,661	115%	2,545,758	1,805,978	71%

Expenditures

Account Description	2020-21 Budget	2020-21 YTD @ 6/30/21		2021-22 Budget	2021-22 YTD @ 02/28/2022	
General Fund:						
101-00-5000 Transfers Out	240,000	240,000	100%	-	-	#DIV/0!
City Council Division:						
101-11-6100 Events and awards	-	-	#DIV/0!	6,500		0%
101-11-6110 City Newsletter	300	245	82%	-		#DIV/0!
101-11-6500 Community Support (homelessness)	4,000	3,000	75%	3,000		0%
	4,300	3,245	75%	9,500	-	0%
City Manager Division:						
101-12-5010 Salaries	120,000	124,080	103%	126,720	84,633	67%
101-12-5100 Benefits	49,455	48,927	99%	50,747	32,815	65%
101-12-6020 Meetings & Conferences	3,500	295	8%	5,000	2,103	42%
101-12-6025 Expense Account	1,250	760	61%	1,500	279	19%
101-12-6050 Mileage	1,000	418	42%	1,000	395	40%
101-12-6440 Cell Phone	1,000	825	83%	1,000	1,106	111%
	176,205	175,305	99%	185,967	121,331	65%
City Clerk Division:						
101-13-5010 Salaries	61,424	63,512	103%	67,000	44,667	67%
101-13-5100 Benefits	26,126	26,424	101%	30,000	18,606	62%
101-13-6020 Meetings & Conferences	-		#DIV/0!	-		#DIV/0!
101-13-6050 Mileage	115	55	48%	100	38	38%
101-13-6210 Special Department Supplies	275	-	0%	275		0%
101-13-6220 Election Supplies	500	-	0%	500	13	3%
101-13-6225 Codification	5,000	2,197	44%	3,000	2,296	77%
101-13-7000 Contract Election Services	-	-	#DIV/0!	15,000		0%
	93,440	92,188	99%	115,875	65,620	57%
Finance Division:						
101-14-5010 Salaries	14,000	14,895	106%	15,789	8,953	57%
101-14-5100 Benefits	1,357	1,304	96%	1,355	512	38%
101-14-6210 Special Department Supplies	50	794	1588%	400	400	100%
101-14-6230 Contracted Computer Services	1,000	1,231	123%	1,000	1,150	115%
101-14-7010 Contracted Banking Services	4,500	5,735	127%	4,500	3,440	76%
101-14-7020 Contracted Audit Services	18,500	17,000	92%	19,000		0%
101-14-7040 GASB Reports	725	700	97%	700	700	100%
	40,132	41,659	104%	42,744	15,155	35%
City Attorney Division:						
101-15-7020 City Attorney Retainer	31,800	31,800	100%	31,800	18,550	58%
101-15-7070 City Attorney Special Service	2,500	24,260	970%	3,000	6,468	216%
101-15-7075 Development Code Update		2,150	#DIV/0!		3,198	#DIV/0!
101-15-7080 Seminars & Training	1,100	750	68%	-	-	#DIV/0!
101-15-6125 City Attorney-Planning			#DIV/0!	3,000	-	0%
101-15-7450 City Attorney-Code Enforcement			#DIV/0!	2,000		0%
	35,400	58,960	167%	39,800	28,216	71%
General Government Division:						
101-16-5010 Salaries	48,308	49,334	102%	55,605	37,070	67%
101-16-5100 Benefits	15,488	8,736	56%	14,286	10,609	74%
101-16-6010 Seminars & Training	1,000		0%	1,000	40	4%
101-16-6020 Meetings & Conferences	200	225	113%	200	678	339%
101-16-6040 Transportation & Lodging	500		0%	500		0%
101-16-6050 Mileage	300	149	50%	300	242	81%
101-16-6120 Postage	700	201	29%	700	249	36%
101-16-6200 Office Supplies	1,000	3,329	333%	3,000	643	21%
101-16-6210 Special Departmental Supplies	-		#DIV/0!		997	#DIV/0!
101-16-6230 Computer & Website Services	10,000	4,475	45%	10,000	1,716	17%

Expenditures

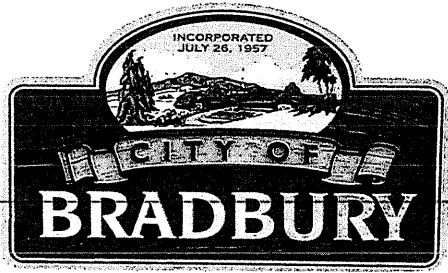
Account Description		2020-21 Budget	2020-21 YTD @ 6/30/21		2021-22 Budget	2021-22 YTD @ 02/28/2022	
101-16-6240	PERS UAL Payment	4,500	6,291	140%	6,291	6,399	102%
101-16-6241	PERS Replacement Benefit Contribution	2,500	2,566	103%	2,600	2,518	97%
101-16-6242	PERS SSA 218 Annual Fee	200	200	100%	200		0%
101-16-6250	Copier & Duplications	1,200		0%		-	#DIV/0!
101-16-6300	Insurance	35,000	36,352	104%	39,187	36,652	94%
101-16-6400	Utilities	3,200	7,029	220%	7,380	4,553	62%
101-16-6440	Telephone	2,300	2,143	93%	2,100	512	24%
101-16-6450	Building Operations	1,200	1,153	96%	1,200	387	32%
101-16-6460	Building & Cleaning Service	3,200	4,840	151%	4,500	3,255	72%
101-16-6470	Maintenance & Supplies	500	4,387	877%	500	790	158%
101-16-7435	Redistricting		#DIV/0!		15,000	40,250	268%
101-16-6415	Street Signs		-	#DIV/0!	6,000		0%
		131,296	131,410	100%	170,550	147,560	87%
Engineering Division:							
101-19-7230	Contracted Engineering Services	75,000	74,148	99%	80,000	41,279	52%
		75,000	74,148	99%	80,000	41,279	52%
Planning, Zoning & Development Division:							
101-20-6020	Meetings & Conferences						
101-20-6120	Postage	500	317	63%	500	35	7%
101-20-6210	Special Department Supplies	500	1,935	387%	500	53	11%
101-20-6240	Environmental Filing Fees	500		0%	500		0%
101-20-7210	City Planner Retainer	46,800	46,800	100%	46,800	18,425	39%
101-20-7220	Contracted Building & Safety	90,000	80,941	90%	120,000	37,607	31%
101-20-7240	City Planner Special Service	15,000	22,275	149%	15,000	-	0%
101-20-7245	General Plan update	134,460	14,966	11%		-	#DIV/0!
101-20-7075	Development Code Update	-	-	#DIV/0!	2,000		0%
		287,760	167,234	58%	185,300	56,120	30%
Parks & Landscape Maintenance Division:							
101-21-7015	Royal Oaks Trail Maintenance	10,000	7,039	70%	10,000	6,435	64%
101-21-7020	City Hall Grounds Maintenance	7,000	4,443	63%	7,000	7,222	103%
101-21-7025	Trail Maintenance	10,000	12,124	121%	10,000	(1,992)	-20%
101-21-7035	Mt.Olive Entrance & Trail	12,000	10,345	86%	12,000	4,119	34%
101-21-7045	Lemon/RO Horse Trail	7,000	3,430	49%	7,000	960	14%
101-21-7060	Street Tree Trimming	-	560	#DIV/0!	15,000	250	2%
		46,000	37,941	82%	61,000	16,994	28%
Public Safety Division:							
101-23-6210	Special Departmental Services	-	11	#DIV/0!		36	#DIV/0!
101-23-7410	Contract Services Sheriff	125,121	125,120	100%	126,940	63,470	50%
101-23-7420	City Hall Security	3,000	3,537	118%	3,000	3,426	114%
101-23-7450	Code Enforcement	12,000	19,615	163%	12,000	1,024	9%
101-23-7757	AED Purchase			#DIV/0!			#DIV/0!
		140,121	148,283	106%	141,940	67,956	48%
Emergency Preparedness Division:							
101-24-6010	Seminars & Training	100	185	185%	110	65	59%
101-24-6020	Meetings & Conferences	100	495	495%	500		0%
101-24-6030	Memberships & Dues	375	360	96%	400	360	90%
101-24-6100	Events & Awards	200		0%	200		0%
101-24-6470	Maintenance & Supplies	5,500	4,532	82%	5,500	217	4%
101-24-6480	Civic Center Generator	1,000	944	94%	1,000	291	29%
101-24-7245	Hazard Mitigation Plan	-		#DIV/0!	-		#DIV/0!
		7,275	6,516	90%	7,710	933	12%

Expenditures

Account Description	2020-21 Budget	2020-21 YTD @ 6/30/21		2021-22 Budget	2021-22 YTD @ 02/28/2022	
Animal & Pest Control Division:						
101-25-7000 Animal Control Services	12,971	5,817	45%	11,450	6,679	58%
101-25-7010 Pest Control Services	300		0%	500		0%
	13,271	5,817	44%	11,950	6,679	56%
Intergovernmental Relations Division:						
101-30-6030 Memberships & Dues	10,500	10,463	100%	10,500	11,021	105%
General Fund Totals	1,300,700	1,193,169	92%	1,062,836	578,864	54%
Utility Users Tax Fund:						
102-15-7075 Development Code Update		-				
102-42-7630 NPDES Stormwater Compliance	73,431	91,186	124%	90,000	14,627	16%
	73,431	91,186		90,000	14,627	16%
Deposits Fund:						
103-00-2039 Chadwick Ranch Development	166,000	85,568	52%	75,000	46,172	62%
	166,000	85,568		75,000	46,172	62%
Long Term Planning Fee Fund:						
112-20-7245 General Plan Expense	20,000	19,270	96%	2,000	-	0%
Technology Fee Fund:						
113-20-4500 Permit Digitizing	-	865	#DIV/0!			#DIV/0!
113-20-7730 Website	2,000	10,200	510%	3,000	-	0%
113-20-8120 Capital Equipment-Server & Copier	10,000	10,222	102%	10,000	10,464	105%
	14,000	21,287	152%	13,000	10,464	80%
Gas Tax Fund:						
200-48-6400 Utilities-Select System	9,000	12,878	143%	11,000	6,790	62%
200-48-6410 Street Lights	8,000	10,506	131%	10,000	6,639	66%
200-48-7000 PW Contract Services	1,000	-	0%	1,000	417	42%
200-48-7290 Street Sweeping	4,000	3,131	78%	4,000	2,818	70%
200-48-7750 Wild Rose Project	5,000	2,250	45%	25,097	9,151	36%
	27,000	28,765	107%	51,097	25,815	51%
SB1 Gas Tax Fund:						
201-48-7745 Royal Oaks North Curb Extension						
201-48-7750 Wild Rose Project				81,615	6,561	8%
201-48-7755 City Wide Slurry Seal					1,038	#DIV/0!
				81,615	7,599	9%
Prop. A Fund:						
203-00-7600 Sale of Prop. A Funds	60,000	60,000	100%			
	60,000	60,000	100%	-	-	#DIV/0!
Prop. C Fund:						
204-20-6030 Memberships & Dues	900	378	42%	900	353	39%
204-40-7325 Transit Services	9,000	8,448	94%	9,000	4,928	55%
204-48-7750 Wild Rose Project			#DIV/0!	36,570	15,348	
	9,900	8,826	89%	46,470	20,629	44%
Transportation Development Act Fund:						
205-48-7045 RO Trail			#DIV/0!		2,600	#DIV/0!
205-48-7720 Lemon/RO Horse Trail Project						#DIV/0!
205-48-7735 Royal Oaks & Mt. Olive Trail Rehab.	5,000	4,014	80%	5,000		0%
205-00-7760 Return of Funds						
	5,000	4,014	80%	5,000	2,600	#DIV/0!

Expenditures

Account Description		2020-21 Budget	2020-21 YTD @ 6/30/21		2021-22 Budget	2021-22 YTD @ 02/28/2022	
Sewer Fund:							
	Transfer Out to GF				665,476		0%
206-50-7601	Mt. Olive Lane Sewer Project	673,396	253,946	38%			#DIV/0!
206-50-7602	DUSD Message Board	40,000	35,160	88%			#DIV/0!
206-50-7606	Winston Ave Project	40,000	51,750	129%			#DIV/0!
		753,396	340,856	45%	665,476	-	0%
STPL Fund:							
208-48-6555	Citywide Slurry Seal						
208-48-7750	Wild Rose Project				1,055		0%
					1,055	-	0%
Recycling Grant Fund:							
209-35-7300	Recycling Education	5,000	7,200	144%	5,000	-	0%
Measure R Fund:							
210-48-7750	Wild Rose Project				88,739		0%
210-48-7755	City Wide Slurry Seal						
210-00-7760	Return of Funds						
					88,739	-	0%
Measure M Fund							
212-48-7750	Wild Rose Project				58,470		0%
212-48-7755	Citywide Slurry Seal						
212-48-7756	Bridge Repair						
					58,470	-	0%
Measure W Fund							
213-42-7630	NPDES Stormwater Compliance	60,000	50,506	84%	50,500	-	0%
Citizen's Option for Public Safety (COPS) Fund:							
215-23-7410	Contract Services Sheriff	50,000	-	0%	50,000	50,000	100%
215-23-7411	Contract CSO Services & Supplies	53,500	70,053	131%	56,500	116	0%
		103,500	70,053	68%	106,500	50,116	47%
County Park Grant:							
217-21-7650	Civic Center Park	1,000		0%	1,000	-	0%
Fire Safe Grant 14-USFS-SFA-0053:						3,295	#DIV/0!
219-21-7761	Community Wildfire Protection Plan	50,000	32,901	66%	30,934	3,295	11%
Covid-19 Fund:							
220-00-5000	Operating Transfers Out		44,815	#DIV/0!	-		#DIV/0!
220-00-6215	COVID 19 Expenses		5,223	#DIV/0!	100,000		0%
			50,038	#DIV/0!	100,000	-	0%
Total Expenditures		2,648,927	2,063,640	78%	2,534,692	760,181	30%



Elizabeth Bruny, Mayor (District 5)
Bruce Lathrop, Mayor Pro Tem (District 4)
Richard Barakat, Council Member (District 3)
Dick Hale, Council Member (District 1)
Montgomery Lewis, Council Member (District 2)

City of Bradbury Agenda Memo

TO: Honorable Mayor and Members of the City Council

FROM: Sophia Musa, Management Analyst

DATE: March 15, 2022

SUBJECT: **APPROVAL OF THE CITY OF BRADBURY'S COMMUNITY WILDFIRE PROTECTION PLAN**

ATTACHMENTS: 1) Community Wildfire Protection Plan

SUMMARY

The City of Bradbury was granted funds in 2019 from the California Governor's Office of Emergency Services (CalOES) to cover a significant portion of the cost to develop a Community Wildfire Protection Plan (CWPP), and the City awarded a bid to DUDEK for the development of the Plan. After hosting various virtual stakeholder workshops and reviewing and revising drafts, the CWPP final draft is ready (Attachment #1). In order to finalize the document and formally close out the CalOES grant, it is recommended that the City Council approve and adopt the Community Wildfire Protection Plan.

BACKGROUND

A Community Wildfire Protection Plan (CWPP) is a community-based plan focused on identifying and addressing local hazards and risks from wildfire. CWPPs are authorized and defined in Title I of the Healthy Forests Restoration Act (HFRA), passed by Congress in 2003. A CWPP determines area-specific risks and provides an action plan for a community to address the wildfire threat. Three central components of a CWPP include collaboration, prioritized fuel reduction, and treatment of structural ignitability. In order to address specific wildfire risks in the City of Bradbury, developing a CWPP soon became a City Council priority.

After applying for funds, the California Governor's Office of Emergency Services (CalOES) confirmed that the City of Bradbury's Hazard Mitigation Grant Program (HMPG)

~~application was approved and grant funds would be awarded to the City to cover a significant portion of the cost to develop a CWPP.~~

In October 2019, the City circulated a Request for Proposal (RFP) for the Development of a CWPP. Based on the vendor's proposal, the City entered into a contract for consultant services with Dudek for the development of a CWPP.

DISCUSSION

At the start of 2020, Dudek began developing the City of Bradbury's CWPP through collaboration, area-specific assessments and data analysis. The collaboration piece started with a kickoff community meeting where Dudek provided an overview of the CWPP project to residents and detailed the plan's stakeholders, which included the Los Angeles County Fire Department, Angeles National Forest, Los Angeles Sheriff's Department, Los Angeles County Public Works, and the City's Public Safety Committee. These are a few of the stakeholders the CWPP has connected and formally involved in mitigating the wildfire risk in Bradbury.

Although the COVID-19 pandemic delayed the next community meeting for several months, Dudek continued to engage residents and stakeholders by utilizing the City's website and distributing a community survey. The City of Bradbury and Dudek was able to host two virtual community meetings in September 2020 and January 2021 where residents were given a platform to provide feedback on the community's concerns and priorities.

During this past year, Dudek has finalized a CWPP that caters specifically to the City of Bradbury and identifies areas for hazardous fuel-reduction treatments and recommends measures that homeowners can take to reduce ignitability of structures throughout the community area. The CWPP includes the following sections:

- Introduction: Community Involvement, Funding/Grant Management
- Plan Area Description: Fire Hazard Areas, Climate, Evacuation
- Planning and Regulatory Environment: Fire Protection, City Codes and Standards
- Wildfire Hazard Assessment: Assessment Methods, Hazard Assessment Results
- Values at Risk: At-Risk Community, Life Safety, Natural Resources
- Action Plan: Goals, Funding, Vegetation/Fuels Management

Dudek also created and included various maps in the CWPP that illustrate Very High Fire Hazard Severity Zones (VHFHSZ), evacuation plans, fire hydrant locations, fire behavior modeling results and more. Overall, the CWPP has established connections with stakeholders in the surrounding areas, provided recommendations for homeowners and the City, and will continue to be used to increase safety through community projects, policies and grant programs.

The development of the CWPP has been funded by CalOES. Once the CWPP is approved by the City Council, Staff will move forward with formally closing the CalOES grant.

FISCAL IMPACT

There is no fiscal impact to the City for approving the CWPP. There could be costs associated with implementing initiatives outlined in the CWPP, but there may also be future grant funds available to cover such costs.

RECOMMENDATION

It is recommended that the City Council approve and adopt the Community Wildfire Protection Plan.

Attachment #1

DRAFT

City of Bradbury Community Wildfire Protection Plan

JANUARY 2022



Prepared for:

City of Bradbury
600 Winston Avenue
Bradbury, California 91008

CONTACT:

Kevin Kearney
City Manager



Prepared by:

DUDEK

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605 THIRD STREET
ENCINITAS, CA 92024

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Discipline Director -
Fire Protection + Urban Forestry

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
ADU	Accessory Dwelling Unit
AFD	Arcadia Fire Department
AMSL	Above Mean Sea Level
ANF	Angeles National Forest
BMP	Best Management Practice
CAD	Computer Aided Dispatch
CAWC	California American Water Company
CAL FIRE	California Department of Forestry and Fire Protection
Cal OES	California Office of Emergency Services
CalTrans	California Department of Transportation
CARB	California Air Resource Board
CBC	California Building Code
CEQA	California Environmental Quality Act
CFC	California Fire Code
CHP	California Highway Patrol
City	City of Bradbury
CWPP	Community Wildfire Protection Plan
EPA	U.S. Environmental Protection Agency
FHSZ	Fire Hazard Severity Zone
FMZs	Fuel Modification Zones
FRAP	Fire and Resource Assessment Program
FSAS	Fire Station Alerting System
GIS	Geographic Information System
HFRA	Healthy Forest Restoration Act
HFHSZ	High Fire Hazard Severity Zone
ICS	Incident Command System
IFC	International Fire Code
JADU	Junior Accessory Dwelling Unit
LACoFD	Los Angeles County Fire Department
LACoSD	Los Angeles County Sheriff's Department
LAFD	Los Angeles Fire Department
LMR	Land Mobile Radio
LRA	Local Responsibility Area
MFD	Monrovia Fire Department
RAWS	Remote Automated Weather Station
SCAQMD	South Coast Air Quality Management District
SRA	State Responsibility Area
USFS	United States Forest Service
VHFHSZ	Very High Fire Hazard Severity Zone
WUI	Wildland Urban Interface

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Executive Summary

The City of Bradbury (City) is proposing to implement a comprehensive, coordinated Community Wildfire Protection Plan (CWPP) to protect lives, property, and natural resources threatened by wildland fire. The City of Bradbury CWPP was developed by Dudek, with input from the Los Angeles County Fire Department (LACoFD), the United States Forest Service (USFS), and other Stakeholders.

Wildfires have and will continue to be a natural part of our ecosystem, however, as humans continue to expand into the Wildland-Urban Interface (WUI) areas and the reality of climate change fueled by drought and strong winds, wildfires will continue to grow and are become more destructive and less predictable. 2020 was a record-breaking wildfire season in the western United States with the cost exceeding billions of dollars in damage and suppression. With the growth and unpredictability of wildfires, many communities have taken advantage of developing a CWPP that focuses on identifying and addressing local hazards and risks from wildfire, as well as identifying potential projects intended to mitigate such risks. The City is located approximately 23 miles northeast of downtown Los Angeles, adjacent to the San Gabriel Mountains in the Angeles National Forest (ANF), a naturally vegetated mountain range exhibiting a complex wildfire environment that presents a significant wildfire risk due to steep and varied terrain, a mosaic of different vegetation types, and WUI development pattern. The City and the LACoFD recognize the catastrophic impact of wildfire in the community and is committed to reducing hazards and risk through fire protection, fuel hazard reduction, public education, preparedness, and community involvement. In order to mitigate for catastrophic wildfires, communities need to have a plan in place to prepare for, reduce the risk of, and adapt to wildfires. The implementation of CWPPs help accomplish these goals and provide recommendations.

Development of this CWPP included an assessment of wildfire hazard, which involved modeling potential fire behavior around the City under extreme wind and weather conditions, consistent with conditions experienced during a Santa Ana wind event. Other wildfire hazard variables were evaluated (terrain, weather, fuels, development patterns, fire department response, structure density, etc.) to identify the Very High Fire Hazard Areas adjacent to the City. City values potentially threatened by wildfire were also evaluated to understand the potential wildfire risk facing the City. The hazard assessment was used to evaluate the extent of the City's statutorily designated as a Very High Fire Hazard Severity Zone (VHFHSZ) by California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resources Assessment Program (FRAP 2007).

The enactment of the 2003 Healthy Forest Restoration Act (HFRA) emphasized the need for federal agencies to work collaboratively with communities in the WUI in developing hazardous fuel reduction projects to reduce the risk from large-scale wildfire (Project Wildfire). The HFRA paved the way for communities to develop a compressive plan that would allow communities to develop and implement forest management and fuel reduction projects. This CWPP outlines a series of policies and action items which are intended to guide implementation of the CWPP. The policies and actions focus on codes and standards, funding, fire rehabilitation, evacuation, fire protection, vegetation/fuels management, and public education. Action items identify tasks to be implemented by the City and the LACoFD, and other responsible City Departments, to achieve the stated goal of protecting lives, property, and natural resources threatened by wildland fire. Additionally, this CWPP shall be treated as an ever-evolving plan and it will be important to monitor and evaluate the outcome of the plan. As the community continues to grow and change, so does the surrounding landscape within the adjacent San Gabriel Mountains, and the tasks and strategies to reduce the wildfire risk must also change. Although the HFRA doesn't provide a specific timeline to monitoring and updating

the CWPP, it will be important to establish a schedule to ensure that the tasks continue to meet the needs of the community.

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1 Introduction

The City of Bradbury is located in Los Angeles County along the northern fringe of the urbanized portion of the Los Angeles Basin at the base of the San Gabriel Mountains in the ANF. The City is bordered by the City of Monrovia to the west and north and the City of Duarte to the south and east. Royal Oaks Drive serves as the southern boundary of the City's corporate limits. Royal Oaks Drive parallels the I-210 Freeway, located approximately one mile south of the City; access to this major regional transportation corridor is available through Duarte via Buena Vista Street and Mountain Avenue. The City and the surrounding landscape exhibit a complex wildfire environment that presents a significant risk to public and firefighter safety and the built and natural environment. This region of the San Gabriel Mountains has been subject to numerous damaging wildland fires, is influenced by local extreme wind and weather conditions (including Santa Ana wind events), has steep and varied terrain with a mosaic of different vegetation types, and is characterized by wildland urban interface (WUI) development patterns that can exacerbate wildfire risk. Although wildfires directly adjacent to the City have historically been relatively infrequent, the San Gabriel Mountains have a significant history of devastating and catastrophic wildland fires, including the 2009 Station Fire, which at the time was one of the 10 largest wildfires in California History, and the 2020 Bobcat Fire, currently one of Los Angeles County's largest wildfires. The 2009 Station Fire originated approximately 15 miles northwest of the City and burned over 160,000 acres, threatened over 12,000 structures in the Angeles National Forest, and resulted in two firefighter deaths. The 2020 Bobcat Fire initially spread south towards Bradbury, Sierra Madre, Monrovia, and Duarte, burning over 115,000 acres within the San Gabriel Mountains, injuring six, and threatening an estimated 6,000 structures, destroying 27 residences and damaging 28 more (CAL FIRE 2020).

As a key component of the Healthy Forest Restoration Act of 2003, a Community Wildfire Protection Plan (CWPP) serves as a mechanism for community input and identification of areas presenting high wildfire risk, as well as identification of potential projects intended to mitigate such risk. Further, the CWPP process is intended to provide the community a forum for identifying values at risk from wildfire, which may include people, property, natural resources, cultural values, economic interests, and infrastructure. The identification of these values at risk by the community strongly influences the potential wildfire hazard mitigation projects identified in this CWPP. With the intent to reduce the wildfire threat to the City of Bradbury, the City applied for and received a Cal OES (California Offices of Emergency Services) grant in 2019 to fund the development of the CWPP. And in the winter of 2020, the City hired Dudek to develop the City's CWPP.

This CWPP was developed for the City of Bradbury with input and direction from stakeholders and the community. The purpose of this collaboratively prepared CWPP is to serve as a fire protection planning document that presents the City's physical characteristics, wildfire hazard, assets at risk from wildfire, vegetation/fuel management projects and specifications, and goals and action items intended to reduce wildfire risk in the City. The ultimate goal of this CWPP is to protect lives, property, and natural resources threatened by wildland fire.

1.1 Purpose and Need

The City recognizes the potential for significant loss of life, property, and natural resources from wildland fire and has a history of prioritizing development and implementation of a comprehensive wildland fire program. The purpose of the CWPP is to create a community-based plan that focuses on identifying and addressing local hazards and risks from wildfire, as well as identifying potential projects intended to mitigate such risks. The CWPP process is intended to provide the community a forum for identifying values at risk from wildfire, which may include people,

property, natural resources, cultural values, economic interests, and infrastructure. The identification of these values at risk by the community strongly influences the potential wildfire hazard mitigation projects identified within the CWPP. Additionally, identifying values at risk of wildfire increases the community member's understanding of living within the wildland-urban interface and instills a sense of personal responsibility among residents to take preventive actions around their properties in regard to wildfire.

The planning outline in *'Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities'* (Sponsored By: Communities Committee, National Association of Counties, National Association of State Foresters, Society of American Foresters, and Western Governors' Association, March 2004) was referred to throughout the development of this CWPP. A CWPP determines what is a wildfire risk, provides a roadmap of actions for a community to address the wildfire threat, and at a minimum, addresses the three following central components:

1. Collaboration
2. Identifying and Prioritizing Fuel Reduction
3. Identifying and treatment of Structural Ignitability

A CWPP must be collaboratively developed by local and state officials to meaningfully involve non-governmental stakeholders in the CWPP's process. This CWPP development included development of a Public Outreach and Engagement Plan to guide community engagement and coordination with other key stakeholders throughout the development of the CWPP. The City's central engagement goal was to develop a CWPP that builds on input from key stakeholders, including community members, City departments, neighboring jurisdictions (e.g. Monrovia Fire Department), Cal Fire, and Federal agencies that manage lands within the vicinity of the community (e.g. United States Forest Service (USFS)). The next step in the CWPP process is to identify and prioritize areas for hazardous fuel reduction treatments by recommending types and methods of treatment that, if acted upon and carried out when the City is threatened by a wildfire, it will make a difference of how that wildfire threatens the community and reduces the overall risk to that community. And the last step of the CWPP is the Treatment of Structural Ignitability. This CWPP will recommend measures that homeowners and communities can take to reduce the ignitability of structures and ensure their structures can withstand a wildfire. Not only will this include providing defensible space around your structure, but with the research and data over the past 15 to 20 years on structural enhancements, modifications can be made to the structure that will reduce the structures likelihood of catching fire.

There are eight steps identified within the *Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities*, that were used as a guide in the completion of the CWPP. The eight steps are:

Step One: Convene the City's Decisionmakers.

The City of Bradbury CWPP developed an operating group that included representatives from the Los Angeles County Fire Department (LACoFD), California Department of Forestry and Fire Protection (Cal Fire), and the Angeles National Forest/United States Forest Service (USFS); the City of Bradbury; other stakeholders; members of the community; and other members of the public.

Step Two: Involve the State and Federal Agencies.

Step two recommends engaging with local representatives of the nearby USFS and other federal agencies interested in the development of the CWPP, to gain an understanding of their perspectives, information about current and future fuel reduction/natural resources planning efforts, and other information relevant to the CWPP planning process. Representatives from the Angeles National Forest Division of the USFS have been involved in throughout the process of this CWPP and will a great benefit for implementing fuel reduction priorities identified within the CWPP.

Step Three: Engage Interested People.

Throughout the early stages of the Bradbury CWPP, community engagement meetings were held in order to include resident's, the City's Public Safety Committee, and homeowner's associations (HOAs) within the City of Bradbury, as well as community members from adjacent communities at risk, local business members, City Council members, and other organizations and individuals. These meetings were to introduce interested people to the CWPP process and allow for input from a diverse range of interested people to ensure that the final CWPP encompasses all concerns and ideas.

Step Four: Establish a Community Base Map.

Based upon existing fire hazard severity zone maps and community boundaries, a community base map was created to identify the Very High Fire Hazard Severity Zone (VHFHSZ) and High Fire Hazard Severity Zone (HFHSZ) areas, as well as potential ember zone areas based upon the fire behavior modeling results within adjacent naturally vegetated areas of the San Gabriel Mountains. The base map provides the residents within the City and adjacent communities a baseline visual of the areas within the City that are of the highest concern regarding wildfire threats.

Step Five: Develop a Community Risk Assessment.

After review of available City information, including topography, vegetation types, and fire history, a City-wide wildfire risk assessment was conducted to document existing vegetative fuel hazards within and adjacent to the City and identify and determine the highest priority areas where fuel treatment would reduce wildfire risk to the City. In addition to an assessment of existing vegetation, existing infrastructure and the City's overall emergency preparedness was assessed.

Step Six: Establish Community Hazard Reduction Priorities and Recommendations to Reduce Structural Ignitability.

Based on the City-wide assessment, key objectives, and goals of the CWPP were developed and recommended action items were identified to be implemented by the City that serve to minimize wildfire impacts to the community. Future project and actions identified would need to be funded and approved by the City prior to implementation.

Step Seven: Develop an Action Plan and Assessment Strategy.

This CWPP includes an action plan that identifies roles and responsibilities, potential funding needs, and timetables for carrying out the highest priority projects. Additionally, it will be important to establish a schedule to ensure that the tasks and action plan continue to meet the needs of the community over the long term.

Step Eight: Finalize the Community Wildfire Protection Plan.

A draft of the City of Bradbury CWPP will be available for public review prior to final approval, in order to allow for the interested parties to provide comments and feedback. Once comments and feedback have been addressed and mutual agreement throughout all interested parties about all aspects of the CWPP has been achieved, finalization of the CWPP can occur.

The purpose of this CWPP is intended to provide a comprehensive, coordinated plan to mitigate the impact of wildland fire to the City. This CWPP evaluates the City's existing VHFZSZ Areas based on hazard and risk, identifies policies and actions to reduce the community's threat from wildland fire, and identifies and prioritizes vegetation management projects to reduce wildfire threat. Intended users of this CWPP include the LACoFD, all City Departments, the Public Safety Committee, the City Council-City Manager, and members of the public. The policies and actions outlined in Chapter 6 include those proposed for implementation under this CWPP.

1.2 The Development Team

This section lists the representatives or organizations either involved in the development of the CWPP or who provided information for the completion of this CWPP. The organization, roles, and responsibilities are indicated in Table 1.

Table 1. CWPP Development Key Stakeholders and Roles

CWPP Development Participant	Roles/Responsibilities
California Governor's Office of Emergency Services (Cal OES)	<ul style="list-style-type: none"> - Grant funding for CWPP - Provide general guidance as needed - Review and approve Final CWPP
City of Bradbury City Council-City Manager	<ul style="list-style-type: none"> - Provide general guidance as needed - Receive comments from the public on the CWPP - Approve Final CWPP
Los Angeles County Fire Department	<ul style="list-style-type: none"> - Provide guidance and support for the CWPP development - Participate in CWPP Working Group and Team Meetings
CWPP Development Team: <ul style="list-style-type: none"> • City Manager and City Management Analyst • City's Public Safety Committee • Los Angeles County Fire Department • Los Angeles County Office of Emergency Management • Los Angeles County Sheriff's Department • Los Angeles County Public Works 	<ul style="list-style-type: none"> - Provide guidance and expertise for the CWPP - Coordinate with neighboring jurisdictions - Provide guidance on key stakeholders - Distribute media releases about the CWPP through City website - Conduct direct outreach as appropriate
Key Stakeholders: <ul style="list-style-type: none"> • Angeles National Forest • Neighboring Jurisdictions • Utility Companies • State Agencies • Elected Officials 	<ul style="list-style-type: none"> - Provide insights on the intersection of cross-jurisdictional hazard areas - Collaborate on program and project development - Review CWPP drafts - Participate in public workshops, as appropriate

Table 1. CWPP Development Key Stakeholders and Roles

CWPP Development Participant	Roles/Responsibilities
Stakeholders and Interested Parties including Communities Most Vulnerable to Wildfire Risk	<ul style="list-style-type: none"> - Attend stakeholder virtual workshops - Read electronic newsletters - Provide input on the CWPP
CWPP Consultant: Dudek	<ul style="list-style-type: none"> - Develop CWPP - Facilitate virtual public meetings - Develop CWPP community survey

1.3 Community Involvement

1.3.1 Stakeholders

The City recognizes that implementation of the CWPP is not possible without the support of the people, businesses, and organizations that live and work in the City, especially in the City's VHFHSZ areas, as well as the many federal and local agencies that have jurisdiction in these areas. These are the stakeholders that are impacted by this plan and must share in the responsibility for protecting themselves and their community.

The role of the LACoFD is to assist in the development of the CWPP by helping identify wildland fire hazards and risks, recommend procedures and programs for City and private lands to minimize the threat of wildfire, educate the public about how to prepare and protect themselves from wildfire, enforce existing and new wildland fire codes to protect the public, and continue to develop partnerships and cooperation from other City departments, property owner groups, and individual property owners to effectively manage and respond to wildfire threat.

The role of stakeholders is to be aware of the hazards and risks that threaten their properties and safety, comply with wildland fire codes, formulate wildland fire evacuation plans, support neighborhood preparedness and community groups focused on wildland fire safety, and become part of the solution in mitigating the threat of wildfire that faces the City.

Since the creation and implementation of the LACoFD's 'Ready! Set! Go!' Wildfire Action Plan, residents living in the WUI and Very High/High Fire Hazard Areas throughout Los Angeles County, including those living in the City of Bradbury, have gained a greater understanding of the need to decrease the impact of wildfire and their personal responsibility in making that happen. Significant wildfires occurring near the City of Bradbury (including the 2002 Williams Fire, the 2014 Colby Fire, the 2016 Reservoir Fire, 2016 San Gabriel Complex Fire, and the most recent 2020 Bobcat Fire) have also increased public awareness of the wildfire threat facing the City. As a result, there has been a significant increase in public participation in wildland fire issues and public lobbying within City government to mitigate wildfire risk.

The LACoFD continues to work cooperatively with cities throughout Los Angeles County VHFHSZ areas to better plan, prepare, and reduce the potential hazards and risks associated with wildland fire. Federal, state, and other local fire agencies have also been working to develop community fire planning documents (for example, the Monrovia CWPP), coordinating with the City in a collaborative approach. The City and the LACoFD intend to continue these collaborative efforts.

1.3.2 Public Outreach and Engagement Plan

During CWPP development, a Public Outreach and Engagement Plan was developed as a guide for engaging with members of the community and coordinating with other key stakeholders throughout the development of the CWPP. The City's central engagement goal was to develop a CWPP that builds on input from key stakeholders including:

- the communities most vulnerable to wildfire risk;
- City departments with a role in preventing and responding to the spread of wildfires into the community; and
- neighboring jurisdictions, including the Angeles National Forest

The plan outlined a tiered engagement strategy with different levels of engagement for each key stakeholder group. Different engagement opportunities were identified in the plan and included:

- **A CWPP section included on the City's website** (<https://www.cityofbradbury.org/>): The accessible website provides a central location for project information and is fully compliant with the Americans with Disabilities Act, Section 508 and WCAG 2.1AA requirements (which address web content accessibility). The site included meeting announcements, documents available for review, and a survey link for stakeholders to provide direct feedback. The website was updated throughout the CWPP development process and will function as the City's primary website for the final CWPP.
- **City of Bradbury Wildfire Protection Plan Survey:** A City CWPP survey page was created to gain an understanding of the community's wildland fire concerns and allow for stakeholders and interested people to provide feedback about their wildfire level of concern and actions they would like to have included in the CWPP to reduce the risk of wildfire (refer to Appendix A).
- **Public Zoom Meetings:** Public outreach meetings were held throughout the CWPP development phase. Two on-line public zoom meetings and one Public Safety Committee zoom meeting were held to obtain community feedback on the preliminary analysis and scoping of the CWPP, as identified below. Additional public meetings will be held at the City Council to provide updates on the development of the CWPP.

1.3.3 Public Outreach Meetings

The following community meetings were held during the preparation of the CWPP in order to provide community members an opportunity to contribute to the CWPP process. Specifically, community input was sought to better understand the vulnerability of City residents, businesses, and resources to wildfire and to promote awareness of the City's wildland fire hazard and propose workable solutions to reduce the risk of wildfire. The meetings also provided a forum for the community to discuss how to best mitigate wildfire risk in the City. Two on-line webinar community zoom meetings and one Public Safety Committee zoom meeting were conducted during CWPP development, as identified below:

- **September 3, 2020:** On-line webinar — zoom meeting was designed to outline the CWPP development process and gather feedback on community priorities. This meeting was held via online webinar due to coronavirus (COVID-19) shelter-in-place orders in effect at the time.

- **November 12, 2020:** On-line webinar – zoom meeting was designed to update the Public Safety Committee on the hazard assessment that was conducted and outline the CWPP development process. This meeting was held via online webinar due to coronavirus (COVID-19) shelter-in-place orders in effect at the time.
- **January 13, 2021:** On-line Webinar—workshop to introduce the hazard assessment conducted for the CWPP and gather community and stakeholder feedback. This meeting was held via online webinar due to coronavirus (COVID-19) shelter-in-place orders in effect at the time.

1.4 Funding/Grant Management

Funding for the preparation of this CWPP was made available from a California Governor's Office of Emergency Services (Cal OES) Community Fire Prevention Grants. The grant period started on October 2019 and extends through August 2022. Grant management and reporting is being conducted by the City of Bradbury City Manager.

1.5 Signatories

The signatories for the City of Bradbury Community Wildfire Protection Plan include:

1. Local Government: Kevin Kearney, City Manager, City of Bradbury
2. Local Government: Elizabeth Bruny, Mayor, City of Bradbury
3. Local Government: Bruce Lathrop, Mayor Pro-Term, City of Bradbury
4. Los Angeles County Fire Department: Daryl Osby, Fire Chief
5. United States Forest Service, Angeles National Forest Division (USFS): Robert Garcia, Angeles National Forest Fire Chief

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2 Plan Area Description

Fire environments are dynamic systems and include many types of environmental factors and site characteristics. Fires can occur in any environment where conditions are conducive to ignition and fire movement. Areas of naturally vegetated open space are typically comprised of conditions that may be favorable to wildfire spread. The three major components of the fire environment are climate, topography, and vegetation (fuel). The state of each of these components and their interaction with each other determine the potential characteristics and behavior of a wildfire at any given moment. It is important to note that wildland fire may transition to urban fire if structures are receptive to ignition. Structure ignition depends on a variety of factors and can be prevented through a layered system of protective features including fire resistive landscapes directly adjacent to the structure(s), application of known ignition resistive materials and methods, and suitable infrastructure for firefighting purposes. Understanding the existing wildland vegetation and urban fuel conditions on and adjacent to the City is necessary to understand the potential for wildfire within and around the City.

Wildfires are a regular and natural occurrence in most of California. However, the number of fires and acres burned annually has increased in recent years. These wildfires are mostly human-triggered, suggesting that the historic fire interval has been artificially affected across large areas. In addition, wildfire suppression efforts over the last several decades may have aided in the accumulation of fuels in some natural communities (Minnich 1983; Minnich and Chou 1997), resulting in larger and more intense wildfires. Large wildfires have had, and continue to have, a substantial and recurring role in California landscapes (Keeley and Fotheringham 2003), in part because (1) California landscapes become highly flammable each fall; (2) the climate in the region has been characterized by fire climatologists as the worst fire climate in the United States (Keeley 2004) with foehn winds¹ occurring during autumn after a 6-month drought period each year; and (3) ignitions via anthropogenic sources have increased or are increasing in many wildland or WUI areas.

2.1 City of Bradbury Location

The City of Bradbury is a small, residential/equestrian-oriented community located in Los Angeles County along the northern fringe of the urbanized portion of the Los Angeles basin at the base of the San Gabriel Mountains in the Angeles National Forest. The community encompasses 1.9 square miles, includes 3.2 miles of public streets and roads, and has an estimated population of just over 1,000 people. The City is bordered by the City of Monrovia to the west and north and the City of Duarte to the south and east. Royal Oaks Drive serves as the southern boundary of the City's corporate limits. Royal Oaks Drive parallels the I-210 Freeway, located approximately one mile south of the City; access to this major regional transportation corridor is available through Duarte via Buena Vista Street and Mountain Avenue (Figure 1, City of Bradbury Location Map and Figure 2, City of Bradbury Vicinity Map).

While many of the action items recommended in this CWPP focus on the VHFHSZ areas situated along the foothill communities within the City, this CWPP covers all portions of the City.

¹ A type of dry, warm, down-slope wind that occurs on the lee (downwind side) of a mountain range. Locally, Sundowner winds would be considered foehn winds.

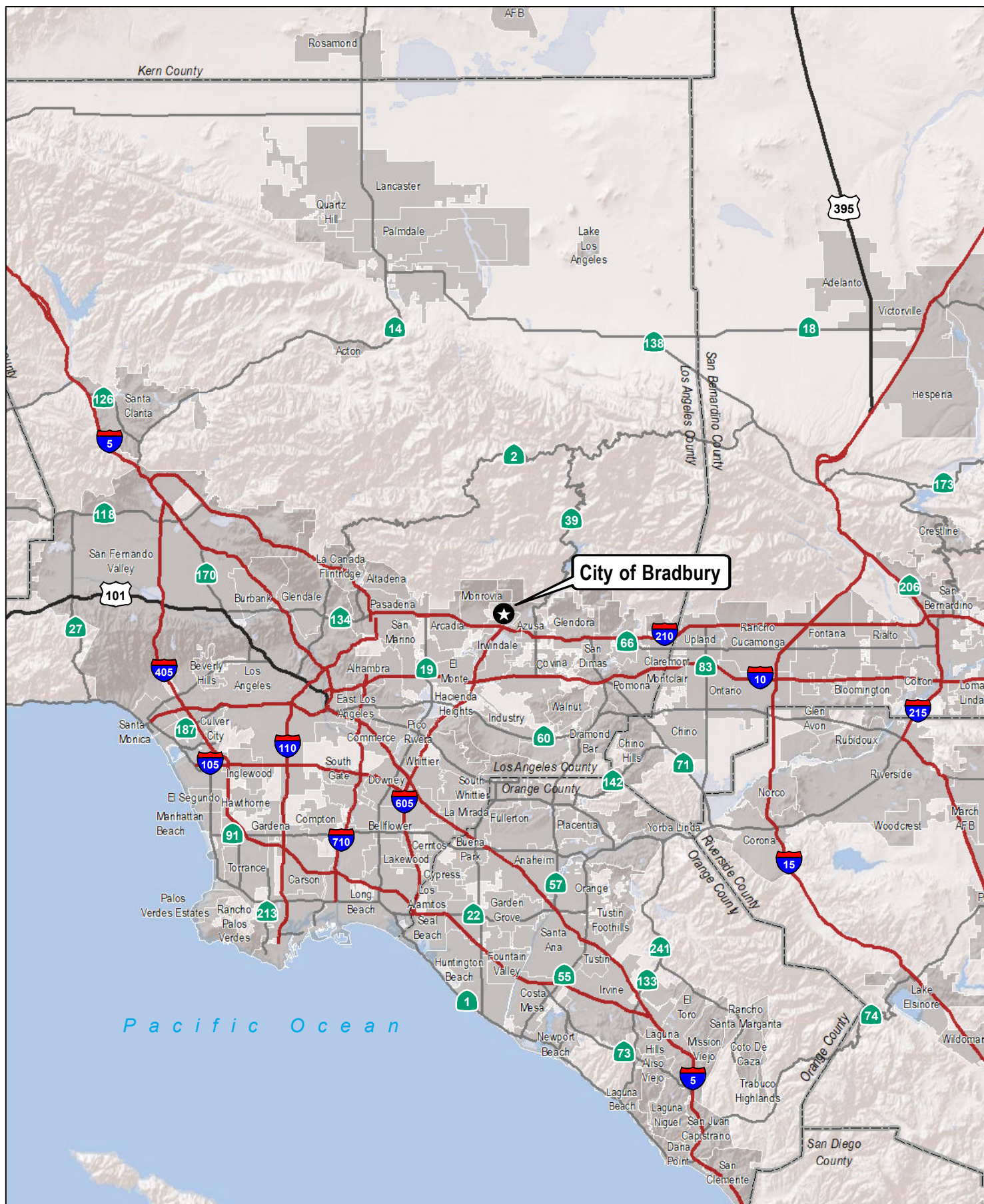
2.2 Fire Hazard Areas

2.2.1 State Fire Hazard Severity Zones

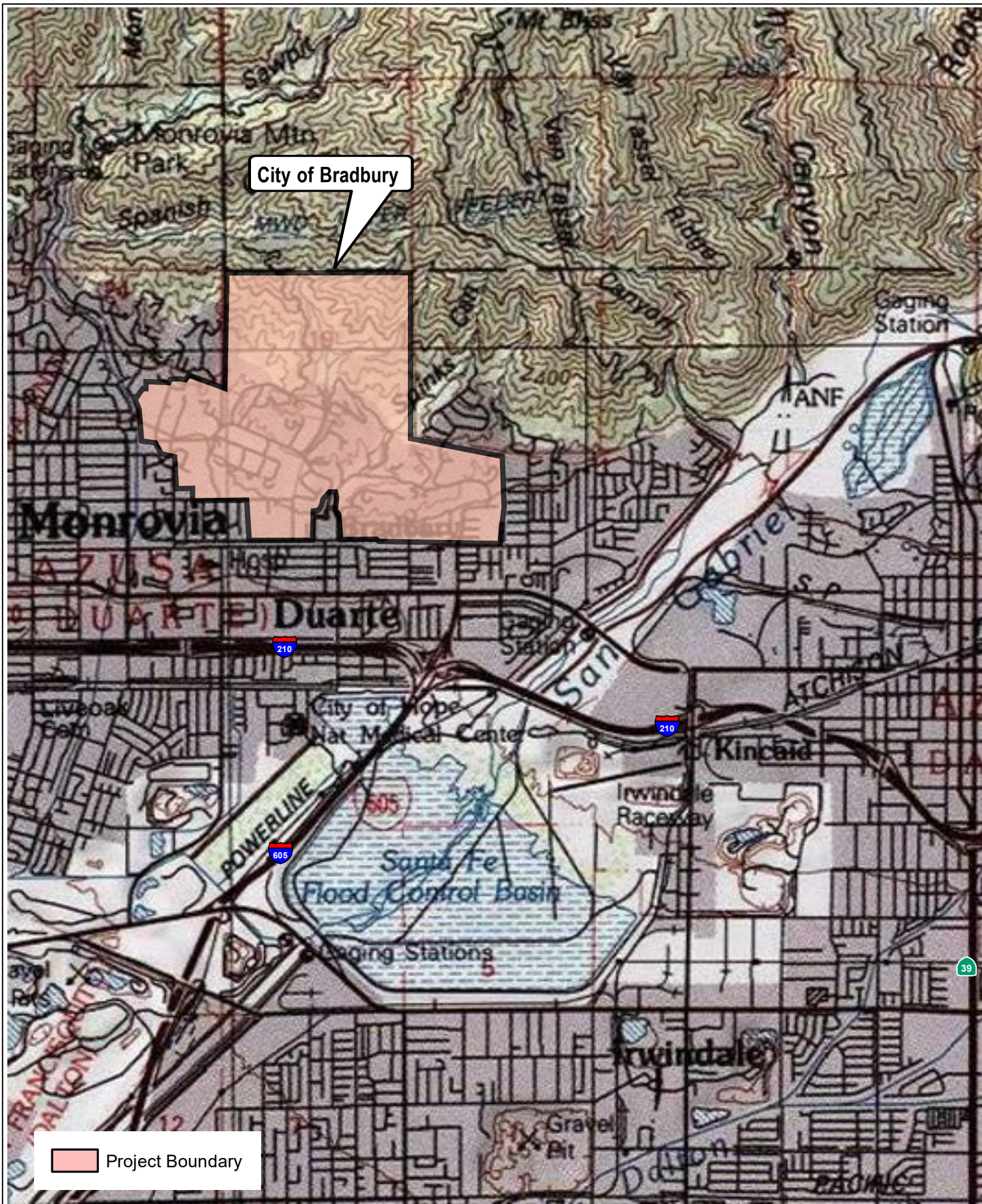
Fire Hazard Severity Zones (FHSZs) are “geographical areas designated pursuant to California Public Resources Code, Sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Areas (SRA) or as Local Responsibility Area (LRA) VHFHSZ or non-VHFHSZ designated pursuant to California Government Code, Sections 51175 through 51189” (California Building Standards Commission 2016). The City of Bradbury’s VHFHSZ is a Local Agency VHFHSZ, as defined, and the City is considered an LRA. The LACoFD is the responsible agency for fire protection within the City’s VHFHSZ and follows the Cal Fire VHFHSZ designation. The City abuts lands where the responsibility for fire protection lies with the Federal or State of California (FRA or SRA). The City’s Local and Federal/State VHFHSZ is presented in Figure 3.

California Public Resources Code Sections 4201–4204 and Government Code Sections 51175–51189 direct CAL FIRE to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. The resulting FHSZs define the application of various mitigation strategies to reduce the risk associated with wildland fires (CAL FIRE 2020a). The model used to determine the extent of FHSZs is based on an analysis of potential fire behavior, fire probability predicated on the frequency of fire weather, ignition patterns, expected rate of spread, ember (brand) production, and past fire history (CAL FIRE 2020a). Structures built in FHSZs are subject to more stringent fire hardening requirements than those that are not.

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SOURCE: USGS 7.5 Minute Series, Azusa Quadrangle

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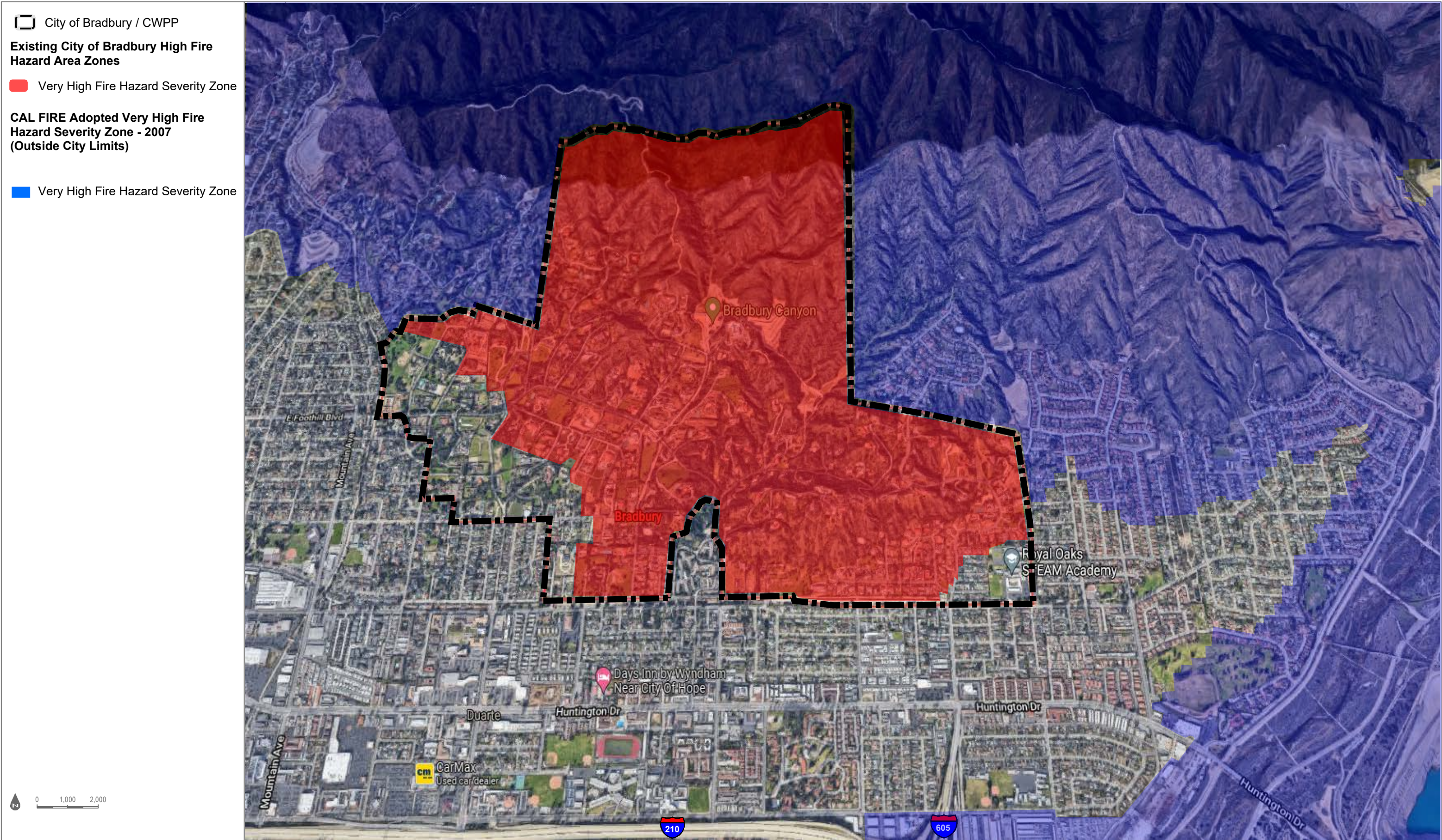
0 1,800 3,600 Feet

FIGURE 2

Vicinity Map

City of Bradbury Community Wildfire Protection Plan

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SOURCE: City of Bradbury, Los Angeles County Fire Department and CAL FIRE

FIGURE 3

Current High Fire Hazard Areas

City of Bradbury Community Wildfire Protection Plan

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2.3 Climate

The City of Bradbury, like much of Southern California, is influenced by the Pacific Ocean and a seasonal, migratory subtropical high-pressure cell known as the “Pacific High.” Wet winters and dry summers with mild seasonal changes characterize the Southern California climate. This climate pattern is occasionally interrupted by extreme periods of hot weather, winter storms, or dry, easterly Santa Ana winds. The average annual high temperature calculated from January 1917 to June 2016 for the San Gabriel Canyon area is 78.2° Fahrenheit (°F), with higher temperatures in summer and early fall (June through October) reaching up to an average of 91.7°F. The average annual low temperature is 52.8°F and can reach an average low temperature of 47.2°F. The average annual precipitation for the area is 22.28 inches, with the most rainfall concentrated in December (3.49 inches), January (4.40 inches), February (5.06 inches), March (3.50 inches), and April (1.69 inches). Rainfall is much less during June (0.19 inches), July (0.04 inches), and August (0.11 inches) (Western Regional Climate Center, 2020).

From a regional perspective, the fire risk in southern California can be divided into three distinct “seasons” (Nichols et al. 2011, Baltar et al 2014). The first season, the most active season and covering the summer months, extends from late May to late September. This is followed by an intense fall season characterized by fewer but larger fires. This season begins late September and continues until early November. The remaining months, November to late May cover the mostly dormant, winter season. Mensing et al. (1999) and Keeley and Zedler (2009) found that large fires in the region consistently occur at the end of wet periods and the beginning of droughts. Live fuel moisture content, a measure of the relative mass of water and indicator of ignitability, for most vegetation in the San Gabriel Mountains of the ANF reaches the driest point in the late summer or early fall period. Seasonal drying of vegetation produces conditions that can result in fuel-driven wildfires and fire-associated climatic changes. This condition is referred to as a plume-dominated wildfire. Plume-dominated wildfires are fires where the energy produced by the fire, in conjunction with atmospheric instability, creates significant convective forces and increased wind speeds. Such fires are incredibly unpredictable, spread in various directions simultaneously, and exhibit extreme fire behavior.

Typically, the highest fire danger in southern California coincides with Santa Ana winds. The Santa Ana wind conditions are a reversal of the prevailing southwesterly winds that usually occur on a region-wide basis near the end of fire season during late summer and early fall. They are dry, warm winds that flow from the higher desert elevations in the east through the mountain passes and canyons. As they converge through the canyons, their velocities increase. Consequently, peak velocities are highest at the mouths of canyons and dissipate as they spread across valley floors. Localized wind patterns on the Project Sites are strongly affected by both regional and local topography. The prevailing wind pattern is from the west (onshore), but the presence of the Pacific Ocean causes a diurnal wind pattern known as the land/sea breeze system. During the day, winds are from the west-southwest (sea) and at night winds are from the northeast (land), averaging 2 miles per hour (mph). During the summer season, the diurnal winds may average slightly higher (approximately 15 mph) than the winds during the winter season due to greater pressure gradient forces. Surface winds can also be influenced locally by topography and slope variations. The highest wind velocities are associated with downslope, canyon, and Santa Ana winds. The foothills adjacent to the City of Bradbury includes topography that would create unusual weather conditions; thus the City is subject to periodic extreme fire weather conditions that occur throughout foothill portions of Los Angeles County.

The fire season in the San Gabriel Mountain areas has historically occurred between June and October as the vegetation begins to dry out from regular, dry, offshore winds. The fire season would typically end in November with the onset of winter rainfall, cooler temperatures, and higher relative humidity, with fires less common from

December to April. However, climate change effects are extending fire season throughout the state, and the fire season in the Bradbury surrounding areas may ultimately be year-round. The greatest fire danger for this area coincides with the period when the Santa Ana winds are at their strongest.

Certain weather conditions can increase fire risk, resulting in the declaration of a Red Flag Warning. A Red Flag Warning is a forecast warning issued by the United States National Weather Service to inform area firefighting and land management agencies that conditions are ideal for wildland fire ignition and propagation. After drought conditions, and when humidity is very low, and especially when high or erratic winds which may include lightning are a factor, the Red Flag Warning becomes a critical statement for firefighting agencies, which often alter their staffing and equipment resources dramatically to accommodate the forecast risk (City of Bradbury). A Red Flag Warning is issued when their forecast includes any of the two following conditions:

- A sustained wind average 15 miles per hour (mph) or greater, and
- Relative humidity less than or equal to 25%, and
- 10-hour fuel moisture less than 8%.

To the public, a Red Flag Warning means high fire danger with increased probability of a quickly spreading vegetation fire within the area within 24 hours (City of Bradbury). The City is located in the Los Angeles County Mountains / Angeles National Forest Weather Zone (CAZ254). The City's webpage and Los Angeles County Emergency Response webpage identify policies and procedures to be followed by the LACoFD and Los Angeles County residents during Red Flag Warnings and High Risk Days and include monitoring weather conditions, notifying City Departments and the media, revoking burn permits, flying red flags at fire stations, and ensuring that staff and equipment are within the City should an event occur.

2.3.1 Climate Change

As noted above in the Executive Summary, California faces a dramatic increase in the number and severity of wildfires, with 10 of the most destructive fires occurring since 2015 (CAL FIRE 2019a). The state's major study on climate impacts, the Fourth Climate Assessment (OPR et al. 2019), projects that California's wildfire burn area is likely to increase by 77% by the end of the century. As identified in Governor Newsom's Strike Force report (State of California 2019), the growing risk of catastrophic wildfires has created an imperative for the state to act urgently and swiftly to expand fire prevention efforts. Current research has also identified that the frequency of autumn days with extreme fire weather has more than doubled in California since the early 1980s, a result of human-caused climate change. Such fire weather exhibits strong offshore winds (e.g., Santa Ana Winds) and is coincident with unusually dry vegetation resulting from warm conditions over the summer months prior to the onset of autumn precipitation (Goss et al. 2020).

Climate change is expected to make landscapes more susceptible to extreme wildfires by altering temperatures (Hayhoe et al. 2004) and the availability and aridity of fuels (Abatzoglou and Williams 2016). Anthropogenic climate change has emerged as a driver of increased fire activity, a trend that is expected to continue (Abatzoglou and Williams 2016). All analyses completed for fire occurrence and severity into the future predict more frequent fires, a greater number of fires, and higher fire severity under climate change scenarios (Fried et al. 2004; Lenihan 2008; Westerling et al. 2011; Westerling 2018).

A changing climate, combined with anthropogenic factors, has already contributed to more frequent and severe wildfires in the western United States (Abatzoglou and Williams 2016; Mann et al. 2016; Westerling 2016), with the number of human-caused fires being much higher in more populated regions of the state. Recently, the area burned by wildfires has increased consistent with increasing air temperatures (OEHHA 2018). Increased wildfire risk and severity are vulnerabilities that are anticipated throughout California (Westerling 2018; Krawchuk et al. 2009). Increased fire occurrence and severity under climate change would secondarily affect other areas of vulnerability, as noted below.

- **Increased Fire Risk:** Warmer air temperatures are expected to lengthen the fire season, drying out vegetation more quickly and increasing fire risk. Based on high- and low-emissions climate change scenarios, increases in the number of high-severity wildfires are anticipated (Westerling 2018). Multi-year severe drought is supported as a factor in increasing fire size and severity, as well as tree mortality (Crockett and Westerling 2018). On interannual and shorter time scales, climate variability affects the flammability of live and dead forest vegetation (Westerling 2016). Fire size in southern California and the Central Coast areas also increases with both air temperature in the month of ignition and with low precipitation in the preceding 12-month period (Westerling 2018). Additionally, the frequency of extreme fire weather in the fall months has increased over the past 40 years, a trend which is expected to continue under climate change models (Goss et al. 2020).
- **Greater Fuel Loads:** Years with widespread fires are historically preceded by wet years, which influence greater vegetation growth, especially in the understory. Highly flammable species, which often populate disturbed areas quickly, may have a competitive advantage over other species, typically resulting in a higher, more flammable fuel load. Drought may result in increased tree mortality, which contributes to higher fuel loading and wildfire size and severity (Crockett and Westerling 2018). Increasing fire size and severity and tree mortality are linked to increasing temperatures and aridity (Crockett and Westerling 2018). Increased prevalence of dead or desiccated fuels resulting from drought effects is conducive to crown fires, which require ladder fuels to move from volatile grasses to the less volatile mid-level forest to the dry and volatile canopy cover (Crockett and Westerling 2018). Increased fuel aridity contributes to larger forest areas experiencing increased periods of high fire potential (Abatzoglou and Williams 2016).
- **Ecological Impacts:** Increased fire severity is expected to amplify and accelerate the ecological impacts of climatic change. Drought years may increase the vulnerability of tree populations to insects and disease, and the lower occurrence of extended freezing periods in the winter would allow higher insect survivability. Climate-induced changes in fire behavior and frequency would influence species distribution, migration, and extinction (Flannigan 2000). Greater occurrence of fires increases the amount of carbon and particulates released into the atmosphere (Westerling 2008).
- **Social Impacts:** Increased expenditures for fire suppression are anticipated, and the amount of burned property (in total area and monetary value) in Southern California communities increases substantially under global climate models' high-emissions scenarios due to greater fire risk (Westerling and Bryant 2008; Levy 2018). In areas with the highest fire risk, wildfire insurance is estimated to see costs rise by 18% by 2055, and the number of properties insured lowered (Westerling 2018). Wildland fire smoke exposure is a growing risk to public health (Domitrovich et al. 2017). Secondary effects of increased fire, such as loss of recreational amenities, area closures, and excessive smoke, can have serious financial effects on regional business interests and local economies.

The management recommendations included in this CWPP include fuel management actions to reduce fuel loads, minimize ignitions, and reduce the potential for extreme fire behavior.

2.4 Topography

The City of Bradbury is located at the base of the San Gabriel Mountains in the ANF. The northern portion of the City is very steep, sloping from the northeast to the southwest. The southern portion of the City is fairly flat with some steep, rolling terrain sloping towards the south. Elevation within the City ranges from approximately 579 feet AMSL at the southern portion of the City to 1,800 feet AMSL at the highest point of the City to the north.

Topographic features that may present a fire spread facilitator are the slope and canyon alignments, which may serve to funnel or channel winds, thus increasing their velocity and potential for influencing wildfire behavior. From a regional perspective, the alignment of tributary canyons and dominant ridges are conducive to channeling and funneling wind, thereby increasing the potential for more extreme wildfire behavior in the region. Terrain affects wildfire movement and spread. Steep terrain typically results in faster upslope fire spread due to pre-heating of uphill vegetation. Flat areas typically result in slower fire spread when absent of windy conditions. Topographic features such as saddles, canyons, and chimneys (land formations that collect and funnel heated air upward along a slope) may form unique circulation conditions that concentrate winds and funnel or accelerate fire spread. For example, fire generally moves slower downslope than upslope. Terrain may also buffer, shelter, or redirect winds away from some areas based on canyons or formations on the landscape. Saddles occurring at the top of drainages or ridgelines may facilitate the migration of wildfire from one canyon to the next. Various terrain features can also influence fire behavior, as summarized in Table 2.

The narrow drainage and sub-drainage topographic features of the San Gabriel Mountains have the capability to funnel winds, increase wind speeds, erratically alter wind direction, and facilitate fire spread and promote extreme fire behavior. This is especially true during Santa Ana wind events when strong northerly/northeasterly winds are aligned with the downslope direction of the canyons and watersheds of the San Gabriel Mountains. The topography of within and adjacent to Bradbury is, therefore, capable of producing wind conditions that promote extreme wildfire behavior.

Table 2. Effects of Topographic Features on Fire Behavior

Topographic Feature	Effect
Narrow Canyon	Surface winds follow canyon direction, which may differ from prevailing wind; wind eddies/strong upslope air movement expected, which may cause erratic fire behavior; radiant heat transfer between slopes facilitates spotting/ignition on opposite canyon side.
Wide Canyon	Prevailing wind direction not significantly altered; aspect significant contributor to fire behavior. Wide canyons not as susceptible to cross-canyon spotting except in high winds.
Box Canyon/ Chute	Air drawn in from canyon bottom; strong upslope drafts. No gaps or prominent saddles to let heated air escape. Fires starting at canyon bottom can move upslope very rapidly due to a chimney-like preheating of the higher-level fuels and upslope winds.
Ridge	Fires may change direction when reaching ridge/canyon edge; strong air flows likely at ridge point; possibility for different wind directions on different sides of ridge. Ridges experience more wind. Fires gain speed and intensity moving toward a ridge. Fires burning at a ridge can exhibit erratic fire behavior. Strong air flows can cause a whirling motion by the fire. As the wind crosses a ridge it usually has a leeward eddy where the wind rolls around and comes up the leeward side.

Table 2. Effects of Topographic Features on Fire Behavior

Topographic Feature	Effect
Saddle	Potential for rapid rates of fire spread; fires pushed through saddles faster during upslope runs. Winds can increase when blowing through saddles due to the funneling effect of the constricted pass. On the other side, winds will slow, but erratic winds potentially occur at the saddle due to eddies.

Sources: Teie 1994; NFPA 2011.

2.5 Vegetation and Fuels

Vegetation types (fuels) present in the City and their contribution to fire hazard are summarized in this section. Hazardous fuels include live and dead vegetation that exists in a condition that readily ignites; transmits fire to adjacent structures or ground, surface, or overstory vegetation; and/or is capable of supporting extreme fire behavior.

2.5.1 Vegetative Fire Hazard

The following sections summarize vegetative fire hazard of dominant vegetation types that occur within and adjacent to the City. Hazardous fuels include live and dead vegetation that exists in a condition that readily ignites; transmits fire to adjacent structures or ground, surface, or overstory vegetation; and is capable of supporting extreme fire behavior. All vegetation burns; however, some plants exhibit characteristics that make them more flammable than others. Flammability can be defined as a combination of ignitability, combustibility, and sustainability. Ignitability is the ease of or the delay of ignition; combustibility is the rapidity with which a fire burns; and sustainability is a measure of how well a fire continues to burn with or without an external heat source (White and Zipperer 2010). Flammability is influenced by several factors, which can be classified into two groups: physical structure (e.g., branch size, leaf size, leaf shape, surface-to-volume ratio, and retention of dead material) and physiological elements (e.g., volatile oils, resins, and moisture content) (Moritz and Svihra 1998; UCCE 2016; UCFPL 1997; White and Zipperer 2010). Plants that are less flammable have low surface-to-volume ratios, high moisture contents, and minimal dead material or debris. Examples of such plants include agave, oleander, and olive trees. More flammable species have high surface-to-volume ratios, exhibit low moisture contents, contain volatile oils, and have high levels of dead material or debris (Moritz and Svihra 1998; UCFPL 1997; UCCE 2016; White and Zipperer 2010). Examples of such plants include pampas grass, juniper, and pine. Plant condition and maintenance is also an important factor in flammability potential. Some plants that have more flammable characteristics can become less flammable if well maintained and irrigated. Conversely, plants can be explosively flammable when poorly maintained, situated on south-facing slopes, in windy areas, or in poor soils (Moritz and Svihra 1998).

The LACoFD has developed a list of desirable plant species for use in the County's VHFHSZ Areas (Appendix B). These plants have the ability to store water in leaves or stems and withstand drought, produce limited dead and fine material, are prostrate or prone in form, have extensive root systems for controlling erosion, can withstand severe pruning, have high levels of salt or other compounds that contribute to fire resistance, have low levels of volatile oils or resins, and/or can resprout after a fire. The County has also adopted a list of plants that are prohibited in the County's VHFHSZ Areas. These plants are considered to be unacceptable in the landscape due to their flammable characteristics, which include large amounts of dead material retained within the plant, rough or peeling

bark, production of profuse amounts of litter and the presence of volatile substances such as oils, resins, wax, and pitch. Certain native plants species contain these characteristics (e.g., sage, buckwheat, and coyote bush).

Insects, fungi, other microbes, and vertebrates are a natural component of California forests. Populations of pests are dynamic and fluctuate in response to climatic and environmental changes such as drought, stand density, fire, and other site disturbances. Healthy, vigorous trees are typically able to withstand pest attacks when pest populations are at low to moderate levels. When stressors exist in forests (e.g., overstocking, shading, drought), tree vigor is reduced, and tree susceptibility to pest attacks and infestations increases. Localized areas of infestations of pitch canker (*Fusarium circinatum*) and sudden oak death (*Phytophthora ramorum*) have been reported within Los Angeles County (Pitch Canker Task Force 2012; University of California 2004). Eucalyptus longhorned borer (*Phoracantha semipunctata* and *Phoracantha recurva*) has also been documented within the County (California Agriculture 1996). These diseases/pests can contribute to wildfire hazards by increasing dead surface fuel loads and hindering firefighting efforts.

2.5.2 Vegetation Types

The existing vegetation types present throughout the foothills of the San Gabriel Mountains adjacent to the City and their associated contribution to fire hazard. It should be noted that the majority of the City is considered as urban land cover. Urban land cover typically represents noncombustible types (e.g., pavement) or developed and maintained landscapes (e.g., buildings, turf in parks. Ornamental landscape vegetation also characterizes portions of areas considered as urban land cover. Such vegetation is a combination of native and introduced ground cover, grass, shrub, and tree species. Some ornamental vegetation may increase fire hazard due to plant composition and structure (as described above) and the lack of irrigation and maintenance.

To support the fire behavior modeling efforts conducted for this CWPP, the different vegetation types observed adjacent to the City were classified into the aforementioned numeric fuel models. As is customary for this type of analysis, the terrain and fuels directly adjacent to the property are used for determining flame lengths and fire spread. It is these fuels that would have the potential to affect the project's structures from a radiant and convective heat perspective as well as from direct flame impingement.

Vegetation types were derived from a site visit that was conducted on by a Dudek Fire Protection Planner. Based on the site visit numerous vegetation communities and land cover types exist, including Broom baccharis scrub, mafic chaparral, southern willow scrub (disturbed and undisturbed), southern mixed chaparral, coastal sage scrub, coast live oak and western sycamore riparian forests with non-native chaparral and shrub understory. Mature tree canopies for coast live oak trees (*Quercus agrifolia*) and western sycamore trees (*Platanus racemosa*) are assumed to have a canopy base height ranging from 35 to 45 feet off the ground. Canopy bulk density, the weight of canopy fuels per cubic foot of volume, is assumed to be the maximum allowable value in BehavePlus to represent broadleaf trees which, given canopy density and leaf size, have more weight per area than conifer trees (the standard for this value input in BehavePlus (Heinsch and Andrews 2010)). Foliar moisture, the moisture content of canopy foliage, is assumed to be 100%, a reasonable estimate in lieu of site-specific data (Scott and Reinhardt 2001).

Variations in vegetative cover type and species composition have a direct effect on fire behavior. Some plant communities and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (bark thickness, leaf size, branching patterns), and overall fuel loading. For example, the native shrub species that compose the coastal

sage scrub and mixed chaparral plant communities on site are considered to exhibit higher potential hazard (higher intensity heat and flame length) than grass dominated plant communities (fast moving, but lower intensity) if ignition occurred. The corresponding fuel models for each of these vegetation types are designed to capture these differences. Additionally, vegetative cover influences fire suppression efforts through its effect on fire behavior. For example, while fires burning in grasslands may exhibit lower flame lengths and heat outputs than those burning in native shrub habitats, fire spread rates in grasslands are often more rapid.

As described, vegetation plays a significant role in fire behavior, and is an important component to the fire behavior models discussed in this CWPP. A critical factor to consider is the dynamic nature of vegetation communities. Fire presence and absence at varying cycles or regimes disrupts plant succession, setting plant communities to an earlier state where less fuel is present for a period of time as the plant community begins its succession again. In summary, high-frequency fires tend to convert shrublands to grasslands or maintain grasslands, and fire exclusion tends to convert grasslands to shrublands over time as shrubs sprout back or establish and are not disturbed by repeated fires. In general, biomass and associated fuel loading will increase over time, assuming that disturbance (e.g., fire, grazing, or farming) or fuel reduction efforts are not diligently implemented, which would not occur on this site due to the funded maintenance entity.

2.5.2.1 Grass/Herbaceous

Grass/herbaceous fuels in and adjacent to the City are represented by the California annual grassland vegetation type and are found throughout the foothills along the City's northern boundary. Grassland types may include scattered and widely spaced trees and/or shrubs, although grasses are the dominant cover type. Grasses are fine fuels that are loosely compacted with a low fuel load.² Grasses have a high surface area-to-volume ratio, requiring less heat to remove fuel moisture and raise fuel to ignition temperature. They are also subject to early seasonal drying in late spring and early summer. Live fuel moisture content in grasses typically reaches its low point in early summer, and grasses begin to cure soon after. Due to these characteristics, grasses have potential for a high rate of spread, rapid ignition, and facilitation of extreme fire behavior. Grasses are the vegetation type in and adjacent to the City with one of the highest risks for wildfire ignition. Their low overall fuel loads typically result in faster moving fires with lower flame lengths and heat output. Untreated grasses can help spread fire into other adjacent surface fuel types (e.g., shrubs) or facilitate surface to crown fire³ transition where they exist beneath tree canopies.

2.5.2.2 Brush/Scrub

Brush/scrub fuels in the City are represented by the chaparral and coastal sage scrub vegetation types. Brush/ scrub types may include scattered and widely spaced trees, small patches of grass/herbaceous vegetation, or grass herbaceous vegetation occurring beneath shrub canopies, although shrubs are the dominant cover type. Chaparral and coastal sage scrub vegetation types are found throughout the foothills of the San Gabriel Mountains and within the ANF along the City's northern boundary.

Chaparral and coastal sage scrub are considered moderately fine fuels that are loosely compacted. Chaparral has a high fuel load, and coastal sage scrub has a moderate fuel load. Both types have high surface area-to-volume ratios, requiring less heat to remove fuel moisture and raise fuel to ignition temperature. Both are subject to early seasonal drying in the late spring and early summer, but do not fully cure in the way that grasses do. The live fuel moisture content reaches its

² The amount of available and potentially combustible material, usually expressed as tons/acre (NWCG 2020).

³ A crown fire is a forest fire that advances often at great speed from tree top to tree top.

low point in the late summer and early fall months. Dead fuels consist mainly of 1-hour and 10-hour fuel sizes, or twigs and small stems ranging from 0.25 inches to 1 inch in diameter. Chaparral and coastal sage scrub have the potential for a high rate of spread, rapid ignition, and extreme fire behavior. Chaparral also has a high content of volatile organic compounds, which also contributes to extreme fire behavior potential.

2.5.2.3 Tree/Woodland

Tree/woodland fuels in the City are represented by the coast live oak woodland, western sycamore, pine woodlands, and riparian woodland vegetation types. Also, eucalyptus is included in this section due to its existence in and adjacent to the City. Tree/woodland types may also include scattered shrubs or shrub groupings, small patches of grass/herbaceous vegetation, or shrub and grass herbaceous vegetation occurring beneath tree canopies, although trees are the dominant cover type. Oak woodlands are found in the City's drainages and canyons throughout the foothill areas.

Coast Live Oak Woodland

Oak stands are composed of fuel structures ranging from fine to heavy. In closed canopy stands, a sparse understory of grass, leaves, twigs, branches, and bark litter may be present. In open stands, understory may include grass, shrubs, leaves, twigs, branches, and bark litter. Fuel buildup typically occurs very slowly in oak woodland stands in California (USFS 2020a), and litter forms a thick, compacted mat resulting in very low surface fuel loads. In closed-canopy oak woodlands, understory fuel loads are low. The reduction of fire as an ecosystem process in oak woodlands, however, allows for an accumulation of fuels that had previously been consumed during regular, low-intensity fires. This can cause a build-up of woody vegetation in the understory, including significant increases in dead and down woody material and ladder fuels connecting ground vegetation to tree canopies. As a result, some oak woodlands are more susceptible to severe, crown-consuming fires (McCreary 2004).

Oak trees are highly flame resistant as the leaves do not readily catch fire. Fires in oak stands tend to smolder in the duff, and consume surface fuels without generating enough heat to carry fire into the oak canopy (USFS 2020a). Oaks also do not spread fire crown-to-crown readily like many conifers. Oak woodland litter does little to facilitate fire spread as it has a low surface area-to-volume ratio and requires high heat levels to remove fuel moisture and raise fuel to ignition temperature. Oak woodland litter is subject to seasonal drying in the late summer and early fall months, but fog drip, solar shading, and the windbreak provided by oak canopies can sustain high fuel moisture content in the summer when fog is present. Oaks have a low content of volatile organic compounds, and the lack of highly combustible oils further reduces the fire hazard associated with oaks and oak woodlands.

Dead fuels consist of 1-hour (litter and duff < 0.25 inches in diameter), 10-hour (twigs and small stems 0.25 inches to 1 inch in diameter), 100-hour (branches 1 inch to 3 inches in diameter), and 1,000-hour (large stems and branches > 3 inches in diameter) sizes. Oak woodlands are mostly lacking in features that promote fire spread, but weather and topography have a strong influence on fire behavior. Given extreme fire weather and steep terrain, oak woodlands have the potential for a moderate rate of spread, torching and crown fire, and extreme fire behavior, especially those with higher surface fuel loads and ladder fuels. Fire behavior in oak woodlands and forests is typically much less intense than wildfires burning in chaparral and coastal scrub communities. Low, compacted leaf litter understory, canopy shading of ground fuels, and wind velocity reduction from tree canopies significantly reduces the intensity and spread rates of surface fires in oak woodlands. Transition from ground to canopy fire increases fire intensity, spotting, and tree mortality potential.

Riparian Woodland

Riparian woodlands are concentrated within the drainages of the San Gabriel Mountains and have a low fire hazard as their high moisture levels limit ignition potential and minimize the potential for wildfire spread. The vegetation within riparian woodlands responds slowly to changes in temperature and moisture, and significant surface shading from tree canopies limits fuel moisture loss. Surface fuels are relatively low in riparian woodlands; however, storm-related high-water streamflow can deposit debris and contribute to fuel buildup as it dries out later in the season. During severe weather conditions, high fuel loads can result in high intensity burning.

Eucalyptus

Eucalyptus stands are composed of fuel structures ranging from fine to heavy, and may include an understory of grass; brush; eucalyptus seedlings, saplings, and small trees; and eucalyptus leaf, twig, branch, and bark litter. Eucalyptus litter is generally moderately compacted with heavy to very heavy fuel loads; fuel loads in eucalyptus stands can reach between 45 and 100 tons per acre (Agee et al. 1973). Fuel buildup in eucalyptus stands is very rapid, exceeding that of other tree species, and its litter (dead leaves and debris) is especially flammable (Agee et al. 1973; NPS 2006; Wolf and DiTomaso 2016). Fuel reduction programs in eucalyptus stands are typically recommended to maintain low fuel load levels (USFS 2020b).

The leaves of many eucalyptus tree species may be moderately resistant to combustion under some circumstances (Dickinson and Kirkpatrick 1985); however, these trees are considered highly flammable as the bark catches fire readily, and deciduous bark streamers and lichen epiphytes tend to carry fire into the canopy, which tends to produce embers that can be carried by strong winds. These flying embers are carried downwind and result in the development of spot fires that have ignited in receptive fuel beds in advance of the fire's leading edge (Ashton 1981; USFS 2020b). Peeling bark is typical of many other eucalyptus species and contributes to ground-based fuels (litter) when it falls. Peeling bark is also retained for a period of time on tree trunks, where it can facilitate ground to canopy fire transition (ladder fuel). Eucalyptus litter has a moderate surface area to volume ratio, requiring moderate heat to remove fuel moisture and raise fuel to ignition temperature.

Like chaparral, eucalyptus also has a higher content of volatile organic compounds. Eucalyptus leaves produce a volatile (Gabbert 2014), highly combustible oil, and flammable gasses may be released from trees at very high temperatures, further increasing fire hazard (Gross 2013). The live fuel moisture content reaches its low point in the late summer and early fall months. Dead fuels consist of 1-hour (litter and duff < 0.25 inches in diameter), 10-hour (twigs and small stems 0.25 inches to 1 inch in diameter), 100-hour (branches 1 inch to 3 inches in diameter), and 1,000-hour (large stems and branches > 3 inches in diameter) sizes. Features that promote fire spread include heavy litter fall, flammable oils in the foliage, and open crowns bearing pendulous (i.e., downward-hanging) branches, which encourage maximum updraft (USFS 2020b). Given average weather conditions and terrain, eucalyptus has potential for a high rate of spread, torching and crown fire, and extreme fire behavior.

2.5.3 Wildfire Types and Potential Fire Behavior

Several wildfire types exist, as summarized below.

- **Ground Fire:** A fire burning on the ground or through understory vegetation and not reaching into the canopy (NWCG 2020).

- **Surface Fire:** A surface burning fire with low flame lengths (usually less than 1 meter) that does not result in significant movement into understory or overstory vegetation (NWCG 2020).
- **Crown Fire:** A fire that has burned upward from the ground and into the tree canopy. There are three types of crown fires:
 - o **Passive Crown Fire:** A crown fire in which individual or small groups of trees torch out, but solid flaming in the canopy cannot be maintained except for short periods. Passive crown fire encompasses a wide range of crown fire behavior from the occasional torching of an isolated tree to a nearly active crown fire. Also called torching (Scott and Reinhardt 2001).
 - o **Active Crown Fire:** A crown fire in which the entire fuel complex becomes involved, but the crowning phase remains dependent on heat released from the surface fuels for continued spread. Also called running and continuous crown fire (Scott and Reinhardt 2001).
 - o **Independent Crown Fire:** A crown fire that spreads without the aid of a supporting surface fire (Scott and Reinhardt 2001).

Another component of fire behavior is spotting, the transfer of firebrands (embers) ahead of a fire front, which can ignite smaller vegetation fires (NWCG 2020). These smaller fires can burn independently or merge with the primary fire. Spotting can also result in structural ignitions when transported embers reach a receptive fuel bed (e.g., combustible roofing), especially in wind-driven fires, such as those occurring during the Santa Ana wind events in the San Gabriel Mountains. Structure fires, as well as vegetation-fueled fires, can generate firebrands. Additionally, landscape features like ridges can dramatically affect fire behavior by changing prevailing wind patterns, funneling air, and increasing wind speeds, thereby intensifying fire behavior.

Each of the fire types mentioned above may occur within or adjacent to the City, depending on site-specific conditions. Fire behavior is how a wildland fire reacts to weather, fuels, and topography. The difficulty of controlling and suppressing a wildfire is typically determined by fire behavior characteristics, such as rate-of-spread, fireline intensity, torching, crowning, spotting, fire persistence, and resistance to control (NWCG 2020). Extreme fire behavior is that which precludes methods of direct control (e.g., flame lengths 8 feet and greater), behaves unpredictably and erratically, and typically involves high spread rates, crowning and spotting, the presence of fire whirls, and a strong convective column (NWCG 2017).

Fire behavior characteristics are an essential component in understanding fire risk and fire agency response capabilities. Flame length—the length of the flame of a spreading surface fire within the flaming front—is measured from midway in the active flaming combustion zone to the average tip of the flames (Andrews et al. 2008). While it is a somewhat subjective and nonscientific measure of fire behavior, it is imperative to fireline personnel when evaluating fireline intensity and is worth considering as a vital fire variable (Rothermel 1993). Fireline intensity is a measure of heat output from the flaming front and also affects the potential for a surface fire to transition to a crown fire. The information in Table 3 presents an interpretation of flame length and its relationship to fire suppression efforts.

Table 3. Fire Suppression Interpretation

Flame Length	Fireline Intensity	Interpretations
Under 4 feet	Under 100 BTU/ft/s	Fires can generally be attacked at the head or flanks by persons using hand tools. Hand line should hold the fire.

Table 3. Fire Suppression Interpretation

Flame Length	Fireline Intensity	Interpretations
4 feet to 8 feet	100–500 BTU/ft/s	Fires are too intense for direct attack on the head by persons using hand tools. Hand line cannot be relied on to hold the fire. Equipment such as dozers, pumpers, and retardant aircraft can be effective.
8 feet to 11 feet	500–1,000 BTU/ft/s	Fires may present serious control problems—torching out, crowning, and spotting. Control efforts at the fire head will probably be ineffective.
Over 11 feet	Over 1,000 BTU/ft/s	Crowning, spotting, and major fire runs are probable. Control efforts at head of fire are ineffective.

Source: Roussopoulos and Johnson 1975. **Note:** BTU/ft/s = British thermal units per foot per second.

2.6 Fire History and Ignitions

Fire history is an important component of fire planning and can provide an understanding of fire frequency, fire type and behavior, most vulnerable community areas, and significant ignition sources, amongst others. One important use for this information is as a tool for pre-planning. It is advantageous to know which areas may have burned recently and therefore may provide a tactical defense position, what type of fire burned in the area, and how a fire may spread. Fire history represented in this CWPP uses the CAL FIRE - Fire and Resource Assessment Program (FRAP) database. FRAP summarizes fire perimeter data dating to the late 1800s, but which is incomplete due to the fact that it only includes fires over 10 acres in size and has incomplete perimeter data, especially for the first half of the 20th century (Syphard and Keeley 2016). However, the data does provide a summary of recorded fires and can be used to show whether large fires have occurred in the area, which indicates whether they may be possible in the future.

According to available data from the CAL FIRE in the FRAP database⁴, approximately ninety-three (93) fires have burned within the San Gabriel Mountains of the Angeles National Forest within 5-miles of the City of Bradbury since the beginning of the historical fire data record. The topography, vegetation, and climatic conditions in the foothills above the City combine to create a unique situation capable of supporting large-scale, high-intensity, and sometimes damaging wildfires. Recorded wildfires within 5 miles range from 10.1 acres to 114,963 acres (2020 Bobcat Fire) and the average fire size is approximately 1,546 acres (not including the 2020 Bobcat Fire or fires smaller than 10 acres). The 2020 Bobcat Fire is the most recent fire, which occurred directly north of the City. Two fires have burned within the northern portion of the City. LACoFD may have data regarding smaller fires (less than 10 acres) that have occurred on the site that have not been included herein. Fire history for the general vicinity of the City is illustrated in the map in Table 4 and graphically presented in Figure 4.

Table 4. Fire History within Five Miles of the City of Bradbury

Fire Year*	Fire Name	Interval (years)	Total Area Burned (acres)
1900	Big Fire	N/A	16,960
1909	Un-named	9	19
1909	Un-named	0	20
1909	Un-named	0	104
1910	Un-named	1	81

⁴ Based on polygon GIS data from CAL FIRE's FRAP, which includes data from CAL FIRE, USDA Forest Service Region 5, BLM, NPS, Contract Counties and other agencies. The data set is a comprehensive fire perimeter GIS layer for public and private lands throughout the state and covers fires 10 acres and greater between 1878–2018.

Table 4. Fire History within Five Miles of the City of Bradbury

Fire Year*	Fire Name	Interval (years)	Total Area Burned (acres)
1910	Un-named	0	19
1910	Un-named	0	27
1911	Un-named	1	15,096
1912	Un-named	1	32
1915	Un-named	3	15,096
1916	Duarte	1	179
1917	Hastings Ranch	1	350
1918	Fish Canyon	1	51
1923	Un-named	5	119
1924	Monrovia CC	1	57
1924	San Gabriel	0	43,050
1928	Bradbury No. 62	4	227
1928	Marlborough	0	73
1928	Brush Flat No. 12	0	241
1928	Un-named	0	86
1929	Rock Pit No. 46	1	145
1932	Tunnel Fire	3	31
1937	Fralich	5	38
1942	Hiyon #135	5	184
1943	Azusa Fire No. 42	1	188
1946	Beatty No. 209	3	159
1947	Azusa Fire No. 112	1	351
1950	Un-named	3	18
1952	Arcadia	2	10
1952	Baird Fire	0	138
1952	Spinks	0	179
1953	Un-named	1	95
1953	Monrovia Peak Fire	0	14,061
1953	Maddock	0	558
1954	Monrovia Peak No. 2	1	13,870
1957	Gale Fire	3	24,708
1957	Morris	0	2,788
1958	Un-named	1	66
1958	Un-named	0	13,943
1959	Un-named	1	118
1961	Un-named	2	257
1961	Un-named	0	922
1962	Un-named	1	861
1962	Norumbega Fire	0	15
1965	Un-named	3	23
1968	Canyon Inn Fire	3	19,055

Table 4. Fire History within Five Miles of the City of Bradbury

Fire Year*	Fire Name	Interval (years)	Total Area Burned (acres)
1968	Newman Fire	0	67
1968	Un-named	0	47
1968	Un-named	0	26
1969	Un-named	1	51
1969	Un-named	0	11
1969	Bole Fire	0	715
1970	Un-named	1	10
1975	Lannen Fire	5	160
1975	Star Pine Fire	0	115
1978	Mountain Trail Fire	3	1,295
1979	Silver Fish Fire	1	153
1980	Stable Fire	1	6,048
1982	Un-named	2	29
1988	Un-named	6	28
1993	Kinneloa Fire	5	5,454
1994	Old San Gabriel Canyon Rd.	1	3
1996	Reservoir	2	1,465
1997	Canyon II Fire	1	3,825
1997	Roberts	0	10
1998	Foothill	1	11
1999	Santa Anita	1	750
2002	Santa Anita II	2	28
2002	Williams	0	38,119
2008	Santa Anita	6	558
2009	Morris	1	2,237
2012	Reservoir	3	10
2013	Madre	1	209
2013	Shooting	0	11
2014	Colby Fire	1	1,951
2016	Reservior Fire	2	1,146
2016	Fish Fire	0	4,246
2020	Bobcat Fire	4	114,963

¹ *CAL FIRE FRAP 2020

Nearly all significant wildfires have burned in the months of July, September, or October. This timeframe coincides with the end of the dry summer season, where vegetation has lower fuel moistures, and Santa Ana winds are prominent. While not all the fires shown in Table 4 were associated with Santa Ana winds, the largest and most damaging fires have occurred during such winds.

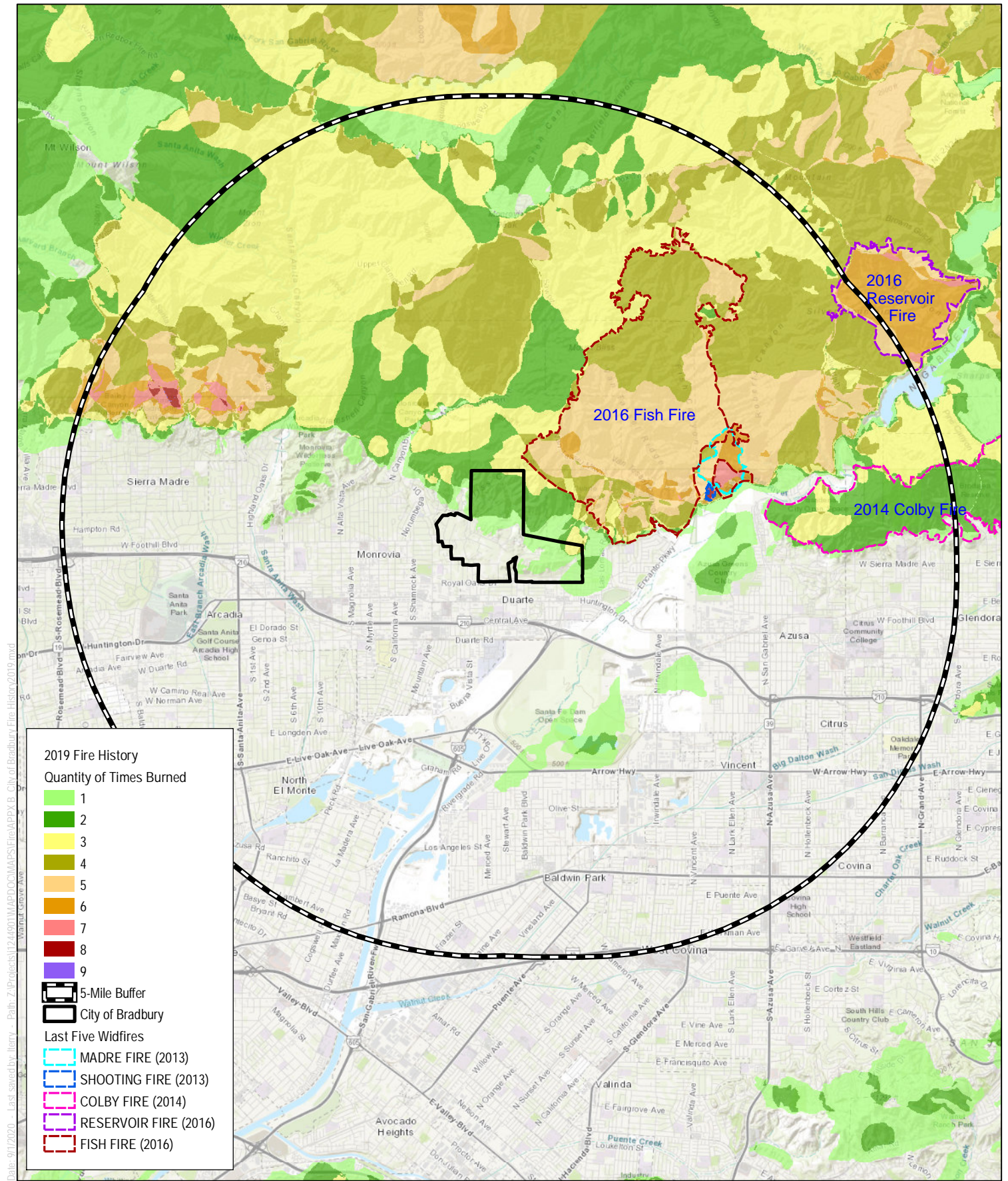
Based on an analysis of this fire history data set, specifically the years in which the fires burned, the average interval between wildfires within 5 miles of the City was calculated to be one year with intervals ranging between 0 (multiple fires in the same year) to 6 years. Based on this analysis, it is expected that there will be wildland fires within 5

miles of the City at least every six (6) years and on average, every 1.25 years, as observed in the fire history record. The proximity of the City to large expanses of open space to the north, northwest, and northeast and the terrain within the San Gabriel Mountains, including multiple sub-drainages and canyons, has the potential to funnel Santa Ana winds, thereby increasing local wind speeds and increasing wildfire hazard in the vicinity of the City.

2.7 Development Patterns

Nearly the entirety of the City of Bradbury's land area is designated and zoned for Agricultural residential land uses. This is reflected in the pattern of development and land use within the City's VHFHSZ area, which creates conditions that can be described as either a WUI or a wildland-urban intermix (Intermix). The WUI are areas where structures and other human development meets or intermingles with undeveloped wildland or vegetation fuels. This area typically consists of residential and commercial areas near or along foothills, such as found in Bradbury. Intermix areas predominately consist of low-to-medium density housing units and structures more closely interwoven with vegetative fuels that are capable of propagating fire. This condition exists throughout the Bradbury Estates, Woodlyn Lane community, and the remainder of the Bradbury community areas. where steep terrain and sensitive habitat prevents more dense development. Challenges with developments in WUI areas include narrow roads, long driveways, dead-end roads, steep slopes, and dense vegetation. Emergency response and evacuation from WUI areas during emergencies can also be hindered by these factors.

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SOURCE: BASE-ESRI; FIRE DATA-CALFIRE 2019

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Figure 4

Fire History Map

City of Bradbury Community Wildfire Protection Plan

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2.8 Existing Hazard Abatement/Fuels Treatment

2.8.1 LACoFD Defensible Space and Vegetation Management

An important component of a fire protection system for a City is the provision for fire resistant landscapes and modified vegetation buffers. Defensible space Fuel Modification Zone (FMZs) are designed to provide vegetation buffers that gradually reduce fire intensity and flame lengths from advancing fire by strategically placing thinning zones, restricted vegetation zones, and irrigated zones adjacent to each other on the perimeter of the WUI exposed structures.

As noted above, the City is exposed to naturally vegetated open space areas to the north, as well as being adjacent to residential communities to the west, east, and south. Based on the modeled extreme weather flame lengths within the naturally vegetated coastal scrub and chaparral fuels within the San Gabriel Mountains of the ANF, average wildfire flame lengths are projected to be approximately 40 to 45 feet high. The fire behavior modeling system used to predict these flame lengths was not intended to determine sufficient FMZs widths, but it does provide the average predicted length of the flames, which is a key element for determining “defensible space” distances for providing firefighters with room to work and minimizing structure ignition. Although Defensible Space is very important for setting back structures from adjacent unmaintained fuels, the highest concern is considered to be from firebrands or embers as a principle ignition factor.

2.8.1.1 Los Angeles County Fuel Modification Zone Standards

A FMZ is a strip of land where combustible vegetation has been removed and/or modified and partially or totally replaced with more adequately spaced, drought-tolerant, fire resistant plants in order to provide a reasonable level of protection to structures from wildland fire. Los Angeles County Fire Code (Title 32, Fire, Section 4908) is consistent with the 2019 California Fire Code (Section 4907 — Defensible Space), Government Code 51175 – 51189, and Public Resources Code 4291, which require that fuel modification zones be provided around every building that is designed primarily for human habitation or use within a VHFHSZ. Fuel modification consists of at least 100 feet, measured in a horizontal plane, from the exterior façade of all structures towards the undeveloped areas. A typical landscape/fuel modification installation per the County’s Fire Code consists of a 30-foot-wide Zone A and a 70-foot wide Zone B for a total of 100⁵ feet in width. An additional 100-foot wide Zone C may be required for the areas adjacent to natural-vegetated, open space areas.

Zone A – From structure outward to minimum 30 feet

Zone A is an irrigated, limited planting area measured from the outermost edge of the structure or appendage outward to 30 feet (horizontal distance), or to the property line for perimeter lots adjacent to native vegetation.

⁵ In accordance with section 325.2.2 of the Los Angeles County Fire Code, Clearance of Brush and Vegetation Growth “Extra Hazard”, it may be determined by the fire official that some sites pose an extra hazard. In such cases, Fuel Modification Zones may exceed 100 feet but not exceed 200 feet from structures.

1. Zone A should be planted with plants from Appendix B: Acceptable Plant List by FMZ. Plant selection for Zone A should consist of small herbaceous or succulent plants less than two to three feet in height or regularly irrigated and mowed lawns.
2. Plants identified as “Target” or undesirable plants (See Appendix C: Fuel Modification Zone Undesirable Plant List) by LACoFD shall not be planted within Zone A.
3. Trees should be spaced to allow a minimum 10-foot canopy clearance at full maturity to the structure.
4. Inorganic mulches, such as gravel, shall be used within 10 inches of the structure.
5. A 5-foot wide pathway shall be provided around and abutting any structures for firefighter access.

Zone B – From outer edge of Zone A to 100 feet from structure

Zone B is the area (may be irrigated or not irrigated) measured horizontally from the outer edge of Zone A to 100 feet from the structure or property line, whichever is first.

1. Zone B can be planted with slightly higher plant density than Zone A as long as landscape does not create any horizontal or vertical fuel ladders (e.g., fuel which can spread fire from ground to trees).
Exception: Screen plantings are permissible if used to hide unsightly views.
2. Trees found in Appendix B can be planted, if they are Zone B appropriate and the tree canopies at maturity are not continuous.
3. Plants identified as “Target” or undesirable plants (See Appendix C) by LACoFD shall not be planted within Zone B.
4. Avoid planting woody plant species taller than 3 feet in height at maturity directly underneath any tree canopy.
5. Zone B may not be landscaped, but it is still subject to brush clearance standards (<https://www.fire.lacounty.gov/forestry-division/fire-hazard-reduction-programs/>)

Zone C – Thinning Zone (from outer edge of Zone B to 200 feet from structure)

Zone C is considered a thinning zone and is any FMZ greater than 100 feet from structures. When provided, either by conditions of a development, voluntary by the property owner, or required by the LACoFD, this zone is more of a progressive thinning zone to lessen spread of fire as it approaches the primary FMZ adjacent to structures. The amount of fuel reduction and removal should take into consideration the type and density of fuels, aspect, topography, weather patterns, and fire history. Thinning of less than 50 percent of the existing condition may be acceptable where erosion is of high concern, but the average cover throughout the Zone C will be reduced by 50 percent, resulting in approximately 50 percent ground cover by plant canopy.

2.8.2 LACoFD Vegetation Management Program

The LACoFD created the Vegetation Management Program in 1979 to develop strategies for responding to the growing fire hazard problem throughout Los Angeles County. The Vegetation Management Program includes an

ongoing effort to analyze the history and effects of wildland fires in Los Angeles County, as well development of fuel management projects with stakeholders, including cities, community groups, and other agencies; experimentation with various methods of reducing or removing fuels in fire prone areas, as well as environmental impacts and effects of these practices. Many homes have been lost due to unmanaged vegetation around them. Vegetation can be modified and managed, but as long as people choose to live in wildland areas, the threat of major catastrophe exists. Vegetation management, related to wildland fire, refers to the total or partial removal of high fire hazard grasses, shrubs, or trees. In addition to fire hazard reduction, vegetation management has other benefits, including increased water yields, improved habitat for wildlife, reduction of invasive exotic plant species, and open access for recreational purposes (LACoFD, Fire Hazard Reduction⁶).

2.8.3 Neighboring Jurisdictions Establishment and Maintenance of Defensible Space

Mutual vegetation management is essential for fire prevention and fire management. Both the Monrovia Fire Department (MFD) and the Arcadia Fire Department (AFD) have brush clearance and fuel mitigation strategies independent of LACoFD, to reduce the potential or slow the progress of wildfires. These programs include fuel reduction through identified structural hardening (i.e., defensible spaces) and emergency preparedness. The LACoFD coordinates vegetation management efforts with the MFD and AFD in areas adjacent to the City, where feasible.

2.9 Evacuation

The City of Bradbury presents unique challenges for evacuation due to the speed and intensity at which wildfires occur as well as the high variability in transportation systems in the City, notably throughout the City's VHFHSZ Areas. Factors associated with evacuation, such as human behavior, population density, overloaded transportation routes, visitors, vulnerable populations, as well as the evacuation of pets and large animals, make the task of any evacuation more complex. Any combination of these factors may significantly increase the amount of time it takes to execute an evacuation. As a result, the decision by property owners and agencies to evacuate is often made quickly.

Evacuation during a wildfire in the City of Bradbury is not necessarily directed by the LACoFD, except in specific areas where fire personnel may enact evacuations on-scene. The Los Angeles County Sheriff's Department (LACoSD), Monrovia Police Department (MPD), Arcadia Police Department (APD), and other cooperating law enforcement agencies have the primary responsibility for evacuations. These agencies work closely within the Unified Incident Command System (ICS) with the County Office of Emergency Services and responding fire department personnel who assess fire behavior and spread, which should ultimately guide evacuation decisions. To that end, the LACoFD, LACoSD, and Department of Public Works, Los Angeles County have worked with a County Task Force to address wildland fire evacuation planning for cities throughout Los Angeles, including Bradbury. The task force also received input from the AFD, MFD, California Highway Patrol (CHP), the California Department of Transportation (CalTrans), as well as various property owners' associations throughout the Los Angeles area.

In 2008, the LACoFD reviewed the evacuation routes throughout the City; these evacuation routes include:

⁶ <https://fire.lacounty.gov/fire-hazard-reduction-programs/#1566334036482-7a650ced-8cf5>

- From the Estates: Exit out of the Deodar Main or Barranca Road. If possible, have incoming horse trailers stage on Lemon, and walk the horses down Barranca Road.
- From Woodlyn Lane: Exit towards Royal Oaks Drive North. If route is not accessible, exit towards Mount Olive Drive.
- From the East: The east end of the City exits down Mount Olive Drive from all feeder streets.

A map of the City's Emergency Evacuation Plan is presented in Figure 5.

2.9.1 Post Emergency Evacuation Community Repopulation

Once a wildfire has burned through an area, the damage to homes and infrastructure is usually unknown and there are many dangers to the homeowners wanting to return home days or sometimes weeks later that could remain, including downed trees and powerlines, unsafe roofs and exterior areas of a home, small ground hotspots or smoldering stumps, smoke and ash in the area that could irritate eyes and lungs, and even unsuspected wildlife in the area. Repopulation to an area would occur after an order is issued and once the law enforcement officers (LACoFD and LACoSD) allow for residents to return home. Fire jurisdictions, including the LACoFD, understand that evacuation orders cause additional unwanted stress and concerns to those who are eager to return home, however, it's important to understand that incident commanders are continuously evaluating the area for both fire and infrastructure conditions so that residents can return home as soon as possible and as safe as possible. According to a LACoFD Repopulation General Information sheet, before an evacuation order can be lifted, several factors are taken into consideration by the incident commander and law enforcement, including the amount of personnel still working in an area and the type of work being performed, public access conditions (damage to the road or downed trees blocking the road), damage to utility infrastructure that must be repaired prior to repopulation (power lines in the road or replacing downed power poles), or public health considerations (unhealth smoke and ash that remains). When repopulation begins to occur after evacuation orders have been lifted, repopulating in segments not only allows law enforcement and fire agencies to get some residents home as quickly as possible, but also reduces the impact on law enforcement checking for identification when areas are reopened to residents only. See Appendix D, Los Angeles County Fire Department Repopulation General Information Sheet for additional repopulation information.

As an area is being repopulated, it's extremely important to be aware of the hazardous environment and know what to look for when an evacuation order has been lifted. The California Department of Forestry and Fire Protection (Cal Fire) has additional information about returning home from a wildfire (Cal Fire, 2019 - [After a Wildfire - Ready for Wildfire](#)), including:

- Keep an eye out and be mindful of people working in the area, including road crews, firefighters, and other personnel and law enforcement workers.
- Watch for trees, brush, and rocks that may have been weakened or loosened by a wildfire.
- Be aware of debris or damage to roads or driveways, slowing traffic flow and reducing traffic lanes due to repairs and firefighting operations.
- Use extreme caution around trees, power poles, and other tall objects or structures that may have been weakened by a wildfire.

- Check for the smell of gas and use a battery-powered flashlight to inspect a damaged home.
- Check the ground for hot spots, smoldering stumps, and vegetation.
- Check the roof and exterior areas for sparks or embers.
- Check the attic and other areas throughout the home for hidden burning sparks or embers.
- Check for fire damage to the home, turn off all appliances and make sure the meter is not damaged before turning on the main circuit breaker.
- Do not drink water from the faucet until emergency officials say it's okay, as water supply systems can be damaged and become polluted during wildfires.
- Wildfires leave behind a lot of ash that can irritate eyes, nose, or skin and cause coughing; protect yourself against ash by wearing a mask to help you breathe in dust from ash, wearing goggles to protect your eyes, and wearing gloves, long-sleeved shirts, long pants, and shoes and socks to protect your skin.

2.10 Water Supply

Water systems that supply adequate quantity, pressure, and duration are essential to structure protection. Without adequate water supply the ability to safely protect structures and suppress fires is compromised. The Fire Department Water Supply and Fire Hydrant standards (City Municipal Code, Chapter 8, Section 17.08.010) outline the City's water supply requirements. (Appendix E). The Public Works Department has developed an extensive water distribution system that consists of many components including reservoirs, pump stations, pressure zones, water mains, and fire hydrants. Fire hydrants (with fire flow ratings) and water reservoirs important for fire suppression were identified during development of the 2004 Wildland Fire Plan.

The City of Bradbury's domestic water service is owned and operated by the California American Water Company (CAWC), within the Los Angeles County Service Area of Duarte. The locations of City's existing fire hydrants are presented in Figure 6.

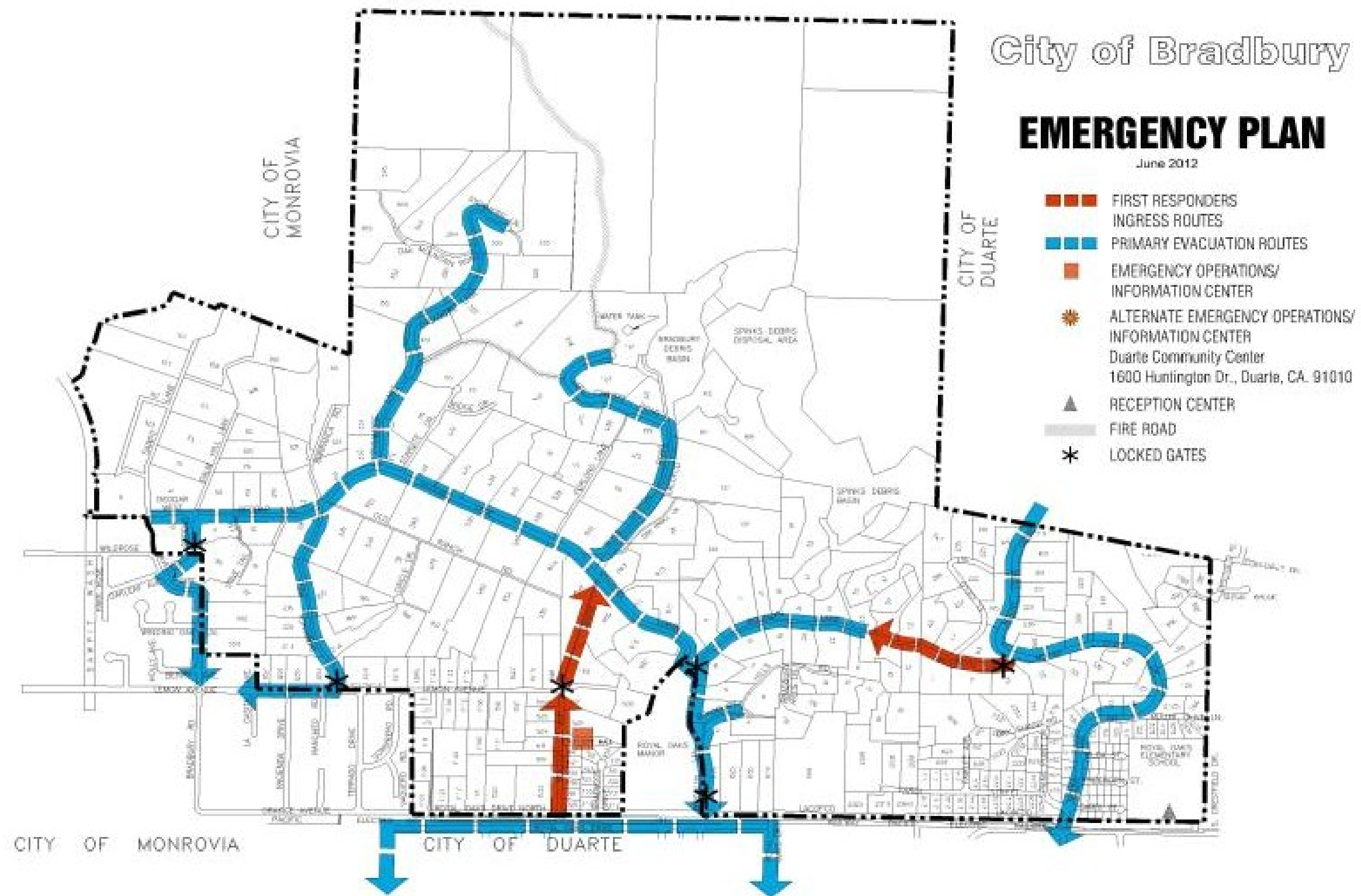
2.11 Communications

Radio communications systems are critical to fire department response capabilities and the life safety of firefighters and the public depends on reliable, functional communication tools that work in harsh environments. Radios are the lifeline that connect firefighters to command and outside assistance and serve as a critical tool for communicating site information accurately and efficiently. The County of Los Angeles operates an 800 MHz, trunked simulcast radio system. With the exception of the LACoFD and the LACoSD, all Los Angeles County departments participate. To communicate with LACoFD and LACoSD, there exists a bridging interface. In the event of a declared emergency Los Angeles County departments can communicate with each other and free up other communication channels.

The LACoFD currently provides fire protection and life safety services to more than 4 million residents, with a service area spanning 2,300 square miles to 59 cities and nearly 400,000 incidents annually. With rapid response from 174 County fire stations, LACoFD's Fire Station Alerting System (FSAS) serves as the central communication technology for getting first responders out the door quickly (RadioMobile, 2021). The LACoFD improved the performance and flexibility of their FSAS with new technology. The Department's old FSAS was a system compiled of relays, batteries, inverters, and a commercial public address system. The dispatch alerts were previously received via two-tone signals through the radio system that triggered the process of turning on station lights, generating a series of alert tones, and finally turning on the speaker so the voice dispatch could be heard.

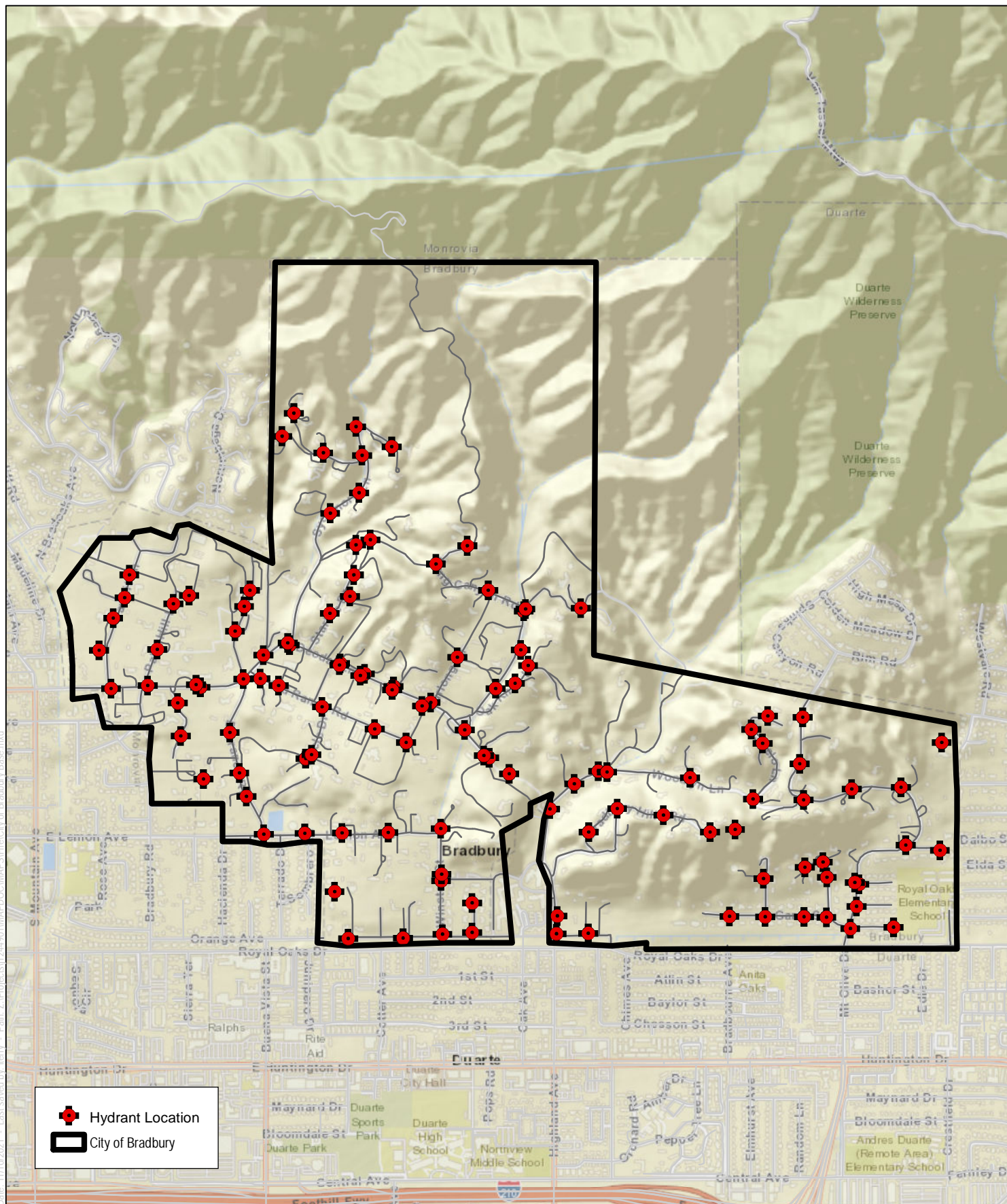
The Department's communication system components are aging and were in need of an upgrade system, so the Department turned to collaboration with a new FSAS, based on modern technology, which would improve the response times and can be customized to meet the need of each fire station individually. With the new FSAS, the Computer Aided Dispatch (CAD) system would send a dispatch that is immediately converted to a signal by IQ FSAS and routed to the appropriate station(s) via the County's Land Mobile Radio (LMR) network. Some key features of the IQ FSAS include fully programmable and customizable lights and tones (RadioMobile, 2021).

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SOURCE: City of Bradbury, 2020

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SOURCE: BASE-ESRI

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Figure 6
City of Bradbury Fire Hydrant Locations
City of Bradbury Community Wildfire Protection Plan

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3 Planning and Regulatory Environment

The following section provides an analysis of the City of Bradbury in terms of current LACoFD Fire Service capabilities and resources to provide Fire Protection and Emergency Services, as well as existing codes and standards relevant to wildfire protection and fuels management to the City. The analysis that follows examines the ability of the existing LACoFD fire stations to adequately serve the Community. Response times were evaluated.

3.1 Fire Protection

The Project is located within the LACoFD jurisdictional response area. Regionally, LACoFD provides fire, emergency medical, and rescue services from 173 stations. The Department serves over 4 million residents throughout 59 cities and all unincorporated portions of Los Angeles County. The City lies within the East Operations Bureau, Division 2. Fire Station 44 would provide initial response; however, Stations 29, 32, 48, and 169 within LACoFD's Division 2 are available to service the City, if needed. Figure 7 illustrates the station locations and Table 5 provides a summary of the LACoFD fire and medical delivery system for Fire Stations 29, 32, 44, 48, and 169.

Table 5. Closest Los Angeles County Fire Department Responding Stations Summary

Station	Location	Equipment	Staffing
Station 29	14334 Los Angeles Street, Baldwin Park, California, 91706	- (1) Paramedic Engine Company - (1) Paramedic Squad Truck - (1) Quint ¹	- 3-Person Engine company - 2-Person Paramedic Squad - 4-Person Quint
Station 32	605 North Angeleno Avenue, Azusa, California, 91702	- (1) Paramedic Engine Company - (1) Paramedic Squad Truck	- 4-Person Engine Company - 2 Person Paramedic Squad
Station 44	1105 Highland Avenue, Duarte, California, 91010	- (1) Paramedic Engine Company - (1) Assessment Engine Company	- 3-Person Engine Company - 4-Person Assessment Engine Company ²
Station 48	15546 Arrow Highway, Irwindale, California, 91706	- (1) Engine Company	- 4-Person Engine Company
Station 169	5112 North Peck Road, El Monte, California, 91732	- (1) Engine Company	- 3-Person Engine Company

1. A quintuple combination pumper or "quint" is a fire-service apparatus that serves the dual purpose of an engine and a ladder truck.
2. An assessment engine company is an engine company with some limited paramedic capabilities.

The department is largely staffed and equipped for structural fire protection; however, its Forestry Fuel Modification and Fire Prevention Division Units focus on educating the community about the benefits of proper safety practices. These Department Units including full-time staffing of wildland fire experts, development of codes and standards for vegetation management and structural protection in the County's Very High Fire Hazard Severity Zone Areas, implementation of vegetation management projects and a defensible space inspection program, and working with the community to increase resilience in the event of a wildland fire. The LACoFD recognizes that wildland fire throughout the cities they serve is inevitable.

The City of Bradbury, along with the help of the LACoFD also recognizes the need to maintain a long-range wildland fire plan to reduce the catastrophic effects of wildfire. Without this plan, the ability to prioritize, fund, and implement projects and programs to minimize the impact of wildfire in the community would be jeopardized.

3.1.1 LACoFD's Fire Protection Philosophy

3.1.1.1 Public and Firefighter Safety

The mission of the LACoFD is to protect lives, the environment, and property by providing prompt, skillful, and cost-effective fire protection and life safety services. Protecting lives continues to be the number one priority in the Fire Chief's fire protection philosophy and strategic plan, as nearly 84% of the Department's emergency calls are medically related. However, addressing societal challenges through Countywide initiatives and partnerships, supporting community resilience by implementing environmental initiatives, catastrophic preparedness, and public education programs, and building tomorrow's fire department will help fulfill the LACoFD's vision of being an exemplary organization acclaimed for their national reputation, regional strength, and hometown attentiveness (Los Angeles County Fire Department 2017-2021 Strategic Plan). The LACoFD's mission and vision statements, Standard Operating Procedures, training, fire protection, and fire prevention activities all support this priority.

3.1.1.2 Protection of Structures

The protection of structures is another top priority of the LACoFD. The ability to protect structures during a wildfire is complex. The majority of the structures throughout the City were developed before the adoption of building and fire codes that required noncombustible roofing and building materials, adequate fire department access, and meet water supply standards in the VHFHSZ areas. These existing nonconforming structures are at greater risk of loss than structures that meet current building, access, and water standards and limit the ability of the LACoFD to provide adequate structure protection. Added to the complexity is the number of homes (both existing conforming and non-conforming structures) that do not have adequate defensible space or vegetation clearance around structures and along driveways and roadways. The LACoFD's Fire Prevention Division's mission is to educate the community about the benefits of proper safety practices and to identify and eliminate all types of hazardous conditions that pose a threat to life, property, and the environment (Los Angeles County Fire Department Overview, May 2021).

3.1.1.3 Protection of the Environment and Natural Resources

Another top priority for the LACoFD is to protect the environment and natural resources. The Forestry Division of the LACoFD is comprised of environmental professionals who deliver high quality fire prevention services to

homeowners and public agency stakeholders and assist Emergency Operations with logistical support. The Forestry Division is made up of three sections, including Brush Clearance Section, Natural Resources Section, and Forestry Operations Section, whose overall responsibilities include forest and natural resource management, fire prevention, environmental review, pre-fire planning, and public education. Fire suppression and fire prevention strategies and procedures attempt to balance the need for wildland fire safety and protection of resources. The complexity of protecting lives and property, along with natural resources, is a reality for the LACoFD.

The first of the three Sections is the Brush Clearance Section oversees inspection, abatement, and enforcement of brush clearance Fire Codes, reviews, and approves fuel modification plans, and assists homeowners in maintaining “Defensible Space.”

Second, the Natural Resources Section reviews environmental documents for the Fire Department, ensuring compliance with the California Environmental Quality Act (CEQA), and monitors the implementation of the County of Los Angeles Oak Tree Ordinance. The Natural Resources Section is also responsible for bi-monthly live fuel moisture sampling of fire-prone plants and supports monitoring and mitigation of invasive insect species. It also completes the annual review, revision, and implementation of the Fire Department’s Strategic Fire Plan, designed to minimize cost and losses from wildland fires by utilizing geographic information system software to identify high-hazard/high-value areas and communities at risk.

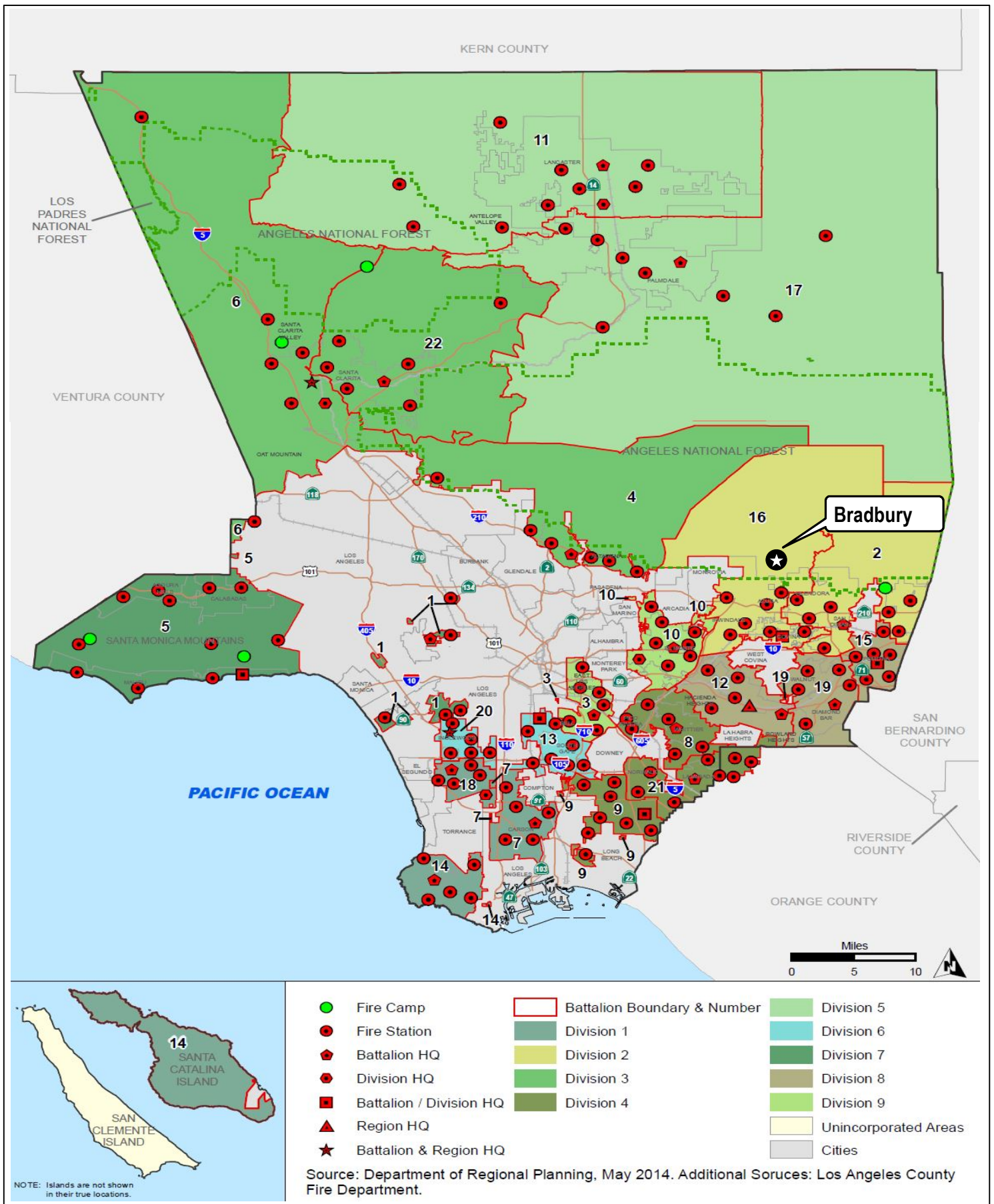
Thirdly, the Forestry Operations Section specializes in the propagation and distribution of native trees and shrubs to assist area residents with erosion control, slope stabilization, and wind breaks. Other services include conservation education, nursery tours, fire prevention consultations, hazard tree assessments, landscape design and installation on Fire Department facilities, pest assessment and control, and tree planting and maintenance projects throughout the County (Los Angeles County Fire Department Overview, May 2021).

The chaparral vegetation types within the surrounding areas of the City has adapted over millions of years with fire as a natural part of its ecosystem. Current and past fire exclusion and suppression policies have resulted in large accumulations of flammable vegetation on hillsides of the San Gabriel Mountains. When these areas burn under wildfire conditions, they result in intense fire behavior and increase the potential for resource damage. The City along with the LACoFD realize the best way to provide wildland fire protection and to protect natural resources is to implement a Community Wildfire Protection Plan that develops policies and actions to reduce accumulations of vegetation, and enhance natural resources and reduce their vulnerability to wildfire.

3.1.2 Fire Protection Partnerships and Mutual Aid Agreements

Like most California communities and jurisdictions, the LACoFD relies on mutual aid resources to augment firefighting resources if a wildfire or other emergency situation occurs through Appendix J – California Master Mutual Aid Agreement found in the Los Angeles County OA Emergency Response Plan. No community has the resources sufficient to cope with all emergencies for which the potential exists. In times of large scale wildfires and disasters, the City of Bradbury relies on the LACoFD and neighboring agencies, including the AFD, MFD, and Los Angeles Fire Department (LAFD), to provide equipment and personnel for fire suppression, prevention, and investigation of wildfires. Likewise, when called upon, LACoFD provides the same assistance to outside agencies in need.

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SOURCE: Los Angeles County Fire Department, 2020

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Figure 7
Los Angeles County Fire Department Battalions and Stations Map
 City of Bradbury Community Wildfire Protection Plan

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3.2 City of Bradbury Codes and Standards

3.2.1 Los Angeles County Fire Code

Through Title 32 of the 2019 Los Angeles County Fire Code, as amended, and adopting by reference the 2019 edition of the California Fire Code (CFC). Title 32 is hereafter referred to as the Los Angeles County Fire Code or “Fire Code”. The 2019 edition of the CFC is based on the model International Fire Code (IFC), as published by the International Code Council (2016 Edition),⁷ and all standards and secondary codes referenced in said codes, as defined in City of Bradbury Municipal Code Title IV, Chapter 3, Section 4.03.010 through 4.03.030.

Section 325 of the Los Angeles Fire Code outlines Clearance of Brush and Vegetative Growth. Specifically, Section 325.2.1 states:

‘Persons owning, leasing, controlling, operating or maintaining any building, structure, or apiary upon or adjoining any mountainous-, or forest-, or brush-covered land or land covered with flammable growth, and person owning, leasing or controlling land adjacent to such structures, shall at all times:

1. Place or store firewood, manure, compost, and other combustible materials a minimum of 30 feet (9.14 m) from any building, structure, or apiary.
2. Maintain around and adjacent to such building, structure, or apiary an effective fire protection or firebreak made by removing and clearing away, for a distance of not less than 30 feet (9.14 m) on each side thereof, all flammable vegetation or other combustible growth. This includes ornamental plants and trees known to be flammable, including but not limited to acacia, cedar, cypress, eucalyptus, juniper, pine, and pampas grass.

Exceptions:

1. Ornamental plants and trees that are individually planted, spaced, and maintained in such a manner that they do not form a means of transmitting fire from native growth to the structure.
2. Cultivated ground cover such as green grass, ivy, succulents, or similar plants provided that they are maintained in a condition that does not form a means of transmitting fire from native growth to the structure.
3. When the fire code official or Commissioner finds that because of extra hazardous conditions, a firebreak of only 30 feet (9.14 m) around such building, structure, or apiary is not sufficient to provide reasonable fire safety, the person owning, leasing, controlling, operating, or maintaining the building, structure, or apiary shall maintain around or adjacent to any building, structure, or apiary an additional fire protection or firebreak made by removing all brush, flammable vegetation, or combustible growth located from 30 to 100 feet (9.14 to 30.48 m) from such building, structure, or apiary, as may be required by the fire code official or Commissioner. Grass and other vegetation located more than 30 feet (9.14 m) from such

⁷ This includes Chapters 1 through 80, and Appendices B, BB, C, CC, and D; the 2016 California Fire Code (Title 24, Part 9 of the California Code of Regulations).

building, structure, or apiary and less than 18 inches (45.72 cm) in height above the ground, may be maintained where necessary to stabilize the soil and prevent erosion.

4. That portion of any tree which extends within 10 feet (3.05 m) of the outlet of any chimney shall be removed.
5. Maintain any tree adjacent to or overhanging any building, structure, or apiary free of dead wood.
6. Maintain the roof of any building, structure or apiary free of leaves, needles, or other dead vegetative growth.
7. Nothing contained in this section shall be construed to require any person to maintain any clearing on land where such person does not have the legal right to maintain such clearing, nor shall any provision of this ordinance be construed to require any person to enter upon or to damage property of another without the consent of the owner thereof.

Section 325.2.2 of the Fire Code outlines Extra Hazards and states:

‘The governing body finds that in many cases because of extra hazardous situations, a firebreak around buildings, structures, or apiaries of only 30 feet (9.14 m) is not sufficient and that a firebreak of 50 feet (15.24 m) or more may be necessary. If the fire code official or Commissioner finds that because of the location of any building, structure, or apiary and because of other conditions, a 30-foot (9.14-m) firebreak around such building, structure, or apiary as required by [Section 325.2.1](#), is not sufficient, the fire code official or Commissioner may notify all owners of the properties affected that they must clear all flammable vegetation and other combustible growth or reduce the amount of fuel content for a distance greater than 30 feet (9.14 m), but not to exceed 200 feet (60.96 m).’

Section 4907.1 of the Fire Code outlines defensible space requirements in the throughout the County and within the City of Bradbury. Section 4907.1 states:

‘Defensible space will be maintained around all buildings and structures in State Responsibility Areas (SRA) as required in Public Resources Code 429- and “SRA Fire Safe Regulations” California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 2, Section 1270.

Buildings and structures within the VHFHSZs of a Local Responsibility Areas (LRA) shall maintain defensible space as outlined in Government Code 51175-51189, Chapter 3 of this code and any local ordinance of the authority having jurisdiction.’

3.2.2 City’s Building Code

The City’s Building Codes (Municipal Code Title XVII, Chapter 1, Section 17.01.101) adopts Title 26, Building Code, of Los Angeles County Code, adopting the California Building Code (CBC), 2016 Edition (Part 2 of Title 24 of California Code of Regulations), based on the model International Building Code and others (e.g., California Mechanical Code, Plumbing Code, Electrical Code, and Residential Code) by reference, subject to the amendments specified in Sections 17.02.010 through 17.08.010. Structural fire protection standards are addressed in the building codes and address structural hardening requirements for buildings located within a VHFHSZ area as defined by the LACoFD and consistent with Chapter 7A of the CBC. Structural hardening requirements address roofing, exterior coverings, decking materials, windows and doors, eaves, and vents, among others. The intent of

these requirements is to minimize the potential for structural ignition through radiant or convective heat exposure or ember intrusion.

3.2.3 City of Bradbury's General Plan

The City of Bradbury's General Plan - 2012-2030 Update, is a long-range policy document designed to guide future conservation, enhancement, and development in the City. It defines the framework by which the City's environmental and economic resources are managed. The General Plan establishes goals, policies, and implementation measures to guide development and sustainability, and address issues related to the health, safety and welfare of its current and future citizens. The following elements of the City's General Plan include goals, policies, and implementation measures that address the impacts of wildland fires.

- **Land Use Element:** Contains goals, policies, and implementation actions related to land use, growth management, community design, and neighborhoods.
- **Environmental Resources Element:** Establishes goals and policies that specifically address hillside protection and conservation of open space, discourage development in high fire areas, and limit development on steep slopes.
- **Safety Element:** Contains goals and policies to reduce the potential risk of death, injuries, property damage, and economic and social dislocation resulting from large-scale hazards.

City of Bradbury General Plan policies applicable to wildfire are included in Appendix F.

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4 Wildfire Hazard Assessment

The wildfire hazard assessment conducted in support of this CWPP involved an evaluation of field conditions, processing and analyzing spatial datasets in a geographic information system (GIS), conducting GIS-based modeling to identify areas that may be subject to extreme fire behavior, and analyzing existing plans and data sets related to wildfire hazard. The assessment effort is presented in the following sections and was used to inform proposed modifications to the City's VHFHSZ Area.

4.1 Assessment Methods

4.1.1 Field Evaluations

Field assessments were conducted by Dudek and City of Bradbury staff in March 2020 and again in December 2020, in order to evaluate existing fuel load conditions, to gain an understanding of general fire hazard conditions in and around the City, and to better understand current vegetation management practices being conducted by the LACoFD and other agencies (MFD and AFD) within and adjacent to the City. During field assessments, site conditions were documented via photographs and, in some cases, noted on digital or hard-copy field maps.

4.1.2 GIS Analysis

Development of this CWPP included analysis and processing of various GIS datasets (in ArcGIS, version 10.7.1) for variables influencing wildfire hazard in the City. The following datasets were analyzed:

- Fire history
- Boundaries (VHFHSZ, High Fire Hazard Area, City Boundary, Parcels)
- Vegetation
- Terrain
- Roads
- Structure locations
- Fire station locations
- Evacuation blocks and routes
- Water Infrastructure

4.1.2.1 Structure Density

Individual building footprint data (2000 and 2010 US Census) was used to determine the proximity of structures to other structures. The 2010 Census identified a total of 400 dwelling units in the City of Bradbury. As of 2018, the Department of Finance identified a total of 409 housing units in Bradbury, all of which consist of single-family dwellings, either primary or second units on the same parcel of land. The City does not have group quarters or institutional facilities. The structure density is 204.2 structures per square mile which is considered low. Of the occupied units, 307 (86.7%) were owner-occupied and 47 (13.3%) were rented. The homeowner vacancy rate was 1.0%; the rental vacancy rate was 7.8%.

There are two primary concerns for structure ignition: (1) radiant and/or convective heat and (2) burning embers (National Fire Protection Association Standard 1144, Insurance Institute for Business and Home Safety, etc.). Burning embers have been a focus of building code updates for at least the last decade, and new structures in the WUI built to these codes have proven to be very ignition resistant. Likewise, radiant and convective heat impacts on structures have been minimized through the inclusion of structural hardening requirements included in Chapter 7A of the California Building Code, such as those for roofs, exterior walls, windows, and doors. However, in communities, or portions thereof, where structures are older and do not include ignition-resistant improvements (such as those identified in Chapter 7A), radiant heat from burning vegetation or adjacent structures is a primary concern. Areas with higher structure density (buildings are closer together) are therefore at greater risk of burning due to radiant heat exposure. The effect of radiant heat during wind-driven fires has been well documented (Cohen and Saveland 1997). Wind and slope can significantly increase the radiant heat exposure to surrounding structures. The type of building construction and the amount and kind of vegetation between structures also play a role in the ability of a structure to withstand radiant heat exposure.

The proximity of structures also limits the ability of property owners to maintain a minimum of 30 feet of defensible space between structures. The lack of defensible space inhibits firefighters from being able to safely maneuver around structures to provide protection.

4.1.2.2 LACoFD's Call Volume and Travel Times

Road network and fire station location data were used to evaluate the amount of travel time necessary to reach an individual parcel from existing fire station locations. Fire stations used in the analysis included LACoFD Fire Stations 29, 32, 44, 48, and 169, with Station 44 providing the initial response.

The closest existing fire station to the City of Bradbury is Station 44 located at 1105 Highland Avenue, Duarte, California, which includes a three (3)-person Engine Company staffed with a Captain, a Firefighter Specialist, and a Firefighter, and a four (4)-person Assessment Engine Company⁸ with a Captain, a Firefighter Specialist, a Firefighter/Paramedic, and a Firefighter, 24-hours per day/seven days a week. Station 32, located at 605 North Angeleno Avenue, Azusa, California, is the next closest station, which includes a four (4)-person Paramedic Engine Company staffed with a Captain, a Firefighter Specialist, a Firefighter/Paramedic, and a Firefighter, and a two (2)-person Paramedic Squad truck with two (2) Firefighter/Paramedics, 24-hours per day/seven days per week

⁸ As Assessment Engine Company, is an engine company with some limited paramedic capabilities.

Additionally, Station 29 located at 14334 Los Angeles Street, Baldwin Park, California, Station 48 located at 15546 Arrow Highway, Irwindale, California, and Station 169 located at 5112 North Peck Road, El Monte, California could provide an effective firefighting force for the Chadwick Ranch Estates Project. Station 29 houses a three (3)-person Paramedic Engine Company, a four (4)-person Quint Company, and a tow (2)-person Paramedic Squad truck; Station 48 staffs a four (4)-person Engine Company; and Station 169 staffs a three (3)-person Engine Company.

The LACoFD documented 398,981 total incidents for 2019⁹ generated by a County-wide service area total population of approximately 4,096,325 persons in 59 cities and all unincorporated communities within Los Angeles County (revised from LACoFD 2019). The County's per capita annual call volume is approximately 97 calls per 1,000 persons. The resulting per capita call volume is 0.097. It is estimated that the City of Bradbury has a total population of 1,069 persons¹⁰.

4.1.2.3 Response Capability Impact Assessment

As presented in Table 6, using 2019 call volume data (Bagwell, pers. Email comm. 2020a), Engines 29, 32, 48, 169, 244, and Assessment Engine 44, the six closest Engines¹¹, ran calls in 2019, averaging 11, 8, 3, 4, 6, 3, and 7 calls per day, respectively. Quint 29, and Squads 29 and 32 with larger response jurisdictions ran 5, 15, and 14 calls per day, respectively.

Table 6. LACoFD 2019 Call Volume Totals for Closest Fire Stations

Response Jurisdiction	Engine 29	Quint 29	Squad 29	Engine 32	Squad 32	Assess. Engine 44	Engine 244	Engine 48	Engine 169
Fire	180	214	74	140	58	103	129	131	149
Medical Aid (EMS)	3,442	1,094	5,316	2,670	5,088	2,099	546	1,146	1,750
Other	429	309	142	347	128	328	280	334	349
Annual Total Response	4,051	1,617	5,532	3,157	5,274	2,530	955	1,611	2,248
Total Calls Per Day	11	5	15	8	14	7	3	4	6

Source: LACoFD Planning Division

The available firefighting and emergency medical resources in the vicinity of the City of Bradbury include an assortment of fire apparatus and equipment considered fully capable of responding to the type of fires and emergency medical calls potentially occurring within the City. For perspective, Assessment Engine 44 and Engine 244 ran 7 and 3 calls per day (Refer to Table 6 above). A busy suburban fire station would run 10 or more calls per day. An average station runs about 5 calls per day.

⁹ <https://fire.lacounty.gov/wp-content/uploads/2020/06/2019-Statistical-Summary-May-2020.pdf>

¹⁰ <https://www.scag.ca.gov/Documents/Bradbury.pdf>

¹¹ Engines 29, 32, and Assessment Engine are Paramedic Engines

Land use in the City of Bradbury vicinity area varies greatly from urbanized and suburban clusters to vast rural areas. LACoFD's response time targets (Bagwell, pers. Email comm. 2020b) by land use type are:

- 5 minutes or less for urban areas
- 8 minutes or less for suburban areas
- 12 minutes or less for rural areas

In an effort to understand fire department response capabilities, an analysis of the travel-time response coverage from the closest, existing station (Fire Station 44) was conducted. This response time analysis was conducted using travel distances that were derived from Google road data and Project development plan data. Travel times were calculated applying the distance at speed limit formula¹² ($T=(D/S) * 60$, where T=time, D=distance in miles, and S=speed in MPH) as well as the nationally recognized Insurance Services Office (ISO) Public Protection Classification Program's Response Time Standard formula ($T=0.65 + 1.7 D$, where T= time and D = distance) for comparison. The ISO response travel time formula discounts speed for intersections, vehicle deceleration and acceleration, and does not include turnout time. Tables 7 and 8 present tabular results of the emergency response time analysis using the distance at speed formula and the ISO formula, respectively.

Table 7. City of Bradbury Emergency Response Analysis using Speed Limit Formula

LACoFD Station Nos.	Travel Distance to Furthest Point of the City ¹	Travel Time to Furthest Point of the City	Maximum Travel Distance ²	Maximum Travel Time ²	Total Response Time ³
29	6.9 miles	11 minutes 48 seconds	7.4 miles	12 minutes 40 seconds	14 minutes 40 seconds
32	6.5 miles	11 minutes 10 seconds	7.0 miles	12 minutes	14 minutes
44	2.8 miles	4 minutes 47 seconds	3.3 miles	5 minutes 36 seconds	7 minutes 36 seconds
48	6.8 miles	11 minutes 36 seconds	7.3 miles	12 minutes 30 seconds	14 minutes 30 seconds
169	6.0 miles	10 minutes 16 seconds	6.6 miles	11 minutes 19 seconds	13 minutes 19 seconds

Notes:

1. Assumes travel distance and time to the furthest point of the City off Bliss Canyon Road from fire station, and application of the distance at speed limit formula ($T=(D/S) * 60$, where T=time, D=distance in miles, and S=speed in MPH), a 35 mph travel speed, and does not include turnout time.
2. Assumes travel distance and time to the furthest point of the City from fire station, and application of the distance at speed limit formula ($T=(D/S) * 60$, where T=time, D=distance in miles, and S=speed in MPH), a 35 mph travel speed, and does not include turnout time.
3. Emergency response time target thresholds include travel time to furthest point of the City from fire station, and application of the distance at speed limit formula ($T=(D/S) * 60$, where T=time, D=distance in miles, and S=speed in MPH) a 35 mph travel speed along with dispatch and turnout time, which can add an additional two minutes to travel time.

¹² Using the speed limit of 35 MPH.

Table 8. City of Bradbury Emergency Response Analysis using ISO Formula

LACoFD Station Nos.	Travel Distance to Furthest Point of the City ¹	Travel Time to Furthest Point of the City ¹	Maximum Travel Distance ²	Maximum Travel Time ²	Total Response Time ³
29	6.9 miles	12 minutes 23 seconds	7.4 miles	13 minutes 15 seconds	15 minutes 15 seconds
32	6.5 miles	11 minutes 42 seconds	7.0 miles	12 minutes 31 seconds	14 minutes 31 seconds
44	2.8 miles	5 minutes 25 seconds	3.3 miles	6 minutes 15 seconds	8 minutes 15 seconds
48	6.8 miles	12 minutes 13 seconds	7.3 miles	13 minutes 02 seconds	15 minutes 02 seconds
169	6.0 miles	10 minutes 48 seconds	6.6 miles	11 minutes 48 seconds	13 minutes 48 seconds

Notes:

1. Assumes travel distance and time to the furthest point of the City off Bliss Canyon Road from fire station, and application of the ISO formula, $T=0.65+1.7(\text{Distance})$, a 35 mph travel speed, and does not include turnout time.
2. Assumes travel distance and time to the furthest point of the City from fire station, and application of the ISO formula, $T=0.65+1.7(\text{Distance})$, a 35 mph travel speed, and does not include turnout time.
3. Emergency response time target thresholds include travel time to furthest point of the City from fire station, and application of the ISO formula, $T=0.65+1.7(\text{Distance})$, a 35 mph travel speed along with dispatch and turnout time, which can add an additional two minutes to travel time.

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4.1.3 Fire Behavior Modeling

Modeling of potential fire behavior was also conducted to support development of this CWPP. Specifically, both the BehavePlus and FlamMap software packages were used to identify portions of the City that may be subject to extreme fire behavior, considering weather, fuels, and terrain variables.

4.1.3.1 BehavePlus Fire Behavior Analysis

Fire behavior modeling has been used by researchers for approximately 50+ years to predict how a fire will move through a given landscape (Linn 2003). The models have had varied complexities and applications throughout the years. One model has become the most widely used as the industry standard for predicting fire behavior on a given landscape. That model, known as “BEHAVE”, was developed by the U. S. Government (USDA Forest Service, Rocky Mountain Research Station) and has been in use since 1984. Since that time, it has undergone continued research, improvements, and refinement. The current version, BehavePlus 6.0, includes the latest updates incorporating years of research and testing. Numerous studies have been completed testing the validity of the fire behavior models’ ability to predict fire behavior given site specific inputs. One of the most successful ways the model has been improved has been through post-wildfire modeling (Brown 1972, Lawson 1972, Sneeuwjagt and Frandsen 1977, Andrews 1980, Brown 1982, Rothermel and Rinehart 1983, Bushey 1985, McAlpine and Xanthopoulos 1989, Grabner, et. al. 1994, Marsden-Smedley and Catchpole 1995, Grabner 1996, Alexander 1998, Grabner et al. 2001, Arca et al. 2005). In this type of study, BehavePlus is used to model fire behavior based on pre-fire conditions in an area that recently burned. Real-world fire behavior, documented during the wildfire, can then be compared to the prediction results of Behave and refinements to the fuel models incorporated, retested, and so on.

Fire behavior modeling conducted within the adjacent naturally vegetated hillsides of the San Gabriel Mountains includes a relatively high-level of detail and analysis which results in reasonably accurate representations of how wildfire may move through available fuels on and adjacent the property. Fire behavior calculations are based on site-specific fuel characteristics supported by fire science research that analyzes heat transfer related to specific fire behavior. To objectively predict flame lengths, spread rates, and Fireline intensities, this analysis incorporated predominant fuel characteristics, slope percentages, and representative fuel models observed adjacent to the City. The BehavePlus fire behavior modeling system was used to analyze anticipated fire behavior within and adjacent to key areas just outside of the City. Predicting wildland fire behavior is not an exact science. As such, the movement of a fire will likely never be fully predictable, especially considering the variations in weather and the limits of weather forecasting. Nevertheless, practiced and experienced judgment, coupled with a validated fire behavior modeling system, results in useful and accurate fire prevention planning information. To be used effectively, the basic assumptions and limitations of BehavePlus must be understood.

- First, it must be realized that the fire model describes fire behavior only in the flaming front. The primary driving force in the predictive calculations is dead fuels less than one-quarter inch in diameter. These are the fine fuels that carry fire. Fuels greater than one inch have little effect while fuels greater than three inches have no effect on fire behavior.

- Second, the model bases calculations and descriptions on a wildfire spreading through surface fuels that are within six feet of the ground and contiguous to the ground. Surface fuels are often classified as grass, brush, litter, or slash.
- Third, the software assumes that weather and topography are uniform. However, because wildfires almost always burn under non-uniform conditions, length of projection period and choice of fuel model must be carefully considered to obtain useful predictions.
- Fourth, the BehavePlus fire behavior computer modeling system was not intended for determining sufficient fuel modification zone/defensible space widths. However, it does provide the average length of the flames, which is a key element for determining “defensible space” distances for minimizing structure ignition.

Although BehavePlus has some limitations, it can still provide valuable fire behavior predictions which can be used as a tool in the decision-making process. In order to make reliable estimates of fire behavior, one must understand the relationship of fuels to the fire environment and be able to recognize the variations in these fuels. Natural fuels are made up of the various components of vegetation, both live and dead, that occur throughout the San Gabriel Mountains. The type and quantity will depend upon the soil, climate, geographic features, and the fire history of the site. The major fuel groups of grass, shrub, trees, and slash are defined by their constituent types and quantities of litter and duff layers, dead woody material, grasses and forbs, shrubs, regeneration, and trees. Fire behavior can be predicted largely by analyzing the characteristics of these fuels. Fire behavior is affected by seven principal fuel characteristics: fuel loading, size and shape, compactness, horizontal continuity, vertical arrangement, moisture content, and chemical properties.

The seven fuel characteristics help define the 13 standard fire behavior fuel models¹³ and the five custom fuel models developed for Southern California¹⁴. According to the model classifications, fuel models used in BehavePlus have been classified into four groups, based upon fuel loading (tons/acre), fuel height, and surface to volume ratio. Observation of the fuels in the field (on site) determines which fuel models should be applied in BehavePlus. The following describes the distribution of fuel models among general vegetation types for the standard 13 fuel models and the custom Southern California fuel models:

- | | |
|-----------------|---|
| ▪ Grasses | Fuel Models 1 through 3 |
| ▪ Brush | Fuel Models 4 through 7, SCAL 14 through 18 |
| ▪ Timber | Fuel Models 8 through 10 |
| ▪ Logging Slash | Fuel Models 11 through 13 |

¹³ Anderson, Hal E. 1982. Aids to Determining Fuel Models for Estimating Fire Behavior. USDA Forest Service Gen. Tech. Report INT-122. Intermountain Forest and Range Experiment Station, Ogden, UT.

¹⁴ Weise, D.R. and J. Regelbrugge. 1997. Recent chaparral fuel modeling efforts. Prescribed Fire and Effects Research Unit, Riverside Fire Laboratory, Pacific Southwest Research Station. 5p.

In addition, the aforementioned fuel characteristics were utilized in the recent development of 40 new fire behavior fuel models¹⁵ developed for use in BehavePlus modeling efforts. These new models attempt to improve the accuracy of the standard 13 fuel models outside of severe fire season conditions, and to allow for the simulation of fuel treatment prescriptions. The following describes the distribution of fuel models among general vegetation types for the new 40 fuel models:

- Non-Burnable Models NB1, NB2, NB3, NB8, NB9
- Grass Models GR1 through GR9
- Grass-shrub Models GS1 through GS4
- Shrub Models SH1 through SH9
- Timber-understory Models TU1 through TU5
- Timber litter Models TL1 through TL9
- Slash blowdown Models SB1 through SB4

BehavePlus software was used in the development of this CWPP in order to evaluate potential fire behavior for the City. Existing site conditions were evaluated, and local weather data was incorporated into the BehavePlus modeling runs. A detailed discussion of the BehavePlus modeling process conducted for this CWPP is presented in Appendix G and a map depicting the run locations for the fire behavior modeling effort is presented in Figure 8.

4.1.3.2 FlamMap Fire Behavior Analysis

In addition to the BehavePlus software package, FlamMap was used as well. FlamMap (version 5.0.3) is a GIS-driven computer program that incorporates fuels, weather, and topography data in generating static fire behavior outputs, including values associated with flame length and crown fire activity, among others (Finney et al. 2015). It is a flexible system that can be adapted to a variety of specific wildland fire planning and management needs. The calculations that come from FlamMap are based on the BehavePlus fire modeling system algorithms but result in geographically distinct datasets based on GIS inputs. FlamMap model outputs allow wildland resource managers to evaluate anticipated fire behavior, which provides important insight about the characteristics of wildfire spread within management areas. Each of the input variables used in FlamMap remain constant at each location, meaning that the input variables are applied consistently to each grid cell and the fire behavior at one grid cell does not impact that at a neighboring grid cell. Essentially, the model presents a “snapshot” in time and does not account for temporal changes in fire behavior or the movement of fire across the landscape. As such, the results of the models contained in this CWPP are best used as valuable information sources and tools to identify high hazard areas and prioritize fuel treatments based on potential risk rather than used as a forecast tool of an exact representation of how a fire would behave in the City.

The following are the basic assumptions and limitations of FlamMap:

¹⁵ Scott, Joe H. and Robert E. Burgan. 2005. Standard fire behavior fuel models: a comprehensive set for use with Rothermel's surface fire spread model. Gen. Tech. Rep. RMRS-GTR-153. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 72 p.

- The model output files describe fire behavior only in the flaming front. The primary driving forces in the predictive calculations are the dead fuels less than 0.25 inches in diameter. These are the fine fuels that carry fire. Fuels greater than 1 inch in diameter have little effect in carrying fire, and fuels greater than 3 inches in diameter have no effect. While not contributing to the fire behavior calculation, larger fuels (1-inch and greater) are consumed by the fire and are components of the fuels being consumed. For example, the smaller portions (e.g., leaves, twigs, peeling bark) of a chaparral shrub will combust readily and affect fire behavior, while larger portions (e.g., trunk, main branches) do not affect fire behavior but are part of the overall fuel load and will combust after the flaming front has passed.
- The model bases calculations and descriptions on a wildfire spreading through surface fuels that are within 6 feet of the ground and contiguous to the ground. Surface fuels are classified as grass, brush, litter, or slash, which are general categories that are assigned to different vegetation types.
- The software assumes that fuel moisture conditions are uniform. However, because wildfires almost always burn under non-uniform conditions, length of projection period and choice of fuel must be carefully considered to obtain useful predictions.
- WindNinja software (version 2.1.0), which is incorporated into FlamMap, allows for the generation and incorporation of gridded wind data in the FlamMap simulation. This approach is preferable as it allows the model to account for the effect of terrain on wind speed and direction at different locations throughout the modeling area, rather than relying on one single input value applied to the entire modeling area (e.g., the entire City).

FlamMap was used to model flame length, crown fire activity, and spot fire potential for an area encompassing the entire City plus a buffer of approximately 5 miles. A detailed discussion of the FlamMap modeling process conducted for this CWPP is presented in Appendix G. A map depicting flame length outputs from the fire behavior modeling effort is presented in Figure 9.

The results presented in Figure 9 and discussed in Appendix H depict values based on inputs to the FlamMap software and are not intended to capture changing fire behavior as it moves across a landscape. For planning purposes, extreme fire behavior (e.g., that occurring during periods of low humidity and high, Santa Ana winds) is the most useful information for identifying high-hazard areas and prioritizing vegetation management activities. Model results should be used as a basis for planning only, as actual fire behavior for a given location will be affected by many factors, including unique weather patterns, small-scale topographic variations, or changing vegetation patterns.

4.2 Hazard Assessment Results

The results presented in Table 9 depict values based on inputs to the BehavePlus software and are not intended to capture changing fire behavior as it moves across a landscape. Changes in slope, weather, or pockets of different fuel types are not accounted for in this analysis. For planning purposes, the averaged worst-case fire behavior is the most useful information for conservative fuel modification design. Model results should be used as a basis for planning only, as actual fire behavior for a given location will be affected by many factors, including unique weather patterns, small-scale topographic variations, or changing vegetation patterns.

Based on the BehavePlus analysis, worst-case fire behavior is expected in untreated, surface shrub and chaparral fuels northeast of the City under Peak weather conditions (represented by Fall Weather, Scenario 3). The fire is anticipated to be a wind-driven fire from the north/northeast during the fall. Under such conditions, expected surface flame lengths reach 42 feet with wind speeds of 50+ mph. Under this scenario, fireline intensities reach 18,499 BTU/feet/second with fast spread rates of 6.2 mph and could have a spotting distance up to 2.3 miles away.

Table 9: RAWS BehavePlus Fire Behavior Model Results – Existing Conditions

Fire Scenario	Flame Length ¹ (feet)	Spread Rate ¹ (mph ⁵)	Fireline Intensity ¹ (Btu/ft/s)	Spot Fire ¹ (miles)	Surface Fire to Tree Crown Fire	Tree Crown Fire Rate of Spread (mph)	Crown Fire Flame Length (feet)
<i>Scenario 1: 38% slope; Summer Onshore Wind (50th percentile)</i>							
Riparian Habitat - Timber Shrub ^{2,3} (Sh4)	10.9'	0.9	1,013	0.5	Crowning ₄	0.8	110.8'
Sagebrush scrub (Sh5)	19.5'	1.5	3,599	0.7	No	N/A	N/A
<i>Scenario 2: 43% slope; Fall Offshore, Extreme Winds (97th percentile)</i>							
Riparian Habitat - Timber Shrub (Sh4)	12.8' (23.5') ⁶	1.1 (4.2)	1,453 (5,471)	0.5 (1.5)	Crowning	1.0 (4.1)	133.1'
Sagebrush scrub (Sh5)	25.0' (41.8')	2.1 (6.4)	6,184 (18,966)	0.8 (2.3)	No	N/A	N/A
<i>Scenario 3: 20% slope; Fall, Offshore, Extreme Winds (97th percentile)</i>							
Sagebrush scrub (Sh5)	24.0' (41.3')	1.9 (6.2)	5,697 (18,499)	0.8 (2.3)	No	N/A	N/A
<i>Scenario 4: 18% slope; Summer Onshore Wind (50th percentile)</i>							
Riparian Habitat - Timber Shrub (Sh4)	10.5'	0.8	933	0.4	Crowning	0.8	110.8'
Sagebrush scrub (Sh5)	18.8'	1.4	3,328	0.6	No	N/A	N/A

Note:

1. Wind-driven surface fire.
2. Riparian overstory torching increases fire intensity. Modeling included canopy fuel over Sh4, which represents surface fuels beneath the tree canopies.
3. A surface fire in the mixed sycamore riparian forest would transition into the tree canopies generating flame lengths higher than the average tree height (25 feet). Viable airborne embers could be carried downwind for approximately 1.0 mile and ignite receptive fuels.
4. Crowning= fire is spreading through the overstory crowns.
5. MPH=miles per hour.
6. Spotting distance from a wind driven surface fire; it should be noted that the wind mph in parenthesis represent peak gusts of 50 mph.

The following describes the fire behavior variables (Heisch and Andrews 2010) as presented in Table 9:

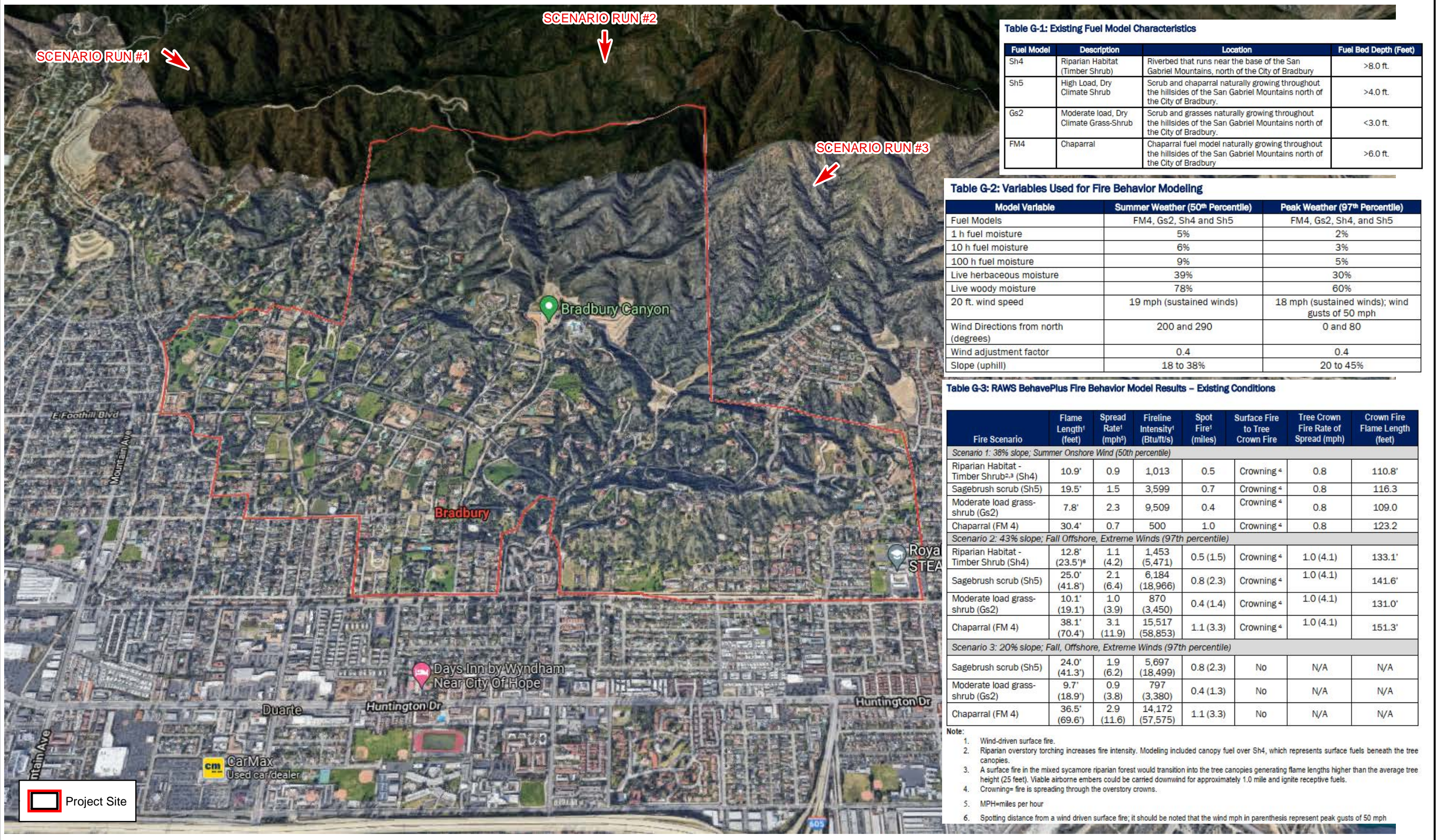
Surface Fire:

- Flame Length (feet): The flame length of a spreading surface fire within the flaming front is measured from midway in the active flaming combustion zone to the average tip of the flames.
- Fireline Intensity (Btu/ft/s): Fireline intensity is the heat energy release per unit time from a one-foot wide section of the fuel bed extending from the front to the rear of the flaming zone. Fireline intensity is a function of rate of spread and heat per unit area and is directly related to flame length. Fireline intensity and the flame length are related to the heat felt by a person standing next to the flames.
- Surface Rate of Spread (mph): Surface rate of spread is the "speed" the fire travels through the surface fuels. Surface fuels include the litter, grass, brush and other dead and live vegetation within about 6 feet of the ground.

Crown Fire:

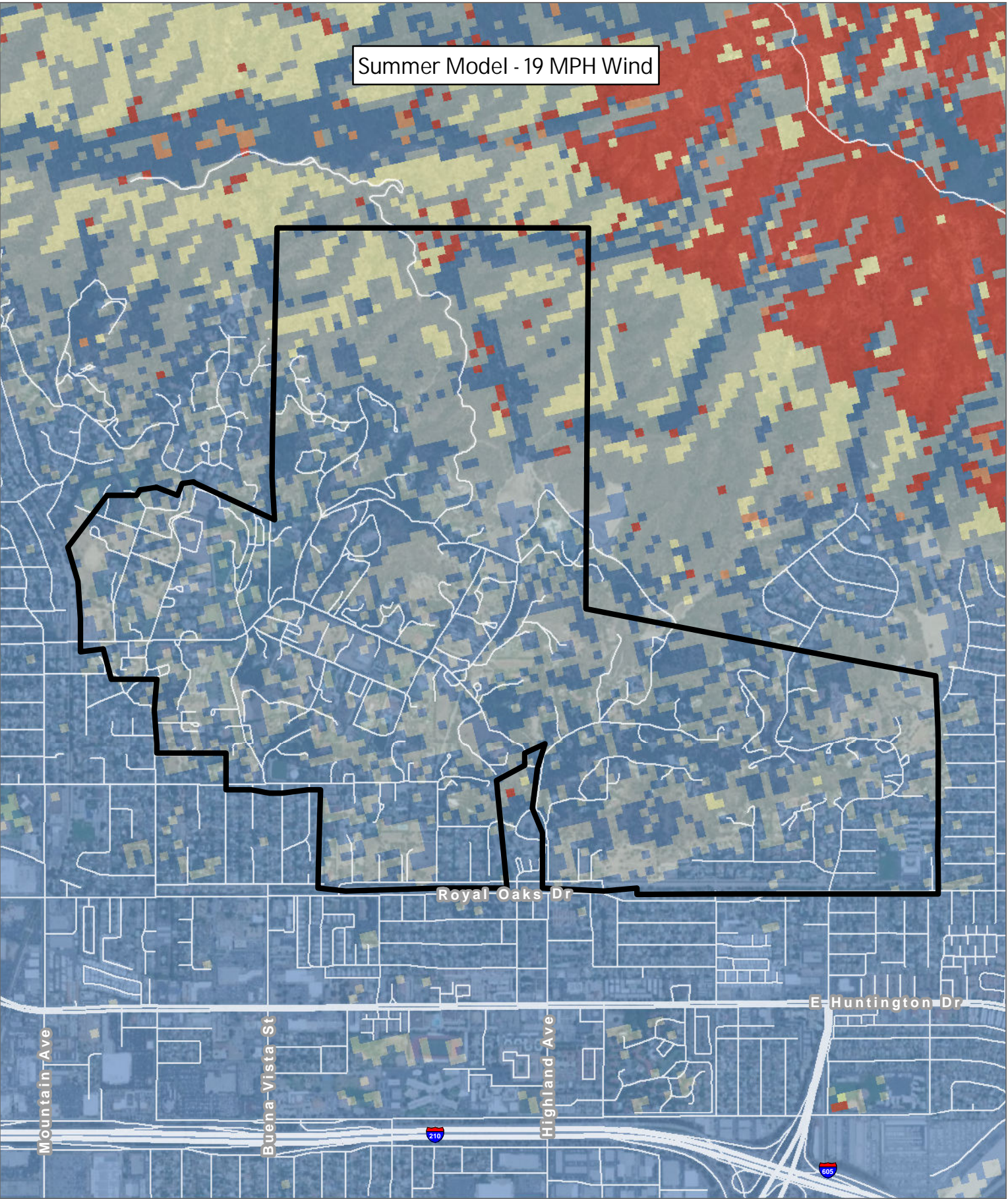
- Transition to Crown Fire: Indicates whether conditions for transition from surface to crown fire are likely. Calculation depends on the transition ratio. If the transition ratio is greater than or equal to 1, then transition to crown fire is Yes. If the transition ratio is less than 1, then transition to crown fire is No.
- Crown Fire Rate of Spread (mph): The forward spread rate of a crown fire. It is the overall spread for a sustained run over several hours. The spread rate includes the effects of spotting. It is calculated from 20-ft wind speed and surface fuel moisture values. It does not consider a description of the overstory.
- Fire Type: Fire type is one of the following four types: surface (understory fire), torching (passive crown fire; surface fire with occasional torching trees), conditional crown (active crown fire possible if the fire transitions to the overstory), and crowning (active crown fire; fire spreading through the overstory crowns). Dependent on the variables: transition to crown fire and active crown fire.

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SOURCE: AERIAL-BING MAPPING SERVICE 2019

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SOURCE: BASE-BING MAPPING SERVICE

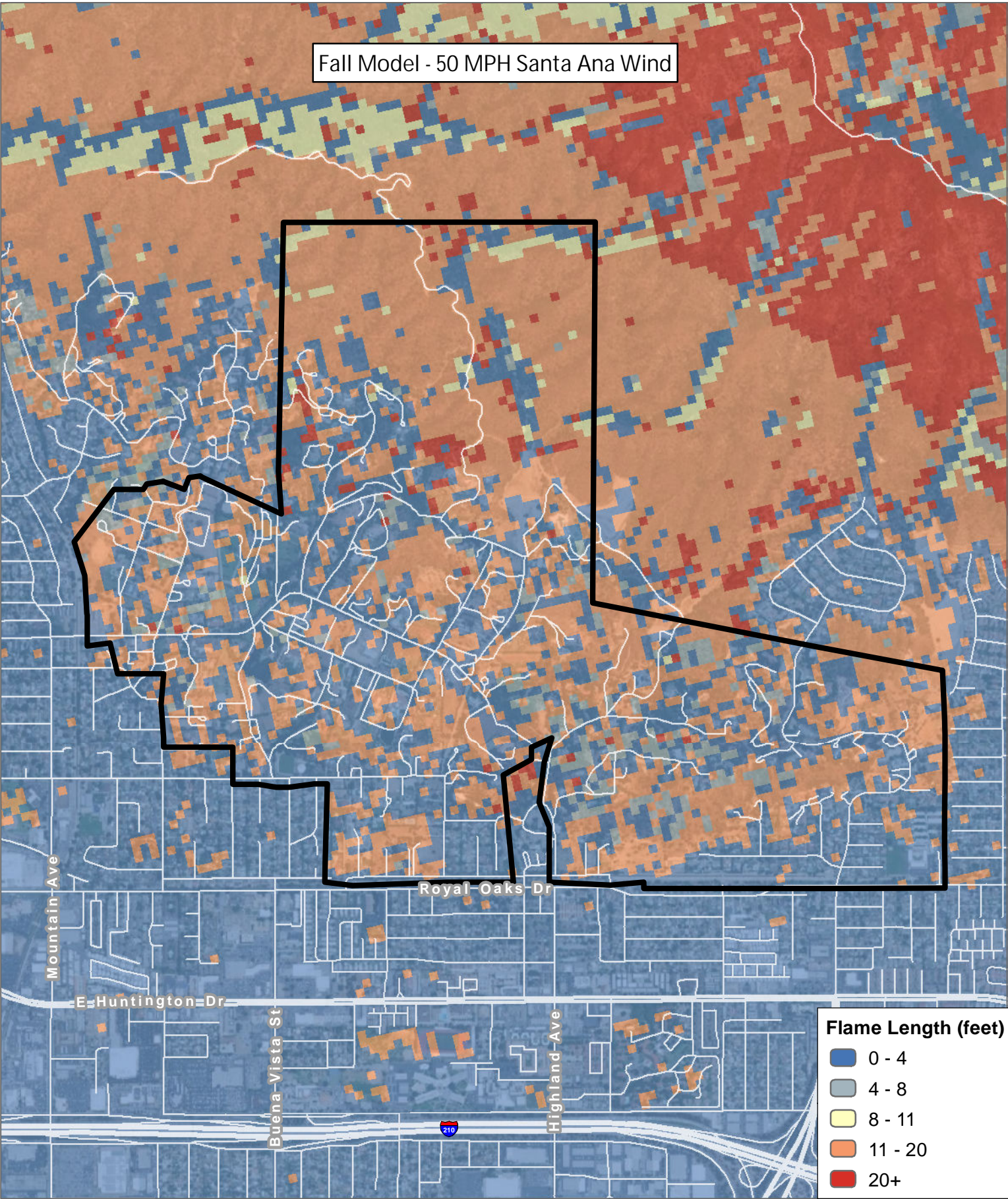


Figure 9

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5 Values at Risk

5.1 At-Risk Community

The Healthy Forest Restoration Act of 2003 identifies at-risk communities as an area:

(A) that is comprised of—

(i) an interface community as defined in the notice entitled “Wildland Urban Interface Communities Within the Vicinity of Federal Lands That Are at High Risk From Wildfire” issued by the Secretary of Agriculture and the Secretary of the Interior in accordance with title IV of the Department of the Interior and Related Agencies Appropriations Act, 2001 (114 Stat. 1009) (66 Fed. Reg. 753, January 4, 2001); or

(ii) a group of homes and other structures with basic infrastructure and services (such as utilities and collectively maintained transportation routes) within or adjacent to Federal land.

(B) in which conditions are conducive to a large-scale wildland fire disturbance event; and

(C) for which a significant threat to human life or property exists as a result of a wildland fire disturbance event.

In addition to this definition, the Office of the State Fire Marshal maintains a list of Communities at Risk. The National Fire Plan directs funding to be provided for projects designed to reduce the fire risks to communities. These high-risk communities identified within the WUI were published in the Federal Register in 2001 and include those communities neighboring federal lands. The City of Bradbury is identified as a Community at Risk in the Federal Register.

5.2 Values at Risk

Values threatened by wildfire include life, property, and natural and economic resources. The LACoFD’s mission statement is (Los Angeles County Fire Department 2020):

“The mission of the Los Angeles County Fire Department is to protect lives, the environment, and property by providing prompt, skillful and cost-effective fire protection, and life safety services.”

The lives and property threatened by wildfire are of paramount importance. However, natural resource and economic values threatened by wildfire are also significant. A major wildfire affecting the City would potentially result in the loss of biological, cultural, and visual resources. In addition, the potential economic loss from the drop in tourism and damage to homes, businesses, and City infrastructure could substantially impact the local economy.

Wildland fire has always been a part of the City’s environment and is a natural process. What has changed is the potential for the loss of life, property and reduction in natural habitat from wildfires as development pushes into WUI areas. Additionally, as described in Section 2.3.1, climate change is anticipated to exacerbate wildfire hazard

in the City. As development continues in these areas, the importance of programs and projects for structural protection, public and firefighter safety, and natural resources protection are critical.

5.2.1 Life Safety

The potential for loss of life threatened by wildfire is difficult to calculate. Locally, as represented in Table 4, the 2009 Station Fire resulted in two fatalities; the 1980 stable Fire resulted in one fatality; the 1968 Canyon (Canyon Inn) Fire resulted in eight firefighter fatalities; and the 2016 San Gabriel Complex Fire resulted in three fatalities. Furthermore, the potential for greater loss of life is possible during extreme wildfire events, as is evident in other wildfires throughout California, including in the 1991 Oakland Hills Fire, where 25 people, both emergency responders and residents, perished while trying to evacuate from the fire. 22 people perished in the 2017 Tubbs Fire and 85 in the 2018 Camp Fire as a result of these extreme wildfire events. Without a comprehensive approach to the problems that exist in the VHFHSZ Areas, the conditions that exist in these areas have the potential for greater loss of life, particularly as population increases.

Further, as seen after the devastating 2017 Thomas Fire, which burned approximately 281,893 acres, there is potential for loss of life as a result of heavy rains that occurred after the fire. Without vegetation and trees to stabilize hillsides, heavy rains that follow a fire event can result in mudslides and debris flows. The fire, which burned into the eastern part of the City of Santa Barbara, was followed by the catastrophic debris flow on January 9, 2018, which affected Montecito and the Coast Village Road area of the City of Santa Barbara, causing millions of dollars in damage and taking 23 lives.

5.2.2 Homes, Structures, and Neighborhoods

Home values in the City of Bradbury are some of the highest in the nation. The median listing price of a home within the City of Bradbury is presently \$2,324,000 (RocketHomes, 2021). Based on the median home price within the City of Bradbury of \$2,324,000 and the approximate number of 400 structures, the potential cost of property loss within the City would total over \$929,000,000. The quantity of structures presented includes all single-family residential structure types in the VHFHSZ. For perspective, the 1980 Stable Fire destroyed 49 Bradbury homes and approximately \$15 million in damage incurred. A fire that size destroying 49 homes would have an estimated property loss of nearly \$114 million.

5.2.2.1 Structural Hardening

As discussed, the topography, vegetation, climatic, and geological conditions in the foothills adjacent to the City of Bradbury combine to create a unique situation capable of supporting large-scale, high-intensity, and sometimes damaging wildfires. Vegetation management and defensible space are key components to an overall fire protection strategy; however, structural hardening also plays an important role in minimizing the potential for structure ignitions. Hardening refer to steps a property owner may take to enhance the survivability of an existing structure that may not be up to current building or residential code standards for wildland areas. Homes survive wildfires through a combination of vegetation management and maintenance, management of combustible materials on the property, and installation and maintenance of fire- and ember-resistant construction materials. Hardening of the homes and other structures to enhance survivability during a wildfire would include retrofitting the most vulnerable home features, including:

- roofs
- vents
- eaves and soffits
- windows
- walls
- decks
- rain gutters
- patio covers
- chimneys
- garages
- fences
- driveway and access roads
- address signage
- water supply

There are three ways your home can be exposed to wildfire: direct flames from a wildfire or burning neighboring home; radiant heat from nearby burning plants or structures; and flying embers. Communities located in wildfire-prone areas need to take extra measures to live safely. There are many ways to prepare communities and properties for wildfire, including creating and maintaining adequate defensible space and hardening homes through altering or replacing the construction components. The most effective way for homes to withstand wildfire is a “coupled approach” that considers the exterior construction materials and how they are put together, as well as the surrounding vegetation and other near-home combustible materials. Selection, location, and maintenance of vegetation and other combustible materials on a property can reduce the chance of a wildfire burning the home (Office of the State Fire Marshal, 2021). While high fire construction standards are mandatory for new buildings in the VHFHSZ Areas, hardening of existing structures is voluntary. Adopting mandatory home hardening provisions of building and fire codes is problematic because existing, nonconforming structures were typically approved and built to the codes in effect at the time of construction. The problem persists, however, that a burning structure in a wildfire contributes to the fire and presents a danger to other structures downwind by way of flying brands (embers). Retrofits to existing structures can reduce fire risk, and some cost-sharing and grant programs are available to offset costs.

Resources for hardening structures can be found on the following websites:

- <https://www.readyforwildfire.org/prepare-for-wildfire/get-ready/hardening-your-home/>
- [Wildfire Home Retrofit Guide \(readyforwildfire.org\)](#)
- [Low-cost-Retrofit-List-Update-5-14-21.pdf \(readyforwildfire.org\)](#)
- <https://ucanr.edu/sites/fire/Prepare/Building/>

5.2.2.2 Accessory Dwelling Units

Accessory Dwelling Units (ADUs) are self-contained residential units, typically used as a rental, and either incorporated within, detached from, or attached to the primary residential unit(s) on the same property. A Junior Accessory Dwelling Unit (JADU) is a unit up to 500 square feet in size contained within an existing or proposed home with a separate exterior entry and an efficiency kitchen. The state views ADUs/JADUs as one important strategy to increase housing statewide and in 2017 significantly amended state law to remove local government barriers for

their construction. The Bradbury Municipal Code, Sections 9.85.020 and 9.85.050 provide definitions of an ADU and the development standards/requirements of an ADU.

In 2019, the state continued to be concerned about local government barriers to ADUs and signed a new package of legislation that again significantly amended state law for ADUs/JADUs effective January 1, 2020. New state law significantly expanded the types and numbers of ADUs allowed per parcel. The City has concerns regarding the impact of California's ADU Law that can affect fire safety. Specifically, the City has concerns related to setbacks and prohibition on fire sprinklers. Separate from the wildfire issues, State law continues to prohibit the City from requiring automatic fire sprinklers in ADU's when the main residence was not required to have fire sprinklers. Bradbury's concern over portions of State law's preemption of local requirements that can affect fire safety stems from Bradbury's location and fire history. As noted above, most of Bradbury is located within a VHFHSZ, a wildland urban interface area, an ember intrusion zone, and is officially recognized by the federal government as a community at high risk from wildfire.

5.2.3 Ready! Set! Go!

The City of Bradbury has adopted the LACoFD "Ready! Set! Go!" Wildfire Action Plan, which was designed to provide the community with information on creating defensible space around their home, retrofitting their home with fire-resistive materials, and preparing them to safely evacuate well ahead of a wildfire. The "Ready! Set! Go!" Action Plan provides a three step process that teaches homeowners to create their own Action Plan of preparedness, have situational awareness and leave early in the event of a fire. **READY** – Being ready for a wildfire starts with the property owner maintaining an adequate defensible space and hardening the home against flying embers by using fire resistive building materials. Get **SET** – Before a wildfire strikes, it's important to be set to get out. Creating an Wildfire Action Plan to include important phone numbers, what items to take and prepare to evacuate. Be sure to stay aware of the latest news from the local fire department and media outlet for updated information on the fire. And **GO** – If a wildfire strikes, be ready to go early for your safety. Take all evacuation steps necessary to give your family and home the best chance of surviving a wildfire. A copy of the LACoFD "Ready! Set! Go!" Action Plan can be found on the LACoFD website: [Ready-set-go_04292021-High-Quality-B.pdf \(lacounty.gov\)](#) and is included as Appendix I of this CWPP.

5.2.4 Critical Infrastructure

Critical infrastructure encompasses physical assets that are vital to maintaining essential services, such as water services, roads, and fire and police services. Damage to critical infrastructure during a wildland fire often results in the temporary delay or loss of critical services to some or all residents within the City.

5.2.4.1 Evacuation Blocks and Routes

As presented in Section 2.9, the City has established evacuation blocks and wildland evacuation routes, which are presented in Figure 4. These evacuation blocks and routes, while not physical infrastructure, are critical components to mitigating wildfire hazard.

5.2.4.2 Water Supply

As described in Section 2.10, water supplies are essential for firefighting efforts and structure protection.

5.2.5 Natural Resources

Natural resources include biological resources, cultural and historic resources, visual resources, streams and water resources, slopes and soil stability, and air quality. The following sections address these City assets in more detail.

5.2.5.1 Biological Resources

Biotic Communities

The City's vegetation (biotic) communities provide important biological habitats for plant and animal species. The vegetation that exists in these communities also becomes fuel available to burn during a wildland fire. The impact of a wildfire in many of these communities can be devastating, especially under extreme wind and weather conditions.

The City's General Plan Environmental Resources Element, General Plan Environmental Impact Report, and LCP identify sensitive biotic communities, which are defined as communities which cannot adapt to new environmental stresses. The Coastal Land Use Plan identifies "Environmentally Sensitive Habitat Area," which is any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem, and which could be easily disturbed or degraded by human activities and developments. The following sensitive biotic communities are present in the City and may be adversely affected by wildfire:

- California Annual Grassland
- Coastal Sage Scrub
- Mixed Chaparral
- Monarch Butterfly Autumnal and Winter Roost Sites
- Perennial Grasslands (Coastal Prairie)
- Hardwood Tree Species
- Conifer Tree Species
- Southern Oak Woodland
- Riparian Woodland/Creeks
- Freshwater Marsh
- Saltwater Marsh

Rare, Endangered, or Threatened Plants and Wildlife

Because of the diversity of biotic communities in the San Gabriel Mountains within the ANF, many different rare, endangered, and threatened animal species exist nearby the City. The protection of these plants and animals is required by law and is essential to biological diversity. Like biotic communities, these plants and animals are threatened by wildfire. The following rare, endangered, or threatened wildlife species are present near the City in the San Gabriel Mountains within the Angeles National Forest and may be adversely affected by wildfire¹⁶:

¹⁶ San Gabriel Watershed and Mountains – Special Resources Study and Environmental Assessment. September 2011. [Draft_SANG_report_book.indb \(npshistory.com\)](#)

-
- Braunton's Milk vetch (*Astragalus brauntonii*)
 - Nevin's barberry (endemic) (*Berberis nevinii*)
 - Thread-leaved brodiaea (endemic) (*Brodiaea filifolia*)
 - Slender-horned spineflower (endemic) (*Dodecahema leptoceras*)
 - California Orcutt grass (*Orcuttia californica*)
 - Santa Ana sucker (*Catostomus santaanae*)
 - Unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*)
 - Southern steelhead trout (*Oncorhynchus mykiss*)
 - Arroyo toad (*Ananyrsus californicus*)
 - California red-legged frog (*Rana draytonii*)
 - Mountain yellow-legged frog (*Rana muscosa*)
 - Desert tortoise (*Gopherus agassizii*)
 - Swainson's hawk (*Buteo swainsoni*)
 - Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)
 - Southwestern willow flycatcher (*Empidonax traillii extimus*)
 - California condor (*Gymnogyps californianus*)
 - Bald eagle (*Haliaeetus leucocphalus*)
 - Coastal California gnatcatcher (*Poliopitila californica californica*)
 - Least Bell's vireo (*Vireo bellii pusillus*)

The following rare and endangered plant species are present near the City in the San Gabriel Mountains within the Angeles National Forest and may be adversely affected by wildfire¹⁷:

- California muhly (endemic) (*Muhlenbergia californica*)
- Southern California black walnut (*Juglans californicavar. Californica*)
- Coulter's goldfields (*Lasthenia glabrata ssp. coulteri*)
- Crested milk-vetch (endemic) (*Astragalus bicristatus*)
- Davidson's bush mallow (endemic) (*Malacothamnus davidsonii*)
- Duran's rush (endemic) (*Juncus duranii*)
- Purple needlegrass (*Nasella pulchra*)
- Engelmann oak (*Quercus englemannii*)
- Coast Live Oak (*Quercus agrifolia*)
- fragrant pitcher sage (endemic) (*Lepechinia fragrans*)
- Johnston's bedstraw (endemic) (*Galium johnstonii*)
- lemon lily (*Lilium parryi*)
- Mojave phacelia (endemic) (*Phacelia mohavensis*)
- San Gabriel Mountains dudleya (endemic) (*Dudleya densiflora*)
- San Gabriel Mountains sunflower (endemic) (*Hulsea vestita ssp. gabrielensis*)
- Tehachapi ragwort (*Packera ionophylla*)

¹⁷ San Gabriel Watershed and Mountains – Special Resources Study and Environmental Assessment. September 2011. [Draft_SANG_report_book.indb \(npshistory.com\)](#)

5.2.5.2 Cultural and Historic Resources

The City is committed to the conservation of its cultural and historic resources. The impact of a wildfire poses a threat to these resources through direct flame contact, radiant heat damage, fire byproducts such as smoke and ash, damage caused by fire suppression and rehabilitation activities, and post-fire erosion, debris flows, and flooding. The effects of wildland fire on cultural resources can be considered direct or indirect. Direct effects are those caused by fire and its byproducts (e.g., smoke and ash) and result from the physical state of the fire environment (fuels, weather, terrain) and the ignition pattern. Indirect effects are the biophysical processes acting on the fire-altered environment and human responses. Indirect effects occur when wildland fire or associated fire management actions change the context in which a cultural resource is found, leaving it vulnerable to impacts (e.g., post-fire erosion) (Ryan et al. 2012).

5.2.5.3 Visual Resources

The aesthetic qualities of the City vary as widely as the nature of the topography and land uses. The scenic foothills and ridgelines of the San Gabriel Mountains that provide the backdrop for the City are also the natural features that contribute to wildfire hazard (weather, topography, and fuel). Management of vegetation for fire hazard reduction purposes may impact public scenic views of the mountains above the City. However, large wildfire burn scars would also impact public scenic views until the vegetation recovers. The preservation and enhancement of scenic resources provides important social, recreational, and economic benefits for both residents and visitors. Vegetation management conducted throughout the City under the LACoFD's and Angeles National Forest's guidance, and as proposed in this CWPP, involves thinning and understory ladder fuel treatment, which retains tree canopies and leaves thinned shrublands in a mosaic pattern where 50% to 70% of existing plant material remains. This approach differs from fire break construction, which removes all vegetation down to bare soil, a practice that would have a significantly greater impact on public scenic views.

5.2.5.4 Streams and Water Resources

Vegetation in local watersheds and along streams and water courses provides many important functions in protecting water resources, water quality, and habitat in the watershed. Vegetated riparian corridors may provide water quality buffering benefits to the adjacent streams. Vegetation removal or treatment in riparian corridor areas must be conducted in careful consideration of potential effects on water quality and ecological function. Riparian vegetation provides habitat for terrestrial and aquatic wildlife species, provides streambank stability, reduces erosion, shades the water surface thereby affecting water temperature (which affects aquatic habitat), and is a source for large woody debris, which falls into streams and watercourses providing habitat and affecting flow patterns and pool development (Kocher and Harris 2007). However, when a watershed is catastrophically burned in an expansive wildfire, many of these functions and roles are lost or severely reduced until the vegetation recovers. Following a catastrophic watershed-wide fire, hillslope erosion and sediment yields through watershed tributary channels typically increase by an order of magnitude (or greater) over non-fire average conditions (Neary et al. 2008).

Therefore, sound vegetation management that reduces the extent and frequency of watershed-wide extreme fires also helps avoid and minimize potential sediment and water quality impacts in the watershed. Vegetation management activities seek to maintain the water resource and water quality benefits of watershed vegetation while reducing the hazard and fire risk.

Historic large fires within the Los Angeles area have been wind driven fires. Because of the east/west alignment of the San Gabriel mountain range, winds are funneled down through major drainages. Some creek areas have heavy concentrations of flammable vegetation. A wildfire burning through these areas has the potential for significant loss of riparian habitat and water quality. In addition, erosion occurring on steeper slopes above drainages where soil conditions are susceptible to erosion or are accelerated from a wildfire will end up being deposited in creek areas where flow velocities are sufficiently reduced.

5.2.5.5 Slopes and Soil Stability

Watersheds severely burned by wildfire are vulnerable to accelerated rates of soil erosion and can experience large amounts of post-fire sediment deposits. Increases in post-fire suspended sediments in streams can result from erosion and overland flow, channel scouring, and creep accumulations in stream channels after an event (USDA 2005). While less is known regarding the effect of fire on turbidity, it has been observed that post-fire turbidity levels in stream water are affected by the steepness of the burned watershed (USDA 2005). The little data available regarding post-fire turbidity levels has indicated that U.S. Environmental Protection Agency water quality standard for turbidity can be exceeded after a fire event (USDA 2005). In some cases, during severe, slow-moving fires, the combustion of vegetation during wildfires creates a gas that can penetrate the soil. As the soil cools, this gas condenses and forms a waxy coating that causes the soil to repel water. This phenomenon, called hydrophobicity, increases the rate of surface water runoff as water percolation into the soil is reduced (Moench and Fusaro 2012). This accelerated slope runoff can move dry soil material that has accumulated at the base of slopes, creating flooding and debris flows.

Vegetation helps stabilize slopes and minimize soil erosion by providing root strength and by absorbing soil moisture. Plant roots can anchor into bedrock or more stable soils and can bind weaker soils through fibrous root development. Excessive, haphazard, or indiscriminate vegetation removal can result in the loss of root strength in the soil, and their decay can increase soil moisture levels, increasing the potential for erosion and slope failure (Ziemer 1981). Vegetation also reduces stormwater runoff by capturing and storing rainfall in the canopy and releasing it through evapotranspiration. Vegetation also promotes infiltration of rainfall into the soil (Center for Watershed Protection and USFS 2008).

5.2.5.6 Air Quality

The California Air Resources Board (CARB) regulates the air quality within California. The South Coast Air Quality Management District (SCAQMD) is the air pollution control agency for all of Orange County and the urban portions of Los Angeles County and is mandated to develop plans to meet federal and state air quality standards, monitor air quality, and regulate activities that may result in air pollution within Los Angeles County.

Wildland fire affects air quality by producing smoke emissions that may exceed CARB's standards for carbon monoxide, carbon dioxide, methane and non-methane hydrocarbons, and particulate matter less than 10 and 2.5 microns in diameter (PM₁₀ and PM_{2.5}). The amount of chemicals and particulate matter produced in a wildland fire is directly related to the amount of fuel consumed.

Carbon dioxide, water vapor, carbon monoxide, particulate matter, hydrocarbons, and other constituent materials are all present in wildfire smoke. The specific composition of smoke depends largely on the fuel type (vegetation

types contain different amounts of cellulose, oils, waxes, and starches, which when ignited produce different compounds). In addition, hazardous air pollutants and toxic air contaminants, such as benzene and formaldehyde, are also present in smoke. However, the principal pollutant of concern from wildfire smoke is particulate matter. In general, particulate matter from smoke is very small in size and can be inhaled into the deepest recesses of the lungs, presenting a serious health concern (Lipsett 2008).

Factors including weather, stage of fire, and terrain can all dictate fire behavior and the impact of wildfire smoke. Wind, for instance, generally results in lower smoke concentrations because wind causes smoke to mix with a larger volume of air. Large quantities of pollutants can also be released by wildland fires over a relatively short period of time. Air quality during large fires can become severely hazardous and can remain impaired for several days after the fire is ignited (Lipsett 2008). During the most recent 2020 Bobcat Fire, for example, Los Angeles County and the communities above the foothills of the San Gabriel Mountains experienced weeks of unhealthy or hazardous air quality (County of Los Angeles Public Health, 2020).

Wildland fire mitigation involves many fuels management practices such as prescribed burning, cutting, chipping, and mechanical methods. Prescribed burning, like wildfire, produces chemical and particulate matter that has the potential to exceed CARB standards. But unlike wildfire, prescribed burning can be mitigated through smoke management practices outlined by CARB and the SCAQMD to avoid exceeding air quality standards. Other fuel management practices where vegetation is not burned, but cut, chipped, or mechanically removed, do not exceed air quality standards and are considered a nonsignificant, short-term activity.

5.2.6 Economics

The potential impact of wildfire on structure loss is significant. The 1980 Stable Fire destroyed 49 Bradbury homes and approximately \$15 million in damage incurred. With the buildup of fuels and the potential for new homes built in the VHFHSZ areas of Bradbury, a wildfire of that proportion would have similar results and a much greater dollar loss. Additionally, repair and rebuilding of infrastructure following a wildfire can be a significantly costly effort for municipalities and utilities.

The local Bradbury and Los Angeles County economy is heavily dependent on the beauty of its natural and cultural resources, with a significant amount of revenue generated by the tourism industry. There is a high potential for a wildland conflagration to temporarily disrupt both the quality of life and economic stability of the City. The potential for economic losses due to litigation resulting from wildfire damage is also a reality. Damage claims against the property owners where the fire originated and/or spread from or through their property, due to untreated wildland areas, represents potential economic loss to both the City and private property owners. Utility companies have also been found responsible for wildfire ignitions and resulting damages, with significant settlements being paid to fire victims and local municipalities. For example, Pacific Gas & Electric (PG&E) settled with Sonoma County and the City of Santa Rosa for over \$300 million (combined)—their share of the \$1 billion deal the utility made with local governments to settle claims for damages caused by wildfires in 2017 and 2018 (Press Democrat 2020). Other potential economic impacts associated with wildfires includes increased insurance costs for property owners, the potential for dropped policies, and public safety power shutoffs implemented by utility companies to reduce ignition potential. A side effect of public safety power shutoffs is the loss of business revenue due to business closures and the direct loss of business materials or assets that require energy to produce, store, or maintain.

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6 Action Plan

This section identifies the goals of the CWPP and identifies recommended action items to be implemented by the City that serve to minimize wildfire impacts to the community. Future project and actions identified in this section would need to be funded and approved by the City prior to implementation.

6.1 Goals

The goal of this CWPP is to identify action items that can be implemented by the City that serve to protect lives, property, and natural resources threatened by wildland fire. The City and the LACoFD recognize the catastrophic impact of wildfire in the community and is committed to reducing hazards and risk through fire protection, fuel hazard reduction, public education, preparedness, and community involvement.

6.2 Action Items

The policies and actions outlined in this section are proposed for implementation under this CWPP. Recommendations for each action are provided.

6.2.1 Codes and Standards

Table 10 outlines policies and actions to reduce wildfire hazards that are related to codes and standards.

Table 10. Policies and Actions Related to Codes and Standards

Action Number	Description	Responsible Party
Policy 1. Increase the survivability of homes in the City's Very High Fire Hazard Severity Zone Areas through the adoption of fire safe building codes.		
1.1	Monitor changes in Fire, Building, and Residential codes. Modify and adopt codes as needed.	LACoFD
1.2	Encourage structural hardening retrofits for existing structures in the VHFHSZ Areas, consistent with the standards in the most current version of Chapter 7A of the California Building Code or other resources (Section 5.2.2.1). Structural retrofits may include, but are not limited to, the following: <ul style="list-style-type: none"> • Class A roof system • Ember-resistant vents • Plug all openings to prevent ember intrusion • Multi-paned windows with at least one or both panes tempered • Noncombustible, ignition-resistant-compliant exterior siding and decks • Automatic closing exterior doors • Battery backup for garage door opener (works when power is out) 	LACoFD
Policy 2. Increase the survivability of homes in the Very High Fire Hazard Severity Zone Areas through the adoption of defensible space standards and landscape guidelines on new, remodeled, and existing homes.		
2.1	Require additions or remodels of existing residential properties in the VHFHSZ Areas to comply with the Fire Department Fuel Modification Zone and Defensible requirements and Fire Hazard Reduction Programs	LACoFD
2.2	Routinely review and update, as necessary, the County's Fuel Modification Zone and Defensible Space Landscape Requirements document (for defensible space), including the Plant Selection Guidelines and Plant Right document.	LACoFD
Policy 3. Create a defensible community by increasing the number of homes that comply with the LACoFD's Defensible Space Requirements.		
3.1	Complete a survey of all homes in the City's VHFHSZ Areas to determine the percentage of homes that comply with the LACoFD Defensible Space and Fuel Modification Requirements.	LACoFD

Table 10. Policies and Actions Related to Codes and Standards

Action Number	Description	Responsible Party
3.2	Pursuant to the California Fire Code, Bradbury Municipal Code Title IV, Chapter 3, Section 4.03.010, and Title 32 of the Los Angeles County Code of Ordinances, examine current LACoFD enforcement capability and recommend policy, procedures, and funding sources to enhance the ability of the department to conduct initial inspections, follow-up enforcement of defensible space violations, and address issues where defensible space requirements span multiple parcels.	LACoFD
3.3	Continue vacant lot brush management and defensible enforcement on undeveloped and developed properties within the VHFHSZ Areas.	LACoFD
3.4	Evaluate ways to allow the Fire Department to work with insurance companies and private property owners in reducing fire hazard on individual properties and within neighborhoods.	LACoFD

6.2.2 Funding

Table 11 outlines policies and actions to reduce wildfire hazards that are related to funding.

Table 11. Policies and Actions Related to Funding

Action Number	Description	Responsible Party
Policy 4. Develop funding sources and incentive programs for residents of the Very High Fire Hazard Severity Zone Areas to encourage reduction of wildfire hazards and risks.		
4.1	Research grant funding opportunities for wildland fire projects and apply for appropriate grants or cost-share programs. Wildland fire projects may include those associated with vegetation management or treatment, structural retrofits (structural hardening), planning, and community education or engagement.	City of Bradbury and LACoFD
4.2	Research grant funding to plan and develop a City Hazard Mitigation Plan to incorporate into the City's General Plan.	City of Bradbury
4.3	Develop additional funding sources to implement vegetation and fire management projects within the City. Funding sources could include private property owner funding, City general fund, cooperative funds, etc.	City of Bradbury and LACoFD

Table 11. Policies and Actions Related to Funding

Action Number	Description	Responsible Party
4.4	Secure grant funding to support the City of Bradbury residents and emergency responders (firefighter, first responders, law enforcement) to ensure the community is prepared to protect against, respond to, and recover from wildfire disasters and emergencies. This includes City radios, emergency supplies, wildfire cameras, a fuel cell for the City's generator, and other emergency related items that will benefit the City in the event of a wildfire.	City of Bradbury
4.5	Continue to develop and annually update the permit fee schedule for misc. building and zoning report inspections, plan review, Pre-application Review Team, and Forestry Fuel Modification Plan Check submittals reviewed for VHFHSZ Area requirements.	LACoFD
4.6	As appropriate, evaluate the opportunity to incorporate projects and actions identified in this CWPP into the City's General Plan update.	City of Bradbury

6.2.3 Fire Rehabilitation

Table 12 outlines policies and actions to reduce wildfire hazards that are related to fire rehabilitation.

Table 12. Policies and Actions Related to Fire Rehabilitation

Action Number	Description	Responsible Party
Policy 5. Post-fire rehabilitation guidelines should be established for the City.		
5.1	Develop appropriate post-fire rehabilitation guidelines for property owners that address post-fire effects of flooding and soil erosion.	LACoFD and City of Bradbury
5.2	Develop a public education pamphlet on post-fire rehabilitation guidelines.	LACoFD and City of Bradbury

Table 12. Policies and Actions Related to Fire Rehabilitation

Action Number	Description	Responsible Party
5.3	Ensure that post-fire rehabilitation guidelines are developed in cooperation with appropriate federal, state, and local agencies including Incident Command, if applicable, and Los Angeles County Flood Control.	LACoFD and City of Bradbury

6.2.4 Evacuation

Table 13 outlines policies and actions to reduce wildfire hazards that are related to evacuation.

Table 13. Policies and Actions Related to Evacuation

Action Number	Description	Responsible Party
Policy 6. Increase evacuation safety for residents and the general public in the Very High Fire Hazard Severity Areas.		
6.1	Continue educational campaign to make residents, businesses, schools, and the public aware of evacuation planning and hazards.	LACoFD
6.2	Promote an educational campaign with property owners' associations and neighborhoods on the creation of a Red Flag Warning Plan.	LACoFD
6.3	Continue to ensure that vegetation road clearance is implemented along primary response routes in the VHFHSZ Areas.	LACoFD
6.4	Investigate methods for publicly identifying evacuation routes in the VHFHSZ area roadways.	LACoFD
6.5	Develop training bulletins for LACoSD employees identifying recommended evacuation routes and proposed traffic control points. LACoSD staff in cooperation with LACoFD staff would accomplish this action.	LACoFD and (LACoSD)
6.6	Develop a simple, straightforward directive for the use of LACoSD Watch Commanders and Field Supervisors identifying the duties and responsibilities of officers in the event of a major fire. This would be accomplished by LACoSD staff in cooperation with LACoFD staff.	LACoFD and LACoSD

Table 13. Policies and Actions Related to Evacuation

Action Number	Description	Responsible Party
6.7	Identify specific roads that do not meet LACoFD Access Standards and develop feasible mitigations and/or appropriate tools that can be used to reduce fire risk in these areas. Tools may include, but are not limited to, expanding roadside vegetation clearance requirements, enacting on-street parking restrictions, installing and maintaining warning and notification signage, enacting parking or traffic flow restrictions during Red Flag Warnings, identifying turnouts for vehicle passage, and establishing one-way traffic flows to facilitate evacuation traffic.	LACoFD
6.8	Conduct a detailed evacuation study for the City's VHFHSZ Areas. The study should address the impact of increased residential density on roadway capacities and evacuation capabilities.	City of Bradbury and LACoFD
6.9	Routinely update the LACoFD's "Ready! Set! Go!" brochure to reflect changing conditions, policies, and best practices.	LACoFD

6.2.5 Fire Protection

Table 14 outlines policies and actions to reduce wildfire hazards that are related to fire protection.

Table 14. Policies and Actions Related to Fire Protection

Action Number	Description	Responsible Party
Policy 7. Reduce fire engine response times in all Very High Fire Hazard Severity Zone Areas to 8 minutes or Less.		
7.1	Evaluate LACoFD response times for the VHFHSZ Areas.	LACoFD
7.2	Develop appropriate actions (development standards, vegetation management, signing, etc.) from evaluation of LACoFD response times.	LACoFD
Policy 8. Provide the highest level of fire protection services to the firefighters and residents within the Very High Fire Hazard Severity Zone Areas.		
8.1	Conduct department training classes focused on Wildland-Urban Interface (WUI) Operations for all operations staff levels.	LACoFD

Table 14. Policies and Actions Related to Fire Protection

Action Number	Description	Responsible Party
8.2	Develop, fund, and implement a VHFHSZ hazard enforcement program to ensure annual “Fuel Modification and VHFHSZ Defensible Space Requirements” are met to satisfy the California Fire Code, Chapter 49, to slow the spread of approaching wildfire and increase firefighter safety (where feasible along the foothills).	LACoFD
8.3	Increase the amount of interagency wildland fire training to gain expertise in wildland firefighting strategies, tactics, communications, and equipment.	LACoFD
8.4	Train firefighters to properly turn off water to compromised structures that have free-flowing water in order to maintain water system supply and pressure (for future proposed project related infrastructure).	LACoFD and Water Resources
8.5	Maintain and regularly update the existing wildland fire pre-attack, firefighting safety zones, and escape routes mapping and preplan VHFHSZ Areas using Geographic Information Systems (GIS).	LACoFD
8.6	Purchase a Remote Automatic Weather Station (RAWS) in cooperation with local fire agencies to monitor fire weather and get more accurate fire weather forecasts for the community. The closest RAWS is approximately 2.5 miles south of Bradbury, where terrain is different.	LACoFD
8.7	Work with neighboring jurisdictions on wildland fire mitigation projects and operational concerns.	City of Bradbury and LACoFD
8.8	Develop appropriate improvements needed to make identified safety zones useable for fire suppression operations.	LACoFD
8.9	Improve LACoFD’s radio communications via infrastructure upgrades or completing projects that enhance coverage throughout the City (as needed).	LACoFD
8.10	Create, fund, and implement a communications system equipment replacement plan (as needed).	LACoFD

6.2.6 Vegetation/Fuels Management

Table 15 outlines policies and actions to reduce wildfire hazards that are related to vegetation/fuels management.

Table 15. Policies and Actions Related to Vegetation/Fuels Management

Action Number	Description	Responsible Party
Policy 9. Support collaborative fuels management projects between the City and residents of the Very High Fire Hazard Severity Zone Areas to encourage fire hazard reduction and protection of natural resources. This includes compliance with LACoFD Defensible Space and Fuel Modification Requirements, as well as additional vegetation management projects requested by property owners.		
9.1	Develop affordable incentive programs to allow property owners to maintain defensible space around homes.	LACoFD
9.2	Work with neighboring jurisdictions on wildfire mitigation projects such as defensible space chipping, vegetation road clearance, and fuels management projects.	City of Bradbury and LACoFD
9.3	Continue working with City and County departments developing and evolving the LACoFD's Fuel Modification and Defensible Space Requirements to ensure that fuels management projects on private lands decrease fire hazard and balance natural resource values.	LACoFD

6.2.7 Public Education

Table 16 outlines policies and actions to reduce wildfire hazards that are related to public education.

Table 16. Policies and Actions Related to Public Education

Action Number	Description	Responsible Party
Policy 10. Increase the community's knowledge and awareness of wildland fire and develop training and education programs to prepare, motivate, and educate the community.		
10.1	Continue to work with the City Staff, council members, Public Safety Committee, and community members living in the VHFHSZ Areas to develop evacuation preplans and preparedness for wildfire.	City of Bradbury and LACoFD
10.2	Coordinate with the LACoFD, and Los Angeles County Office of Emergency Preparedness to facilitate training courses for City Staff and the Public Safety Committee in the use of a HAM radio during an emergency or disaster event.	
10.3	Develop a City of Bradbury Fire Safe Council to update the community on public education projects to increase wildland fire public awareness and preparedness.	City of Bradbury and LACoFD

Table 16. Policies and Actions Related to Public Education

Action Number	Description	Responsible Party
10.4	Work with communities, neighborhoods, and individuals to get the message across that reducing the wildland fire threat requires them to take personal responsibility for preparedness, evacuation, defensible space, driveways, and roadways, and community cooperation.	LACoFD
10.5	To reduce impacts to water availability and pressure during wildfire events, work with property owners to educate them not to use sprinkler systems to water down roofs during wildfires.	LACoFD
10.6	Regularly update the County's Plant Selection Guidelines by Zone and Fire-Safe Landscaping brochures to educate the public on fire safe landscaping, power line hazards, and wildland fire safety. The brochure should include fire safe landscaping, native landscaping, water conservation, soil stabilization, and non-invasive plant species concerns.	LACoFD
10.7	Develop a bilingual public information strategy to educate Bradbury residents on wildland fire that is also culturally relevant. Topics to include defensible space, fire landscaping, road access, Red Flag Warning, wildfire ignition risks, resource concerns, and evacuation. Incorporate video and other visual engagement strategies where feasible.	LACoFD
10.8	Encourage residents to sign up and create a City of Bradbury Community Emergency Response Team (CERT) program through the LACoFD, so residents can learn about hazards that may impact their area. Once a CERT Program is created, work on the development of a wildfire module for the CERT Program that is focused on wildland fire. ¹⁸	City of Bradbury and LACoFD
10.9	Develop educational material for the public to eradicate and reduce the potential for the expansion of invasive species that has the potential to occur from defensible space projects.	LACoFD
10.10	Routinely update the County's "Ready! Set! Go!" Brochure to reflect changing conditions, policies, and best practices and make available in both English and Spanish.	LACoFD
10.11	Conduct outreach with the real estate community to work through upcoming Assembly Bill 38 requirements associated with wildfire-related real estate disclosures and to coordinate delivery of the Defensible Space Requirements documents to home buyers in the VHFHSZ Areas.	LACoFD
10.12	Coordinate with the South Coast Air Quality Management District (SCAQMD) to disseminate information related to air quality and wildfire smoke impacts.	LACoFD and SCAQMD
10.13	Continue to work with other agencies through the Connect-CTY platform on the City of Bradbury's webpage to disseminate pertinent information regarding wildfire emergencies. ¹⁹	City of Bradbury

¹⁸ <https://fire.lacounty.gov/community-emergency-response-team/>

¹⁹ https://www.cityofbradbury.org/alert_detail.php

Table 16. Policies and Actions Related to Public Education

Action Number	Description	Responsible Party
Policy 11. Work with all City departments and staff to increase their knowledge, awareness, prevention, and preparedness for wildland fire.		
11.1	Develop a communication system between the City of Bradbury Staff and the Public Safety Committee; this would include coordinating a training course on the use of HAM radios (or other communication devices used in an emergency event) with the Los Angeles County Office of Emergency Preparedness. This will allow for the City Staff and the Public Safety Committee to effectively communicate with one another and develop a strategic communication action plan for the City.	City of Bradbury
11.2	Continue to work with the Planning Commission to ensure a clear understanding of landscape design, defensible space requirements, and vegetation management issues related to visual impacts.	City of Bradbury
11.2	Develop annual City staff training on wildland fire safety to train City staff working in the VHFHSZ Areas. Training should include the development of a Red Flag Warning program, process for fire complaints, fire reporting procedures, fire prevention, and defensible space requirements.	City of Bradbury and LACoFD
11.3	Coordinate with City Departments during planning, vegetation management, and other CWPP implementation tasks to streamline efforts and maximize the use of available City resources.	City of Bradbury
Policy 12. Work cooperatively with federal, state, and local jurisdictions to provide the highest level of fire protection, prevention, and mitigation projects and programs in the City's Wildland-Urban Interface area.		
12.1	Establish communication with the Los Angeles County Office of Emergency Preparedness – Area D, to establish a mutual aid agreement to augment City Staff with nearby City's and/or municipalities during a wildfire emergency or another disaster, to assist City of Bradbury Staff with daily disaster activities.	
12.2	Continue to work with cooperating agencies on suppression, training, prevention, evacuation, and public education in the VHFHSZ Areas that benefit the entire community.	City of Bradbury and LACoFD
12.3	Support collaborative vegetation management projects between the City and surrounding jurisdictions that reduce fire hazard and protect natural resources.	City of Bradbury and LACoFD
12.4	Ensure that the City and surrounding jurisdictions and agencies work cooperatively to address fire hazard and environmental impacts.	City of Bradbury and LACoFD
12.5	Coordinate vegetation management actions where needed with Los Angeles County Flood Control.	City of Bradbury and LACoFD
12.6	Coordinate with stakeholders (Los Angeles County Fire Department, Monrovia Fire Department, Arcadia Fire Department, U.S. Forest Service, Southern California Edison, CAL FIRE, Area D, and others) to facilitate information and data sharing, resource sharing, coordination of management activities, facilitating property access, grant funding, and cost-sharing opportunities.	City of Bradbury and LACoFD

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7 CWPP Authorization

The City of Bradbury CWPP was collaboratively developed. Interested parties, and local, state, and federal agencies managing land within or adjacent to the at-risk communities were consulted. This document identifies and prioritizes areas for hazardous fuel reduction treatments, provides recommendations for the types and methods of treatment that will protect the at-risk communities in the City, and recommends measures to reduce the ignitability of structures within the WUI areas. This CWPP is intended to better protect the community from the threat of wildfires by promoting community-level fuel reduction projects.

The following entities mutually agree with the contents of the City of Bradbury Community Wildfire Protection Plan:

Elizabeth Bruny, Mayor
City of Bradbury

Kevin Kearney, City Manager
City of Bradbury

Daryl Osby, Fire Chief
Los Angeles County Fire Department

Robert Garcia, Angeles National Forest Fire Chief
U.S. Forest Service

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8 References

- Abatzoglou, J.T. and A.P. Williams. 2016. "Impact of Anthropogenic Climate Change on Wildfire Across Western US Forests." *Proceedings of the National Academy of Sciences of the United States of America* 113:11770–11775.
- Agee J., R. Wakimoto, E. Darley, and H. Biswell. 1973. "Eucalyptus Fuel Dynamics and Fire Hazard in the Oakland Hills." *California Agriculture* 27(9): 13–15.
- Agee, J.K., and C.N. Skinner. 2005. "Basic Principles of Forest Fuel Reduction Treatments." *Forest Ecology and Management* 211:83–96.
- Alexander, M.E. 1998. *Crown Fire Thresholds in Exotic Pine Plantations of Australasia*. Australian National University, Canberra, Australian Capital Territory. PhD Thesis. 228p.
- Anderson, Hal E. 1982. Aids to Determining Fuel Models for Estimating Fire Behavior. USDA Forest Service Gen. Tech. Report INT-122. Intermountain Forest and Range Experiment Station, Ogden, UT.
http://www.fs.fed.us/rm/pubs_int/int_gtr122.pdf.
- Andrews, P.L. 1980. Testing the fire behavior model. In *Proceedings 6th conference on fire and forest meteorology*. April 22–24, 1980. Seattle, WA: Society of American Foresters. Pp. 70–77.
- Andrews, Patricia L.; Collin D. Bevins; and Robert C. Seli. 2008. BehavePlus fire modeling system, version 3.0: User's Guide. Gen. Tech. Rep. RMRS-GTR-106 Ogden, Utah: Department of Agriculture, Forest Service, Rocky Mountain Research Station. 132p.
- ANSI (American National Standards Institute). 2017. ANSI A300 Standards. https://www.tcia.org/TCIA/BUSINESS/ANSI_A300_Standards_/TCIA/BUSINESS/A300_Standards/A300_Standards.aspx?hkey=202ff566-4364-4686-b7c1-2a365af59669.
- Ashton, D.H. 1981. "Fire in Tall Open-Forests (Wet Sclerophyll Forests)." In *Fire and the Australian Biota*, edited by A.M. Gill, R.H. Groves, and I.R. Noble, 339–366. Canberra City, Australia: The Australian Academy of Science.
- Bagwell, L. 2020a. "Los Angeles County Fire Department Call Volume Data in CY2019." Personal communication (phone and e-mail) with L. Bagwell (Planning Division) and Dudek. February 6, 2020.
- Bagwell, L. 2020a. "Los Angeles County Fire Department Response Time Standards." Personal communication (phone and e-mail) with L. Bagwell (Planning Division) and Dudek. February 3, 2020.
- Baltar, M., J.E. Keeley, and F. P. Schoenberg. 2014. County-level Analysis of the Impact of Temperature and Population Increases on California Wildfire Data. *Environmetrics* 25; 397-405.
- Brown, J.K. 1972. Field test of a rate-of-fire-spread model in slash fuels. USDA Forest Service Res. Pap. Int-116. 24 p.

- Brown, J.K. 1982. Fuel and fire behavior prediction in big sagebrush. USDA Forest Service Res. Pap. INT-290. 10p.
- Bushey, C.L. 1985. Comparison of observed and predicted fire behavior in the sagebrush/ bunchgrass vegetation-type. In J.N. Long (ed.), Fire management: The challenge of protection and use: Proceedings of a symposium. Society of American Foresters. Logan, UT. April 17–19, 1985. Pp. 187–201.
- California Agriculture (University of California, Agriculture and Natural Resources). 1996. “Tiny Wasp Helps Protect Eucalypts from Eucalyptus Longhorned Borer.” May 1, 1996. Accessed November 15, 2020. <http://calag.ucanr.edu/Archive/?article=ca.v050n03p14>.
- California Building Standards Commission. 2016. *California Building Standards Code* (California Code of Regulations, Title 24). Published July 1, 2016; effective January 1, 2017. <http://www.bsc.ca.gov/Codes.aspx>.
- CAL FIRE (California Department of Forestry and Fire Protection). 2008. “Very High Fire Hazard Severity Zones in Local Responsibility Areas – Bradbury” [map]. 1:16,000. September 2, 2008. Accessed April 3, 2020. [Bradbury - Very High Fire Hazard Severity Zones in LRA \(ca.gov\)](#).
- CAL FIRE. 2019a. “Top 20 Most Destructive California D Wildfires.” August 8, 2019. Accessed February 17, 2021. https://www.fire.ca.gov/media/5511/top20_destruction.pdf.
- CAL FIRE. 2019b. *Fuel Treatment*. http://www.calfire.ca.gov/resource_mgt/resource_mgt_EPRP_FuelsTreatment.
- CAL FIRE. 2020a. “Wildfire Hazard Real Estate Disclosure.” <https://frap.fire.ca.gov/frap-projects/wildfire-hazard-real-estate-disclosure/>.
- CAL FIRE. 2020b. Fire and Resource Assessment Program. GIS Data Set: Fire Perimeters Version 19_1. Available at: https://frap.fire.ca.gov/media/10969/fire19_1.zip.
- CAL FIRE (Office of the State Fire Marshal). 2020. Communities at Risk List. Accessed June 2020.. <https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/fire-plan/communities-at-risk/#b>
- Center for Watershed Protection and USFS (U.S. Forest Service). 2008. *Watershed Forestry Resource Guide*.
- City of Bradbury. 2019. City of Bradbury 2014-2021 Housing Element Mid-Term Update. March 2019. Accessed March 2021. https://cms7files.revize.com/bradburyca/Document_center/Services/Planning/Mid-term%20Update%20of%202014-21%20Housing%20Element%20-%20March%202019.pdf
- City of Bradbury. 2011. City of Bradbury General Plan – 2012 to 2030 Update. http://cityofbradbury.org/images/INTRODUCTION-DRAFT-02-05-2014_2_.pdf
- City of Bradbury. 2021. City’s Code of Ordinances. Accessed last June 2021. https://library.municode.com/ca/bradbury/codes/code_of_ordinances
- Cohen, Jack D. 1995. *Structure ignition assessment model (SIAM)*. In: Weise, D.R.; Martin, R.E., technical coordinators. Proceedings of the Biswell symposium: fire issues and solutions in urban interface and

- wildland ecosystems. 1994 February 1517; Walnut Creek, CA. Gen. Tech. Rep. PSW-GTR-158. Albany, California: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture; 85–92
- Cohen, J.D. 2000. *Preventing disaster: home ignitability in the wildland-urban interface*. Journal of Forestry 98(3): 15–21.
- Cohen, J.D. and Butler, B.W. [In press]. 1996. *Modeling potential ignitions from flame radiation exposure with implications for wildland/urban interface fire management*. In: Proceedings of the 13th conference on fire and forest meteorology. October 27–31; Lorne, Victoria, Australia. Fairfield, Washington: International Association of Wildland Fire.
- Cohen, J. and J. Saveland. 1997. “Structure Ignition Assessment Can Help Reduce Fire Damages in the Wildland-Urban Interface,” *Fire Management Notes* 57(4): 19 – 23.
- County of Los Angeles Public Health. 2020. South Coast Air Quality Management District (SCAQMD). Accessed March 2021. <https://lacounty.gov/residents/environment/air-quality/>
- County of Los Angeles – Air Quality. 2021. “Smoke Advisory: Unhealthy Air Quality Declared due to Smoke from the Bobcat Fire.” Press release. September 11, 2020. Accessed December 2020. <http://publichealth.lacounty.gov/phcommon/public/media/mediapubhpdetail.cfm?prid=2658>
- Crockett, J.L. & Westerling, A.L. 2018. “Greater Temperature and Precipitation Extremes Intensify Western U.S. Droughts, Wildfire Severity, and Sierra Nevada Tree Mortality.” *Journal of Climate* 31(1): 341–354.
- County of Los Angeles_Chief Executive Office – Office of Emergency Management. 2019. 2019 County of Los Angeles All-Hazards Mitigation Plan. Accessed March 2021. http://file.lacounty.gov/SDSInter/lac/1062614_AHMPPublicDraft_Oct1.pdf
- Dickinson, K.J.M. and Kirkpatrick, J.B. 1985. “The Flammability and Energy Content of Some Important Plant Species and Fuel Components in the Forests of Southeastern Tasmania.” *Journal of Biogeography* 12:121–134.
- Domitrovich, J.W., G.A. Broyles, R.D. Ottmar, T.E. Reinhard, L.P. Naeher, M.T. Kleinman, K.M. Navarro, C.E. Mackay, and O. Adetona. 2017. *Wildland Fire Smoke Health Effects on Wildland Firefighters and the Public*. Joint Fire Science Program Project ID: 13-1-02-14. June 2017. Accessed November 22, 2020. https://www.firescience.gov/projects/13-1-02-14/project/13-1-02-14_final_report.pdf .
- Finney, M.A. 1998. FARSITE: Fire Area Simulator—Model Development and Evaluation. Research Paper RMRS-RP-4, Ogden, Utah: U.S. Forest Service, Rocky Mountain Research Station.
- Finney, M.A., S. Brittain, R.C. Seli, C.W. McHugh, and L. Gangi. 2015. FlamMap: Fire Mapping and Analysis System. Version 5.0 [software]. <http://www.firelab.org/document/flammap-software>.
- FireFamilyPlus. 2019. Fire Family Plus, version 5.0. U.S. Department of Agriculture, U.S. Forest Service, Rocky Mountain Research Station. <https://www.firelab.org/document/firefamilyplus-software>.
- Flannigan, M., B. Stocks, and B. Wotton (2000), Climate change and forest fires, *Sci. Total Environ.*, 262(3), 221–229.

- Fried, J.S., M.S. Torn, and E. Mills. 2004. "The Impact of Climate Change on Wildfire Severity: A Regional Forecast for Northern California." *Climatic Change* 64 (1-2): 169–191.
- Gabbert, B. 2014. "Eucalyptus and Fire." *Wildfire Today: Wildlife News and Opinion*. March 3, 2014. Accessed November 15, 2020. <http://wildfiretoday.com/2014/03/03/eucalyptus-and-fire/>.
- Goss, M., D.L. Swain, J.T. Abatzoglou, A.Sarhadi, C. Kolden, A.P. Williams, and N.S. Diffenbaugh. 2020. "Climate Change is Increasing the Risk of Extreme Autumn Wildfire Conditions Across California." *Environmental Research Letters*. <http://iopscience.iop.org/10.1088/1748-9326/ab83a7>.
- Grabner, K.W. 1996. "Validation of BEHAVE fire behavior predictions in established oak savannas." M.S. thesis. University of Missouri, Columbia.
- Grabner, K.W., J.P. Dwyer, and B.E. Cutter. 2001. "Fuel model selection for BEHAVE in Midwestern oak savannas." *Northern Journal of Applied Forestry*. 18: 74–80.
- Graham, R.T., A.E. Harvey, T.B. Jain, and J.R. Tonn. 1999. *The Effects of Thinning and Similar Stand Treatments on Fire behavior in Western Forests*. General Technical Report PNW-GTR-463. Portland, Oregon: U.S. Forest Service, Pacific Northwest Research Station.
- Gross, L. 2013. "Eucalyptus: California Icon, Fire Hazard and Invasive Species." KQED Science. Accessed November 15, 2020. <http://blogs.kqed.org/science/2013/06/12/eucalyptus-california-icon-fire-hazard-and-invasive-species/>.
- Hayhoe, K., D. Cayan, C.B. Field, P.C. Frumhoff, E.P. Maurer, N.L. Miller, S.C. Moser, S.H. Schneider, K.N. Cahill, E.E. Cleland, L. Dale, R. Drapek, R.M. Hanemann, L.S. Kalkstein, J. Lenihan, C.K. Lunch, R.P. Neilson, S.C. Sheridan, and J.H. Verville. 2004. "Emissions Pathways, Climate Change, and Impacts on California." *Proceedings of the National Academy of Sciences of the United States of America* 101(34): 12422–12427.
- Keeley, J.E. 2004. "Invasive Plants and Fire Management in California Mediterranean-Climate Ecosystems." In *10th MEDECOS-International Conference on Ecology, Conservation Management*, edited by M. Arianoutsou. Rhodes, Greece, 2004.
- Keeley, J.E. and C.J. Fotheringham. 2003. "Impact of Past, Present, and Future Fire Regimes on North American Mediterranean Shrublands." In *Fire and Climatic Change in Temperate Ecosystems of the Western Americas*, edited by T.T. Veble, W.L. Baker, G. Montenegro, and T.W. Swetnam, 218–262. New York, New York: Springer-Verlag.
- Keeley, J.E., and P.H. Zedler. 2009. "Large, High-Intensity Fire Events in Southern California Shrublands: Debunking the Fine-Grain Age Patch Model." *Ecological Applications* 19:69–94.
- Kocher, S.D. and R. Harris. 2007. "Riparian Vegetation." Publication 8240, Forest Stewardship Series 10. University of California.
- Krawchuk, M.A., M.A. Moritz, M-A. Parisien, J. Van Dorn, and K. Hayhoe. 2009. "Global Pyrogeography: The Current and Future Distribution of Wildfire." *PLoS ONE* 4(4): e5102. doi:10.1371/journal.pone.0005102.
- LANDFIRE. 2019. LF 200 lcp file [GIS data]. <https://www.landfire.gov/getdata.php>.

- Lenihan, J.M., D. Bacher, R.P. Neilson, and R. Drapek. 2008. "Response of Vegetation Distribution, Ecosystem Productivity, and Fire to Climate Change Scenarios in California." *Climate Change* 87 (Suppl 1): S215–S230. https://www.fs.fed.us/pnw/pubs/journals/pnw_2008_lenihan002.pdf.
- Levy, G. 2018. "Wildfires are Getting Worse, and More Costly, Every Year." *U.S. News and World Report*. August 1, 2018.
- Lipsett, M. 2008. *Wildfire Smoke: A Guide for Public Health Officials*. July 2008. Accessed March 2, 2020. <https://oehha.ca.gov/media/downloads/public-information/document/wildfirev8.pdf>.
- Los Angeles County. 2020. Code of Ordinances_Title 32. Fire Code. Accessed March 2020. http://lacounty-ca.elaws.us/code/coor_title32
- Los Angeles County Fire Department (LACoFD). 1998. Fuel Modification Plan Guidelines. Appendix I, Undesirable Plant List, and Appendix II, Undesirable Plant List.
- LACoFD. 2021. Los Angeles County Fuel Modification Guidelines. <https://www.fire.lacounty.gov/forestry-division/forestry-fuel-modification/>
- LACoFD. 2021. Los Angeles County Fire Prevention Regional Units. <https://fire.lacounty.gov/fire-prevention/>
- LACoFD. 2021. "Ready! Set! Go!" Los Angeles County Fire Department. https://fire.lacounty.gov/wp-content/uploads/2021/05/Ready-set-go_04292021-High-Quality-B.pdf
- LACoFD. 2021. Los Angeles County Fire Department – 2017-2021 Strategic Plan. <https://fire.lacounty.gov/wp-content/uploads/2019/09/LACoFD-Strategic-Plan-2017-2021.pdf>
- LACoFD. 2021. Los Angeles County Fire Department – 2020 Statistical Summary. <https://fire.lacounty.gov/wp-content/uploads/2021/06/2020-Statistical-Summary-FINAL-DRAFT.pdf>
- LACoFD. 2021. Los Angeles County Fire Department – Fire-Safe Landscaping Brochure. http://fire.lacounty.gov/wp-content/uploads/2020/01/lacofd-Fire-Safe-Landscaping_March-2019.pdf. Accessed April, 2020
- Los Angeles County Sheriff's Department. 2021. Los Angeles County Sheriff Department Station Locator. [Stations | Los Angeles County Sheriff's Department \(lasd.org\)](https://stations.lasd.org/). Accessed June, 2020.
- Mann, M.L., E. Batllori, M.A. Moritz, E.K. Waller, P. Berck, A.L. Flint, and E. Dolfi. 2016. "Incorporating Anthropogenic Influences into Fire Probability Models: Effects of Human Activity and Climate Change on Fire Activity in California." *PLOS ONE* 11(4): e0153589. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0153589>.
- McCreary, D. 2004. Fire in California's Oak Woodlands. University of California Cooperative Extension. June. <https://ucanr.edu/sites/fire/files/288191.pdf>.
- Minnich, R.A. 1983. "Fire Mosaics in Southern California and Northern Baja California." *Science* 219(4590):1287–1294.

- Minnich R.A., and Y.H. Chou. 1997. "Wildland Fire Patch Dynamics in the Chaparral of Southern California and Northern Baja California." *International Journal of Wildland Fire* 7:221–48.
- Moench, R., and J. Fusaro. 2012. "Soil Erosion Control after Wildfire." Fact Sheet 6.308. Natural Resources Series: Forestry. Colorado State University Extension.
https://mountainscholar.org/bitstream/handle/10217/183596/AEXT_063082012.pdf?sequence=1&isAllowed=y.
- Moritz, R., and P. Svihra. 1998. "Pyrophytic vs. Fire Resistant Plants." University of California Cooperative Extension. *HortScript* No. 18. October 1996.
- Neary, D.G., K.C. Ryan, and L.F. DeBano, eds. 2008. *Wildland Fire in Ecosystems: Effects of Fire on Soils and Water*. General Technical Report RMRS-GTR-42-vol.4. Ogden, Utah: U.S. Forest Service, Rocky Mountain Research Station. September 2005. https://www.fs.fed.us/rm/pubs/rmrs_gtr042_4.pdf.
- NFPA (National Fire Protection Association). 2011. "Understanding Fire Behavior in the Wildland/Urban Interface." Accessed June 2020. <https://youtu.be/pPQpgSXG1n0>.
- NPS (National Park Service). 2006. "Eucalyptus: A Complex Challenge. Fire Management Resource Protection, and the Legacy of the Tasmanian Blue Gum." Point Reyes Station, California: San Francisco Bay Area National Parks, Fire Education Office.
https://www.nps.gov/pore/learn/management/upload/firemanagement_firededucation_newsletter_eucalyptus.pdf.
- Nunamaker, C., M. De Lasaux, and G. Nakamura. 2007. "Wildfire and Fuel Management." University of California, Agriculture and Natural Resources. *Publication* 8245: 12.
- NWCG (National Wildfire Coordinating Group). 2020. "NWCG Glossary of Wildland Fire, PMS 205." Accessed June 2020. <https://www.nwcg.gov/glossary/a-z>.
- OEHHA (Office of Environmental Health Hazard Assessment). 2018. "Indicators of Climate Change in California." August 30, 2018. Accessed October, 2020. <https://oehha.ca.gov/climate-change/document/indicators-climate-change-california>.
- OPR (Governor's Office of Planning and Research, California Energy Commission, and California Natural Resources Agency). 2019. *Statewide Summary Report. California's Fourth Climate Change Assessment*. (SUMCCCA4-2018-013. Accessed October, 2020. <https://www.energy.ca.gov/sites/default/files/2019-07/Statewide%20Reports-%20SUM-CCCA4-2018-013%20Statewide%20Summary%20Report.pdf>.
- Pacific West Regional Office Park Planning and Environmental Compliance. National Park Service. October 2012. 'San Gabriel Watershed and Mountains Special Resource Study and Environmental Assessment.' October 2012. Accessed June 2021. <http://npshistory.com/publications/srs/sagw/srs.pdf>
- Pitch Canker Task Force. 2012. "Management." California Polytechnic State University, San Luis Obispo. Last updated January 10, 2012. Accessed June, 2020.
https://ufei.calpoly.edu/pitch_canker/management.lasso?guidelines.
- Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities'*
(Sponsored By: Communities Committee, National Association of Counties, National Association of State

Foresters, Society of American Foresters, and Western Governors' Association, March 2004.

<http://www.communitiescommittee.org/pdfs/cwpphandbook.pdf>

Press Democrat. 2020. "Santa Rosa, Sonoma County Poised to get \$300 million in PG&E Settlement." November, 2020. <https://www.pressdemocrat.com/news/10925002-181/santa-rosa-sonoma-county-poised?sba=AAS>.

RadioMobile. 2020. 'Case Study: How LA County Fire Improved the performance and flexibility of their Fire Station Alerting System with new Technology.' Accessed January 2021.

https://mk0radiomobileb7pukr.kinstacdn.com/wp-content/uploads/2020/04/LA_County_Case_Study_RadioMobile_2020.pdf

Reinhardt, E.D., R.E. Keane, D.E. Calkin, and J.D. Cohen. 2008. "Objectives and Considerations for Wildland Fuel Treatment in Forested Ecosystems of the Interior Western United States." *Forest Ecology and Management* 256:1997–2006.

Rocket Homes. 2021. Bradbury Housing Market. June 2021. Accessed June 2021.

<https://www.rockethomes.com/real-estate-trends/ca/bradbury>

Rothermel, R.C. 1993. *How to Predict the Spread and Intensity of Forest and Range Fires*. General Technical Report INT-143. Ogden, Utah: U.S. Forest Service, Intermountain Forest and Range Experiment.

Roussopoulos, P.J., and V.J. Johnson. 1975. *Help in Making Fuel Management Decisions*. Research Paper NC-112. St. Paul, Minnesota: U.S. Forest Service, North Central Forest Experiment Station.

Ryan, K.C., A.T. Jones, C.L. Koerner, and K.M. Lee, tech. eds. 2012. *Wildland Fire in Ecosystems: Effects of Fire on Cultural Resources and Archaeology*. General Technical Report. RMRS-GTR-42-vol. 3. Fort Collins, Colorado: U.S. Forest Service,

Scott, J.H. and E.D. Reinhardt. 2001. *Assessing Crown Fire Potential by Linking Models of Surface and Crown Fire Behavior*. Research Paper RMRS-RP-29. Fort Collins, Colorado: U.S. Forest Service, Rocky Mountain Research Station.

Scott, J.H. and R.E. Burgan. 2005. *Standard Fire Behavior Fuel Models: A Comprehensive Set for Use with Rothermel's Surface Fire Spread Model*. General Technical Report RMRS-GTR-153. Fort Collins, Colorado: U.S. Forest Service, Rocky Mountain Research Station.

Seli R.C., S. Brittain, and C.W. McHugh. 2019. FlamMap Online Help (Version 6.0). Available in the application.

Shi, H., Z. Jiang, B. Zhao, Z. Li, Y. Chen, Y. Gu, J.H. Jiang, M. Lee, K. Liou, J.L. Neu, V.H. Payne, H. Su, Y. Wang, M. Witek, and J. Worden. 2019. "Modeling study of the Air Quality Impact of Record-Breaking Southern California Wildfires in December 2017." *Journal of Geophysical Research: Atmospheres*, 124. <https://doi.org/10.1029/2019JD030472>.

Sonoma Veg Map. 2018. "2017 Sonoma Complex Fires." Accessed November, 2020.

<http://sonomavegmap.org/firestory/index.html>.

- State of California. 2019. *Wildfires and Climate Change: California's Energy Future. A Report from Governor Newsom's Strike Force*. April 12, 2019. Accessed June, 2020. <https://www.gov.ca.gov/wp-content/uploads/2019/04/Wildfires-and-Climate-Change-California%E2%80%99s-Energy-xFuture.pdf>.
- Teie, W.C. 1994. *Firefighter's Handbook on Wildland Firefighting: Strategy, Tactics, and Safety*. Rescue, California: Deer Valley Press.
- UCCE (University of California Cooperative Extension). 2016. *Research Literature Review of Plant Flammability Testing, Fire-Resistant Plant Lists and Relevance of a Plant Flammability Key for Ornamental Landscape Plants in the Western States*. Final Report. January 2016. <https://ucanr.edu/sites/SaratogaHort/files/235710.pdf>.
- UCFPL (University of California Forest Products Laboratory). 1997. *Defensible Space Landscaping in the Urban/Wildland Interface: A Compilation of Fire Performance Ratings of Residential Landscape Plants*. Berkeley, California: University of California, Berkeley.
- USDA (U.S. Department of Agriculture). 2005. *Wildland Fire in Ecosystems: Effect of Fire on Soil and Water*. General Technical Report RMRS-GTR-42-vol. 4. Ogden, Utah: U.S. Forest Service, Rocky Mountain Research Station. September 2005.
- USFS (U.S. Forest Service). 2020a. "*Quercus agrifolia*." Fire Ecology, Index of Species Information. Accessed April 2020. <https://www.fs.fed.us/database/feis/plants/tree/queagr/all.html>.
- USFS. 2020b. "*Eucalyptus globulus*." Fire Ecology, Index of Species Information. <https://www.fs.fed.us/database/feis/plants/tree/eucglo/all.html>.
- University of California. 2004. "Sudden Oak Death Update, California Aerial Survey." Accessed July, 2020. <https://oaks.cnr.berkeley.edu/sudden-oak-death-update-california-aerial-survey/>.
- Westerling, A.L., D.R. Cayan, T.J. Brown, B.L. Hall, and L.G. Riddle. 2004. "Climate, Santa Ana Winds, and Autumn Wildfires in Southern California." *Eos* 85(31): 289EOS–300.
- Westerling, A.L., and B.P. Bryant. 2008. "Climate Change and Wildfire in California." *Climatic Change* 87 (Suppl 1): S231–S249.
- Westerling, A.L., B.P. Bryant, H.K. Preisler, T.P. Holmes, H.G. Hidalgo, T. Das, and S.R. Shrestha. 2011. "Climate Change and Growth Scenarios for California Wildfire." *Climatic Change* 109 (Suppl 1): S445–S463.
- Westerling, A.L. 2016. "Increasing Western US Forest Wildfire Activity: Sensitivity to Changes in the Timing of Spring." *Philosophical Transactions of the Royal Society B: Biological Sciences* 371(1696). <https://doi.org/10.1098/rstb.2015.0178>.
- Westerling, A.L. 2018. *Wildfire Simulations for California's Fourth Climate Change Assessment: Projecting Changes in Extreme Wildfire Events with a Warming Climate*. A Report for California's Fourth Climate Change Assessment, California Energy Commission. CCCA4-CEC-2018-014. August 2018. Accessed April 2020. https://www.energy.ca.gov/sites/default/files/2019-07/Projections_CCCA4-CEC-2018-014.pdf.

White, R.H. and W.C. Zipperer. 2010. "Testing and Classification of Individual Plants for Fire Behaviour: Plant Selection for the Wildland–Urban Interface." *International Journal of Wildland Fire* 19:213–227.

United States Forest Service. 2020. Fire Management. <https://www.fs.usda.gov/main/angeles/fire>

WRCC (Western Regional Climate Center). 2020. "Period of Record Monthly Climate Summary, Bradbury, California." Accessed on April, 2020. <https://wrcc.dri.edu>

Wolf, K. and J. DiTomaso. 2016. "Management of Blue Gum Eucalyptus in California Requires Region-Specific Consideration." *California Agriculture* 70(1): 39–47. <http://calag.ucanr.edu/archive/?article=ca.v070n01p39>.

Ziemer, R.R. 1981. "Roots and the Stability of Forested Slopes." In *Proceedings of the International Symposium on Erosion and Sediment Transport in Pacific Rim Steeplands*, edited by T.R.H. Davies and A.J. Pearce, 343–361. January 25–31, 1981. Christchurch, New Zealand International Association Hydrological Sciences Publication No. 132

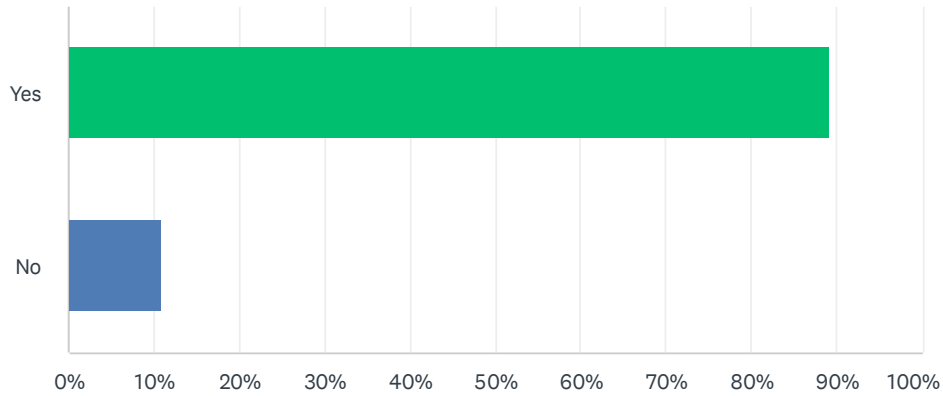
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Appendix A

City of Bradbury Survey Questionnaire and Results

Q1 Are you aware that a City of Bradbury Community Wildfire Protection Plan (CWPP) is being created?

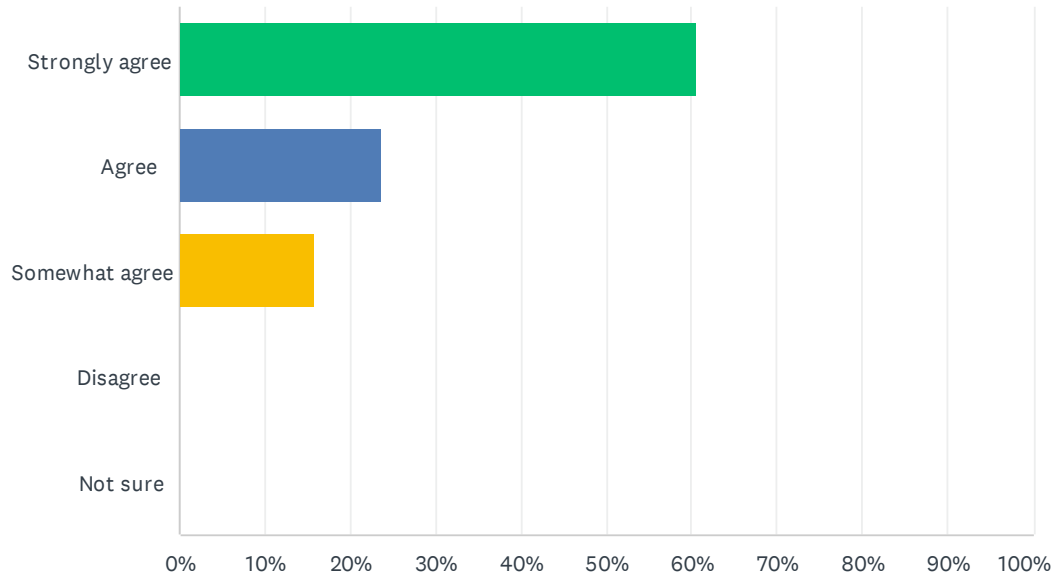
Answered: 37 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	89.19%	33
No	10.81%	4
TOTAL		37

Q2 Rate your reaction to the following statement: There is a wildfire threat to the City of Bradbury?

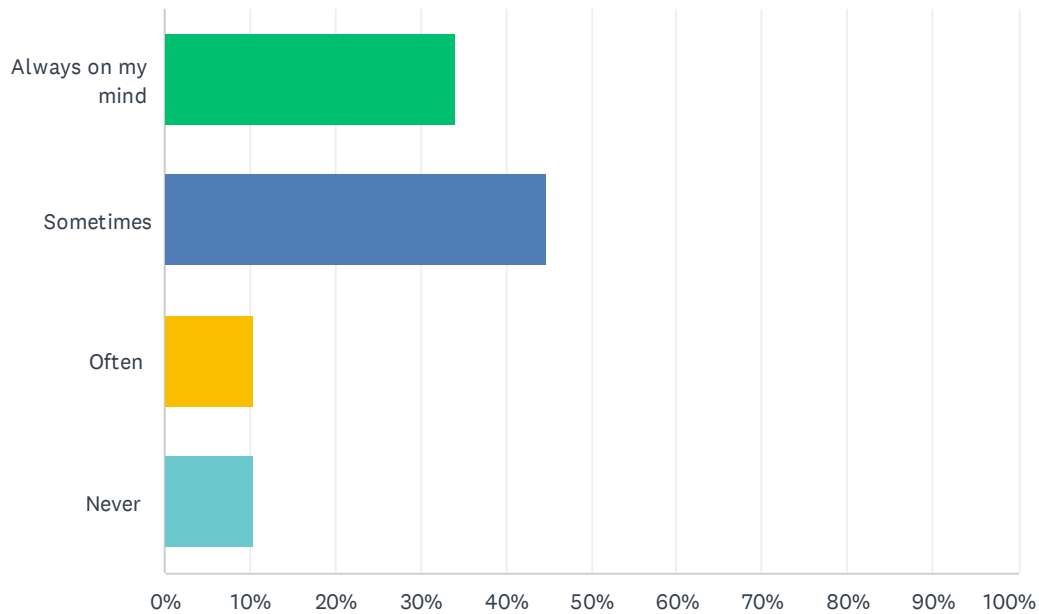
Answered: 38 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	60.53%	23
Agree	23.68%	9
Somewhat agree	15.79%	6
Disagree	0.00%	0
Not sure	0.00%	0
TOTAL		38

Q3 Rate your reaction to the following statement: I worry about wildfire:

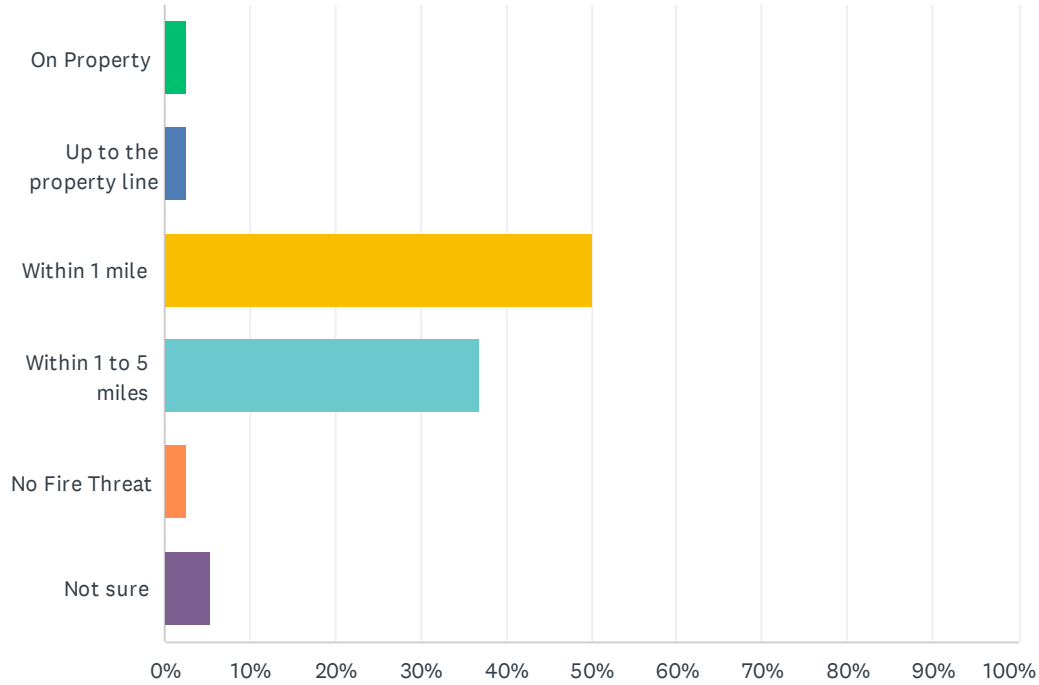
Answered: 38 Skipped: 0



ANSWER CHOICES	RESPONSES	
Always on my mind	34.21%	13
Sometimes	44.74%	17
Often	10.53%	4
Never	10.53%	4
TOTAL		38

Q4 How close has wildfire has come to your residence during the time you've lived in your current location?

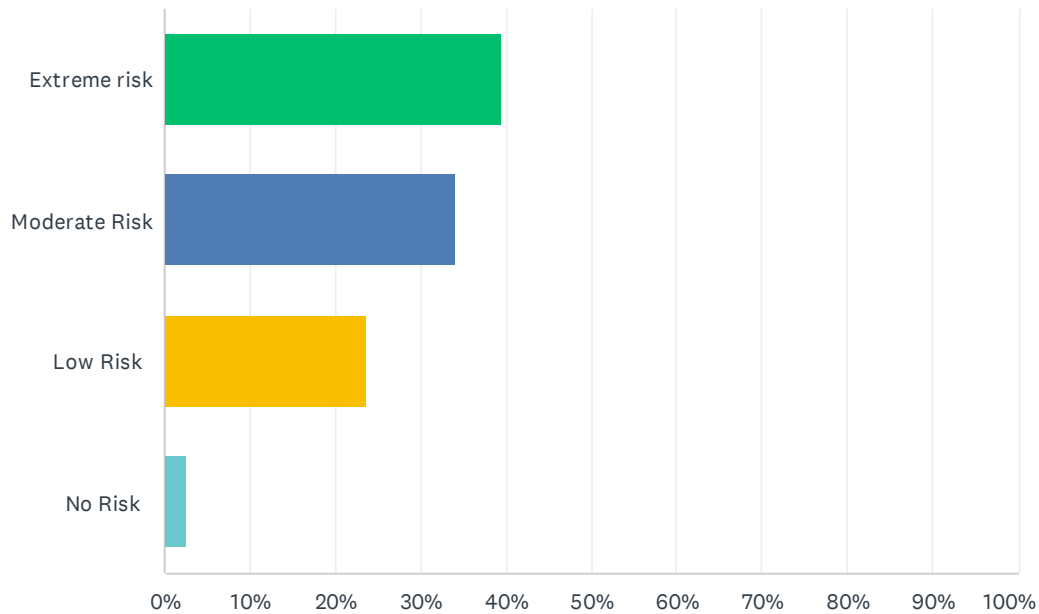
Answered: 38 Skipped: 0



ANSWER CHOICES	RESPONSES	
On Property	2.63%	1
Up to the property line	2.63%	1
Within 1 mile	50.00%	19
Within 1 to 5 miles	36.84%	14
No Fire Threat	2.63%	1
Not sure	5.26%	2
TOTAL		38

Q5 What level of risk do you believe wildfires pose to your property?

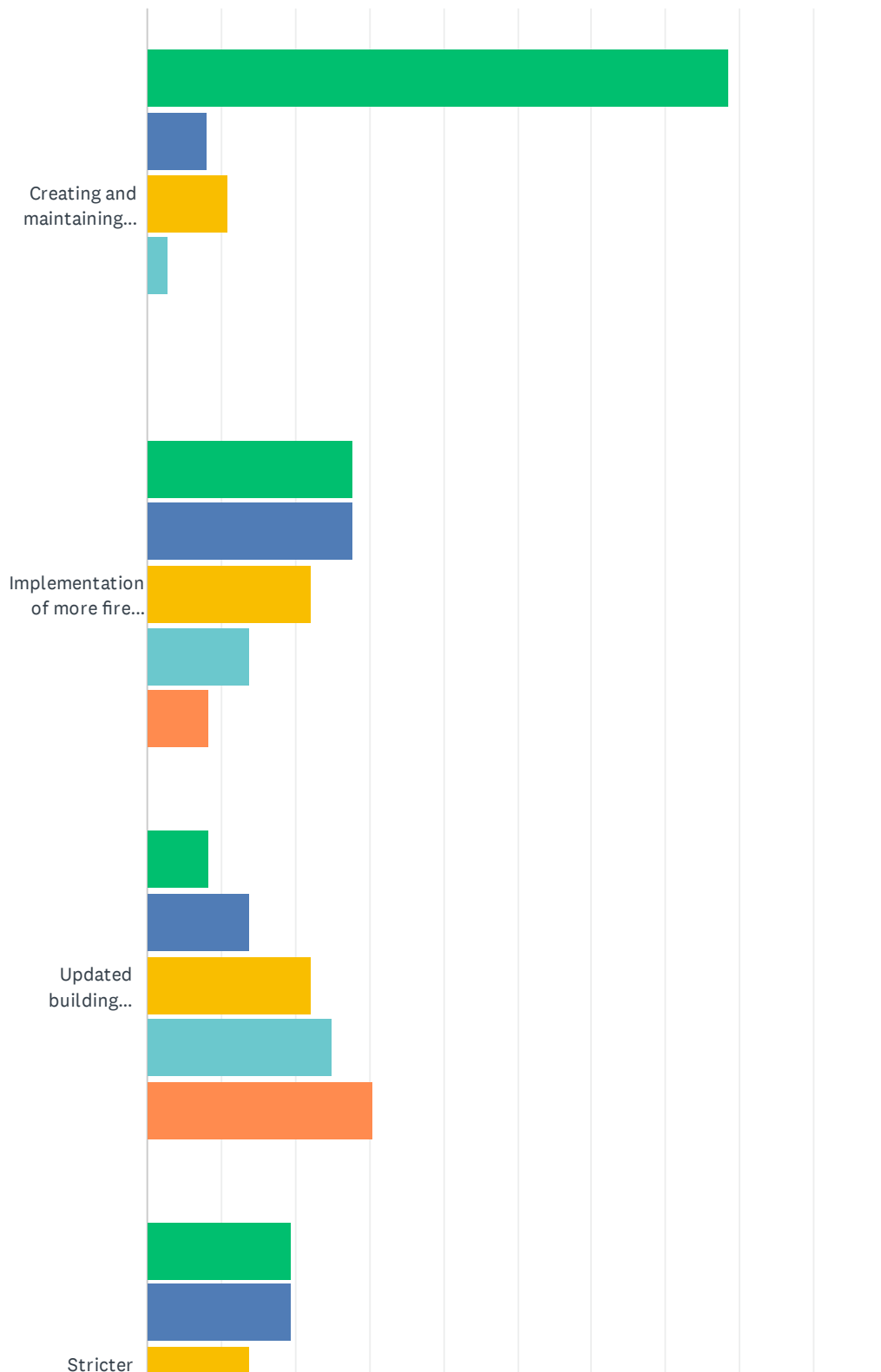
Answered: 38 Skipped: 0



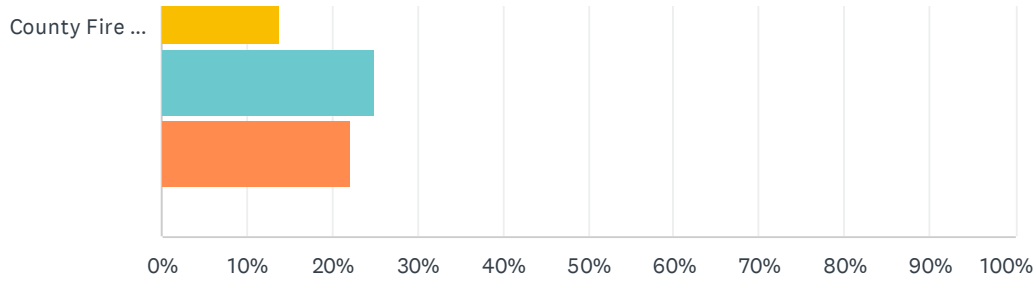
ANSWER CHOICES	RESPONSES	
Extreme risk	39.47%	15
Moderate Risk	34.21%	13
Low Risk	23.68%	9
No Risk	2.63%	1
TOTAL		38

Q6 What do you think would be the best way to decrease wildfire hazards on your property (Rank answers with 1 for the highest priority and 5 for lowest priority)?

Answered: 38 Skipped: 0



City of Bradbury Community Wildfire Protection Plan Survey

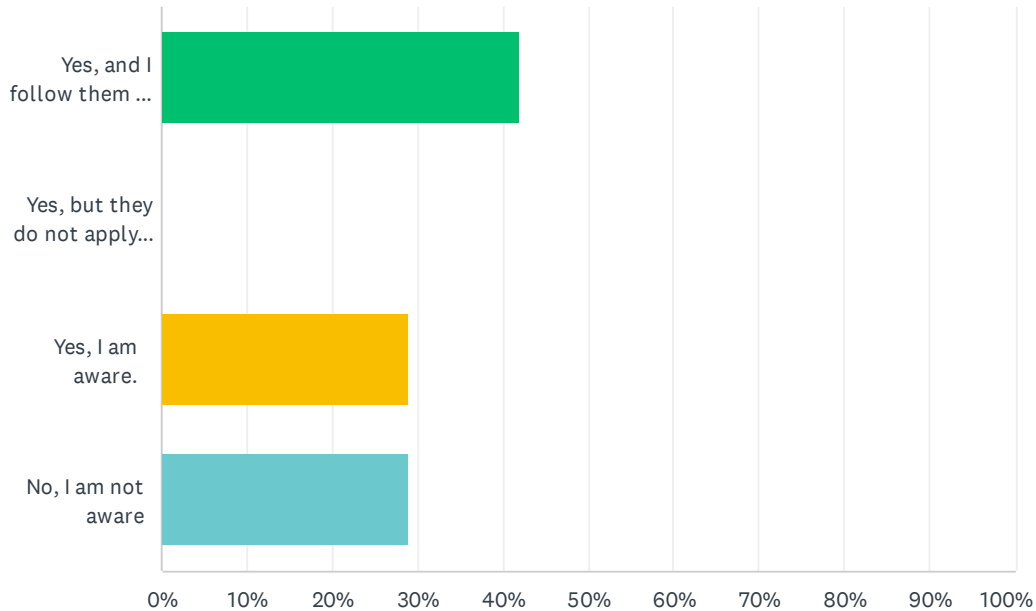


■ 1 - Highest Priority
 ■ 2
 ■ 3
 ■ 4
 ■ 5 - Lowest Priority

	1 - HIGHEST PRIORITY	2	3	4	5 - LOWEST PRIORITY	TOTAL	WEIGHTED AVERAGE
Creating and maintaining fuel modification zones by managing vegetation and fuels (including grasses, shrubs, chaparral, trees, etc.)	78.38% 29	8.11% 3	10.81% 4	2.70% 1	0.00% 0	37	1.38
Implementation of more fire resistive landscape	27.78% 10	27.78% 10	22.22% 8	13.89% 5	8.33% 3	36	2.47
Updated building construction of older homes	8.33% 3	13.89% 5	22.22% 8	25.00% 9	30.56% 11	36	3.56
Stricter County Fire and City rules and regulations	19.44% 7	19.44% 7	13.89% 5	25.00% 9	22.22% 8	36	3.11

Q7 Are you aware that there are City guidelines available for landscaping to reduce wildfire risk?

Answered: 38 Skipped: 0

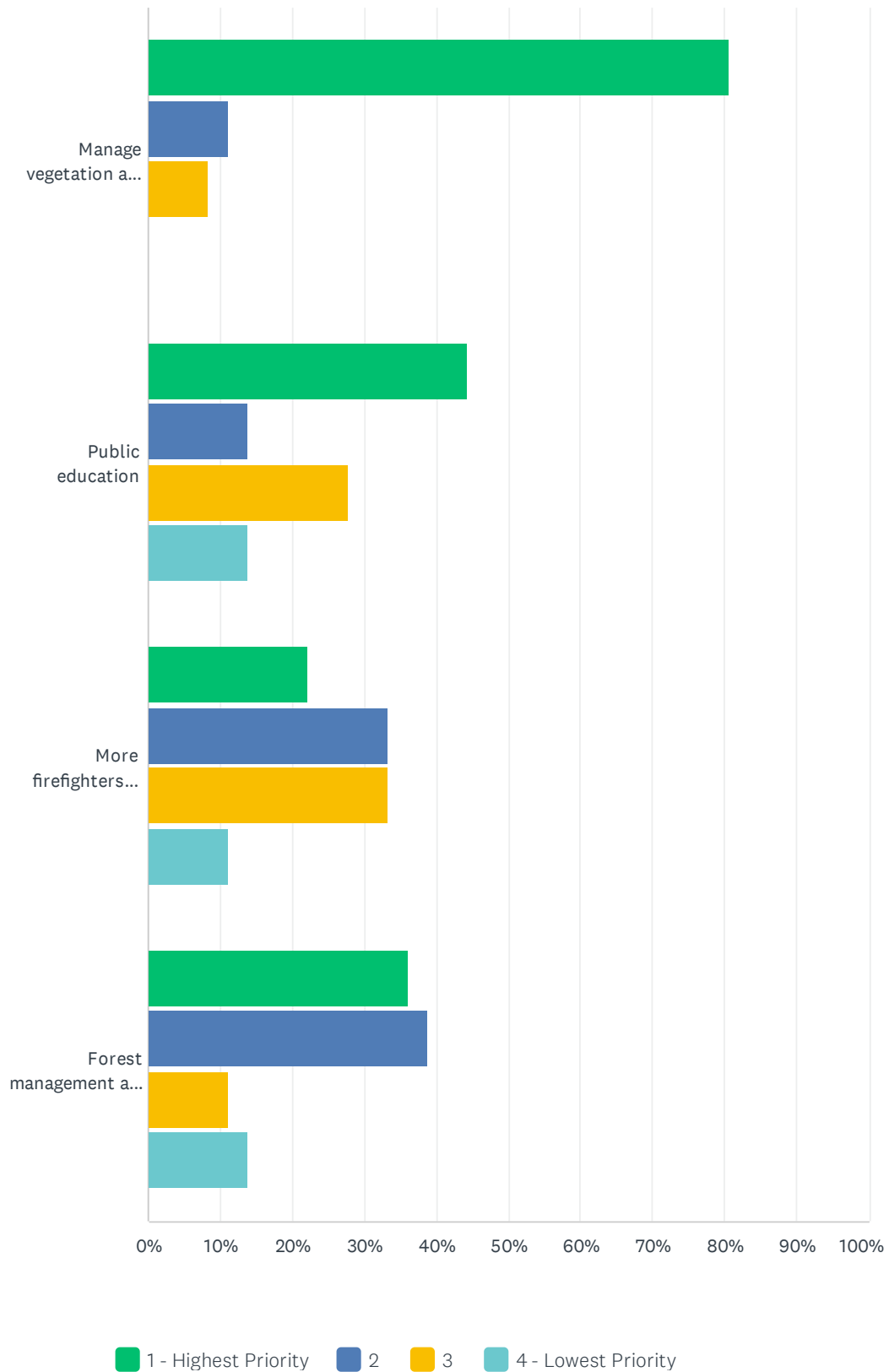


ANSWER CHOICES	RESPONSES	
Yes, and I follow them on my property.	42.11%	16
Yes, but they do not apply to where I live.	0.00%	0
Yes, I am aware.	28.95%	11
No, I am not aware	28.95%	11
TOTAL		38

Q8 What do you believe would be the best way to decrease wildfire hazards within the Bradbury community? (Rank answers with 1 for the highest priority and 4 for lowest priority)

Answered: 37 Skipped: 1

City of Bradbury Community Wildfire Protection Plan Survey

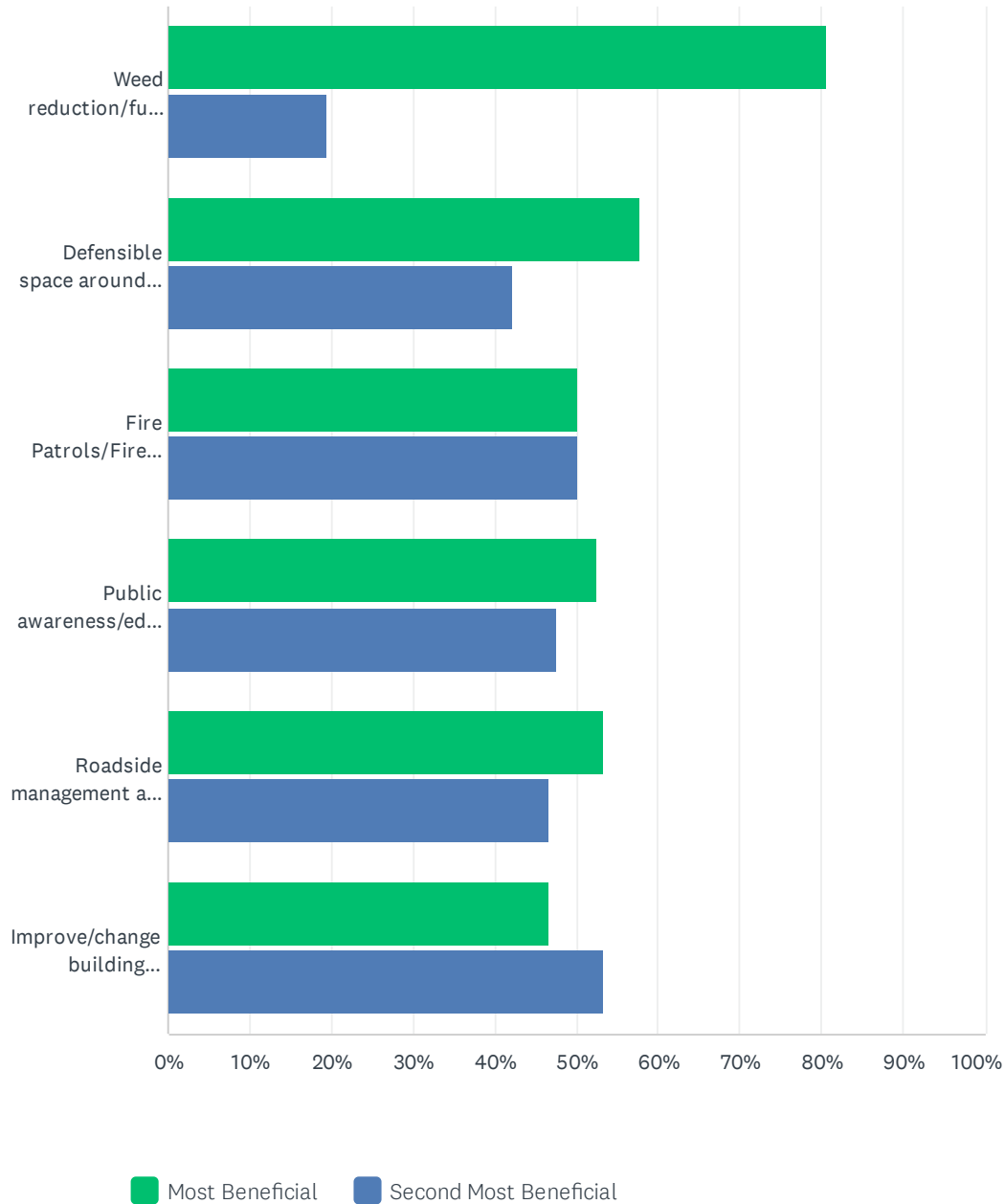


City of Bradbury Community Wildfire Protection Plan Survey

	1 - HIGHEST PRIORITY	2	3	4 - LOWEST PRIORITY	TOTAL	WEIGHTED AVERAGE
Manage vegetation and fuels (i.e. grasses, shrubs, chaparral, trees, etc.) by mowing or thinning or controlled burning	80.56% 29	11.11% 4	8.33% 3	0.00% 0	36	1.28
Public education	44.44% 16	13.89% 5	27.78% 10	13.89% 5	36	2.11
More firefighters/fire fighter equipment and supplies	22.22% 8	33.33% 12	33.33% 12	11.11% 4	36	2.33
Forest management and increase in governmental funding	36.11% 13	38.89% 14	11.11% 4	13.89% 5	36	2.03

Q9 What do you feel are the top 2 most beneficial methods to reducing wildfire risk in your community?

Answered: 37 Skipped: 1

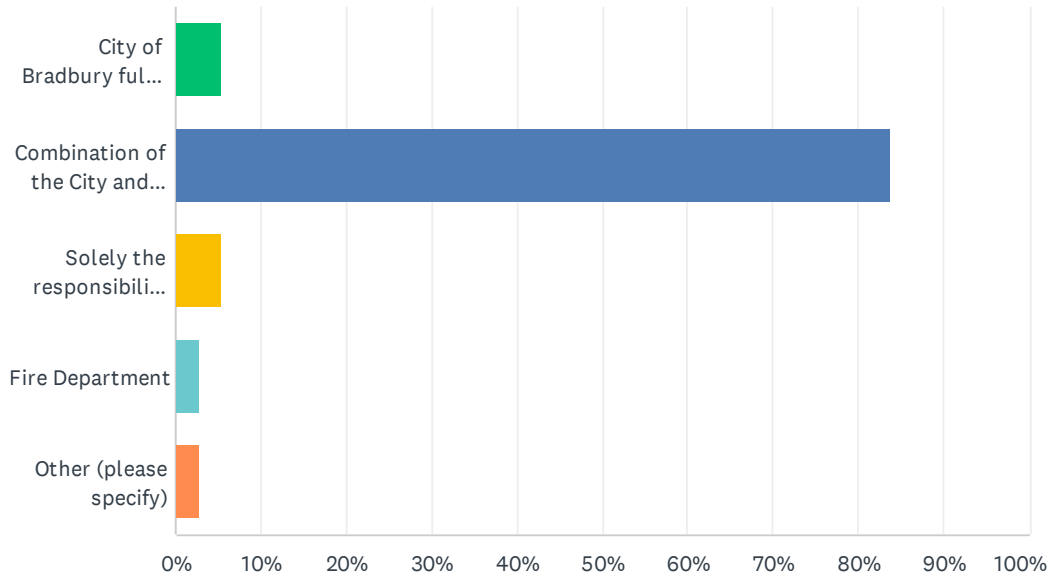


City of Bradbury Community Wildfire Protection Plan Survey

	MOST BENEFICIAL	SECOND MOST BENEFICIAL	TOTAL	WEIGHTED AVERAGE
Weed reduction/fuel load reduction/brush management/dead tree removal	80.65% 25	19.35% 6	31	1.19
Defensible space around homes/in homes including installation of fire resistive and native/drought tolerant plantings	57.69% 15	42.31% 11	26	1.42
Fire Patrols/Fire Department Training/Effective Enforcement/Improved Fire Department Resources/Improved response times	50.00% 11	50.00% 11	22	1.50
Public awareness/education of wildfire risk	52.38% 11	47.62% 10	21	1.48
Roadside management and improved roadway accessibility	53.33% 8	46.67% 7	15	1.47
Improve/change building practices/maintenance/fire resistant homes	46.67% 7	53.33% 8	15	1.53

Q10 Who should be responsible for reducing the wildfire risk within the City of Bradbury?

Answered: 37 Skipped: 1



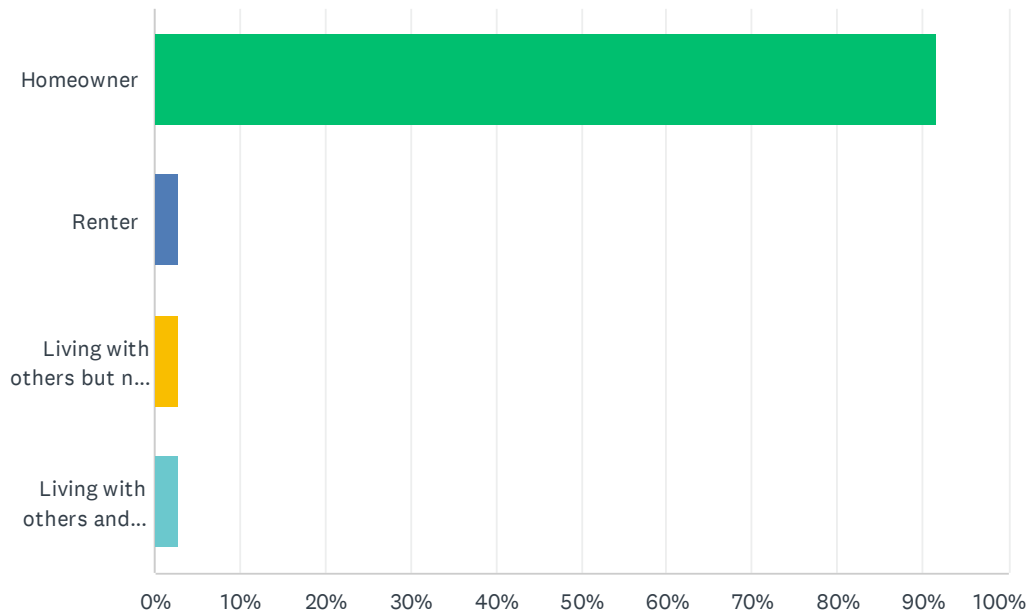
ANSWER CHOICES	RESPONSES	
City of Bradbury fully responsible	5.41%	2
Combination of the City and individual property owners	83.78%	31
Solely the responsibility of the individual property owner	5.41%	2
Fire Department	2.70%	1
Other (please specify)	2.70%	1
TOTAL		37

Q11 What actions would you like to have included in the CWPP and taken to reduce the risk of wildfire?

Answered: 22 Skipped: 16

Q12 Which of the following best describes your current housing situation?

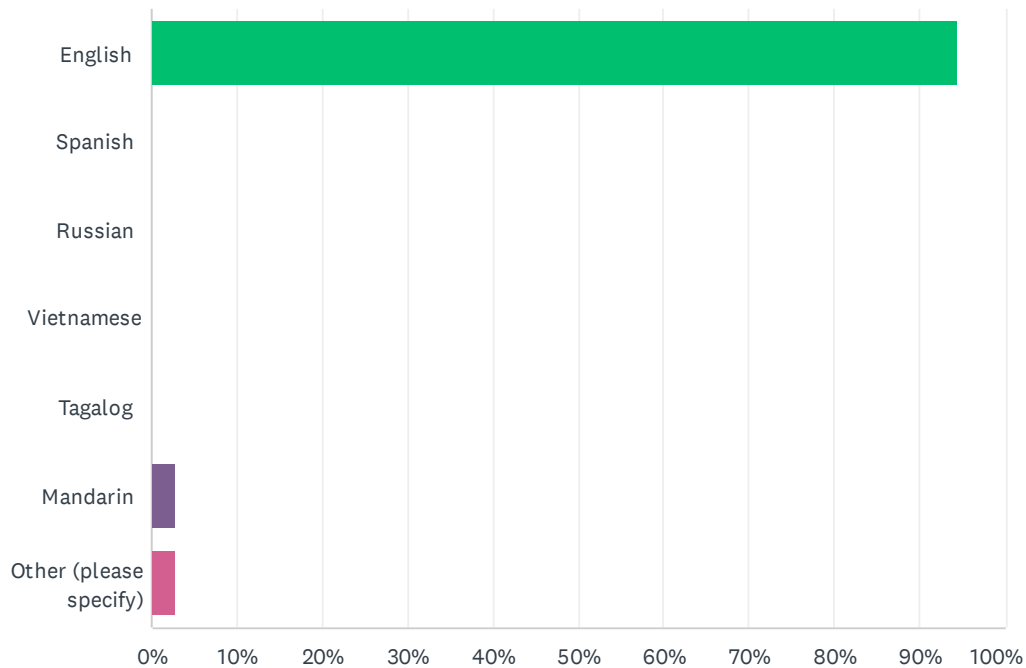
Answered: 36 Skipped: 2



ANSWER CHOICES	RESPONSES	
Homeowner	91.67%	33
Renter	2.78%	1
Living with others but not paying rent or mortgage	2.78%	1
Living with others and assisting with paying rent or mortgage	2.78%	1
TOTAL		36

Q13 What is the primary language spoken in your home?

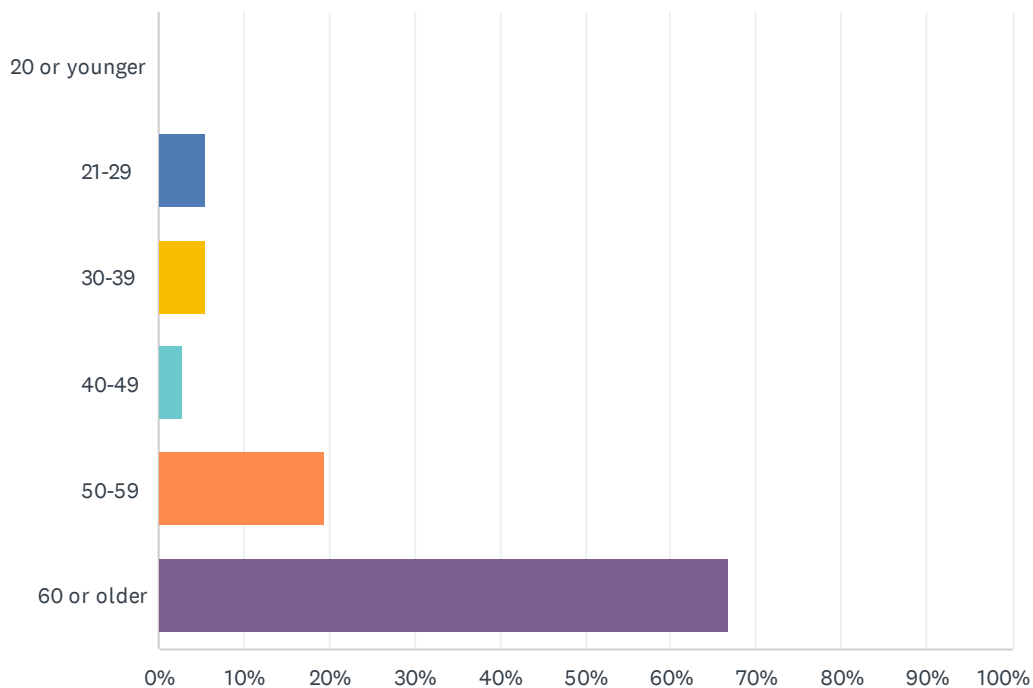
Answered: 36 Skipped: 2



ANSWER CHOICES	RESPONSES	
English	94.44%	34
Spanish	0.00%	0
Russian	0.00%	0
Vietnamese	0.00%	0
Tagalog	0.00%	0
Mandarin	2.78%	1
Other (please specify)	2.78%	1
TOTAL		36

Q14 Which category below includes your age?

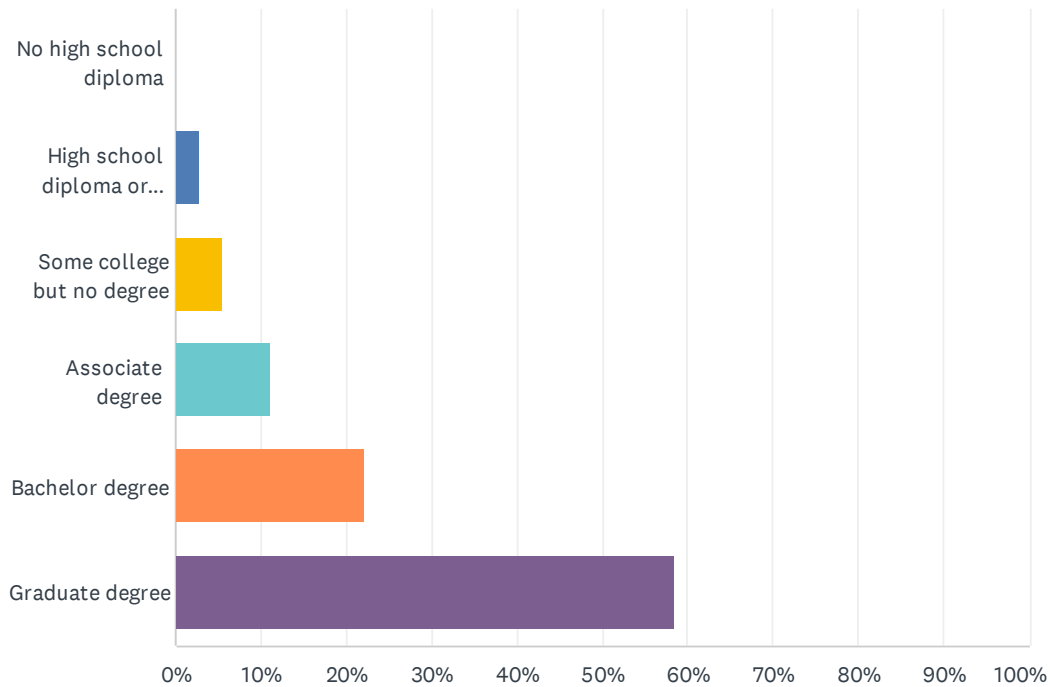
Answered: 36 Skipped: 2



ANSWER CHOICES	RESPONSES	
20 or younger	0.00%	0
21-29	5.56%	2
30-39	5.56%	2
40-49	2.78%	1
50-59	19.44%	7
60 or older	66.67%	24
TOTAL		36

Q15 What is the highest level of education you have attained?

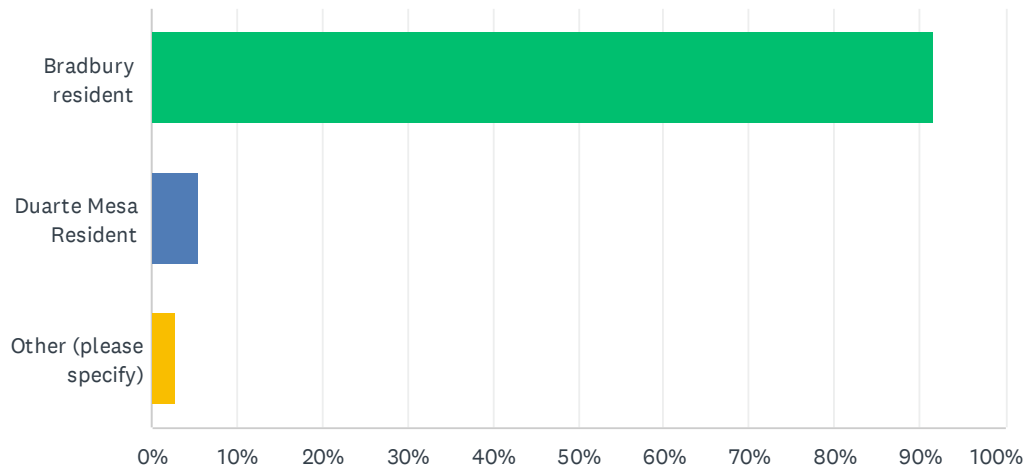
Answered: 36 Skipped: 2



ANSWER CHOICES	RESPONSES	
No high school diploma	0.00%	0
High school diploma or equivalent (e.g., GED)	2.78%	1
Some college but no degree	5.56%	2
Associate degree	11.11%	4
Bachelor degree	22.22%	8
Graduate degree	58.33%	21
TOTAL		36

Q16 Which best describes you?

Answered: 36 Skipped: 2



ANSWER CHOICES	RESPONSES	
Bradbury resident	91.67%	33
Duarte Mesa Resident	5.56%	2
Other (please specify)	2.78%	1
TOTAL		36

Appendix B

Los Angeles County Fire Department's Acceptable Plant List in Fuel Modification Zones

Los Angeles County Fire Department's: Acceptable Plant List by FMZ

Botanical Name	Common Name	Zone 1	Minimum Distance from Structure ²
Ground Cover			
<i>Acacia redolens</i> 'Desert Carpet'/'Low Boy'	Desert Carpet Acacia	B	30
<i>Achillea tomentosa</i>	Woolly Yarrow	A	
<i>Ajuga reptans</i>	Carpet Bugle	A	
<i>Arctostaphylos</i> (Prostrate Varieties)	Manzanita	B	
<i>Artemisia californica</i> (Cultivars)	Sagebrush - Prostrate Forms	B	30
<i>Artemesia</i> 'Powis Castle'	NCN	B	
<i>Baccharis pilularis</i> 'Pigeon Point'/'Twin Peaks'	Prostrate Coyote Brush	B	
<i>Campanula poscharkyana</i>	Serbian Bellflower	A	
<i>Ceanothus gloriosus</i>	Point Reyes Ceanothus	B	
<i>Cerastium tomentosum</i>	Snow-In-Summer	A	
<i>Chamaemelum nobile</i>	Chamomile	A	
<i>Cistus salviifolius</i> 'Prostratus'	Sageleaf Rockrose	B	
<i>Coprosma kirkii</i>	Mirror Plant	B	
<i>Coreopsis auriculata</i> 'Nana'	Tickseed	A	
<i>Cotoneaster</i> (Prostrate Varieties)	Cotoneaster	B	
<i>Dalea greggii</i>	Trailing Indigo Bush	B	
<i>Delosperma alba</i>	White Training Ice Plant	A	
<i>Dichondra micrantha</i>	Dichondra	A	
<i>Drosanthemum floribundum</i>	Rosea Ice Plant	A	
<i>Duchesnea indica</i>	Indian Mock Strawberry	A	
<i>Dymondia margaretae</i>	NCN	A	
<i>Erigeron glaucus</i>	Seaside Daisy	A	
<i>E. karvinskianus</i>	Santa Barbara Daisy	B	
<i>Euonymus fortunei</i> 'Colorata'	Purple-Leaf Winter Creeper	B	
<i>Festuca cinerea</i> (ovina'Glauc') <i>F. rubra</i>	Blue Fescue Red Fescue	A A	
<i>Fragaria chiloensis</i>	Wild Strawberry	A	
<i>Gazania Hybrids</i>	Trailing Gazania	A	
<i>Geranium incanum/sanguineum</i>	Cranesbill	A	
<i>Glechoma hederacea</i>	Ground Ivy	A	
<i>Helianthemum nummularium</i>	Sunrose	A	
<i>Herniaria glabra</i>	Green Carpet	A	
<i>Heuchera species and Cultivars</i>	Coral Bells	A	
<i>Hypericum calycinum/coris</i>	Aaron's Beard	B	
<i>Iberis sempervirens</i>	Evergreen Candytuft	A	
<i>Iva hayesiana</i>	Poverty Weed	B	30

<i>Juniperus (Prostrate species/cultivars)</i>		B	
<i>Laurentia fluvialis</i>	Blue Star Creeper	A	
<i>Lysimachia nummularia</i>	Moneywort	A	
<i>Liriope spicata</i>	Creeping Lily Turf	A	
<i>Liriope muscari</i>	Lily Turf	A	
<i>Mahonia repens</i>	Creeping Mahonia	B	
<i>Myoporum 'Pacificum' & 'Putah Creek'</i>	Pacific Myoporum	B	
<i>M. parvifolium</i>	NCN	A	
<i>Oenothera berlandieri</i>	Mexican Evening Primrose	B	
<i>O. stubbei</i>	Baja Evening Primrose	A	
<i>Ophiopogon japonicus</i>	Mondo Grass	A	
<i>Pachysandra terminalis</i>	Japanese Spurge	A	
<i>Pelargonium peltatum/tomentosum</i>	Ivy Geranium	A	
<i>Persicaria capitata</i>	Pink Clover	A	
<i>Phlox subulata</i>	Moss Pink	A	10
<i>Phyla nodiflora (Lippia repens)</i>	Lippia	A	
<i>Potentilla tabernaemontanii</i>	Spring Cinquefoil	A	
<i>Ribes viburnifolium</i>	Catalina Perfume	B	
<i>Rosmarinus officinalis (Prostrate Varieties)</i>	Prostrate Rosemary	B	30
<i>Scaevola 'Mauve Clusters'</i>	NCN	A	
<i>Salvia sonomensis</i>	Creeping Sage	B	
<i>Sedum species</i>	Stonecrops	A	
<i>Senecio mandraliscae/serpens</i>	Kleinia/Blue Chalksticks	A	
<i>Soleirolia soleirolii</i>	Baby's Tears	A	
<i>Teucrium cossonii majoricum</i>	Germander	A	
<i>T. X lucidrys 'Prostratum'</i>	Prostrate Germander	A	
<i>Thymus species</i>	Mother of Thyme	A	
<i>Trachelospermum jasminoides</i>	Star Jasmine	A	
<i>Trifolium fragiferum</i>	White Clover	A	
<i>Verbena species (Prostrate Varieties)</i>	Garden Verbena	A	
<i>Vinca minor</i>	Dwarf Periwinkle	A	
<i>Viola odorata</i>	Sweet Violet	A	
<i>Wedelia trilobata</i>	Yellow Dot	B	
<i>Zoysia tenuifolia</i>	Korean Grass	A	
Miscellaneous Perennials, Grasses, Ferns etc.			
<i>Acorous gramineous and Cultivars</i>	Sweet Flag	A	
<i>Agapanthus africanus</i>	Lily of the Nile	A	
<i>Alstroemeria cooperi</i>	Peruvian Lily	A	
<i>Armeria species</i>	Thriffs	A	
<i>Bamboos</i>	Bamboo	B	30
<i>Bergenia cordifolia</i>	Heart Leaf Bergenia	A	
<i>Cycas species</i>	Cycads	A	
<i>Cyrtomium falcatum</i>	Holly Fern	A	

<i>Davalia tricommanoides</i>	Rabbits Foot Fern	A	
<i>Epilobium canum</i>	California Fuchsia	B	
<i>Helictotrichon sempervirens</i>	Blue Oat Grass	A	15
<i>Hemerocallis hybrids</i>	Daylily	A	
<i>Iris douglassiana</i>	Coastal Iris	A	
<i>Iris germanica</i>	Bearded Iris	A	
<i>Kalanchoe species</i>	Kalanchoe	A	
<i>Leymus condensatus</i> 'Canyon Prince'	Canyon Prince Wild Rye	B	
<i>Lobelia laxiflora</i>		A	10
<i>Pelargonium species</i>	Geranium	A	
<i>Penstemon species</i>	Beard Tongue	A	
<i>Plumeria</i>	Plumeria	A	
<i>Phlebodium aureum</i>	Rabbits Foot Fern	A	
<i>Tulbaghia violacea</i>	Society Garlic	A	
<i>Zephyranthes candida</i>	Zephyr Lily	A	
Shrubs			
<i>Abelia grandiflora</i> (Prostrata)	Glossy Abelia	A	10
<i>Abutilon hybridum</i>	Flowering Maple	A	10
<i>Acanthus mollis</i>	Bear's Breech	A	
<i>Agave species</i>	Agave	A	
<i>Aloe species</i>	Aloe	A	
<i>Alyogyne huegelii</i>	Blue Hibiscus	A	10
<i>Arbutus unedo</i> (Dwarf Cultivars)	Dwarf Strawberry Tree	A	10
<i>Arctostaphylos species</i>	Manzanita	B	
<i>Aucuba japonica</i>	Japanese Aucuba	A	
<i>Baccharis species</i>	Various	B	
<i>Berberis thunbergii</i>	Japanese Barberry	B	
<i>B. thunbergii</i> 'prostrate cultivars'		A	10
<i>Bougainvillea sp.</i>	Bougainvillea	B	
<i>Buddleja davidii</i>	Butterfly Bush	B	
<i>Buxus microphylla japonica</i>	Japanese Boxwood	A	10
<i>Caesalpinia</i> (Shrub Forms)	Bird of Paradise Bush	A	10
<i>Camellia species</i>	Camellia	A	10
<i>Calliandra californica/eriophylla</i>	Baja Fairy Duster	B	
<i>Callistemon citrinus</i>	Lemon Bottlebrush	B	
<i>C. viminalis</i> "Little John"	NCN	A	10
<i>Calycanthus occidentalis</i>	Western Spice Bush	B	
<i>Carissa macrocarpa and Cultivars</i>	Natal Plum	A	10
<i>Carpenteria californica</i>	Bush Anemone	A	10
<i>Cassia artemisioides</i>	Feathery Cassia	A	30
<i>Ceanothus species</i>	Wild Lilac	B	30
<i>Cercocarpus betuloides</i>	Mountain Mahogany	B	30
<i>Choisya ternata</i>	Mexican orange	B	

<i>Cistus species</i>	Rockrose	B	
<i>Comarostaphylis diversifolia</i>	Summer Holly	B	
<i>Convolvulus cneorum</i>	Bush Morning Glory	B	
<i>Coprosma pumila/repens</i>	Mirror Plant	B	
<i>Cotoneaster species & cultivars</i>	Cotoneaster	B	
<i>Crassula species</i>	NCN	A	
<i>Cuphea hyssopifolia</i>	False Heather	A	
<i>Cycas revoluta</i>	Sago Palm	A	
<i>Dasyllirion quadrangulatum/wheeleri</i>	Mexican Grass Tree	A	10
<i>Dendromecon harfordii</i>	Island Bush Poppy	B	
<i>Dietes bicolor/irioides</i>	Fortnight Lily	A	
<i>Dodonaea viscosa (Purpurea)</i>	Hopseed Bush	B	
<i>Elaeagnus pungens & cultivars</i>	Silverberry	B	
<i>Encelia californica</i>	Coast Sunflower	A	10
<i>E. farinosa</i>	Brittle Bush	B	
<i>Erigonum giganteum</i>	St. Catherine's Lace	B	
<i>Escallonia species</i>	Escallonia	A	10
<i>Euonymus japonica & cultivars</i>	Evergreen Euonymus	A	10
<i>Euphorbia species</i>		A	
<i>Euryops pectinatus</i>	NCN	A	
<i>Fatsia japonica</i>	Japanese Aralia	A	
<i>Fouquieria splendens</i>	Ocotillo	A	
<i>Fremontodendron species & cultivars</i>	Flannel Bush	B	
<i>Gardenia jasminoides</i>	Gardenia	A	
<i>Garrya elliptica</i>	Coast Silktassel	B	
<i>Grevillea species & cultivars</i>	Grevillea	B	
<i>Grewia occidentalis</i>	Lavender Starflower	B	
<i>Hakea suaveolens</i>	Sweet Hakea	B	
<i>Hebe species & cultivars</i>	Hebe	A	10
<i>Hesperaloe parviflora</i>	Red Yucca	A	
<i>Hibiscus rosa - sinensis</i>	Chinese Hibiscus	A	10
<i>Ilex species</i>	Holly	B	
<i>Juniperus species</i>	Juniper	B	
<i>Justicia brandegeana</i>	Shrimp Plant	A	10
<i>J. californica</i>	Chuparosa	B	
<i>Keckiella cordifolia</i>	Heart-Leaved Penstemon	B	
<i>Kniphofia uvaria</i>	Red-Hot Poker	A	
<i>Lantana Camara & hybrids</i>	Lantana	A	10
<i>Larrea tridentata</i>	Creosote Bush	B	
<i>Lavandula species</i>	Lavender	A	10
<i>Lavatera assurgentiflora/maritima</i>	California Tree Mallow	B	
<i>Leonotis leonrus</i>	Lion's Tail	B	
<i>Leptospermum scoparium & varieties</i>	New Zealand Tea Tree	B	
<i>Leucophyllum species</i>		B	
<i>Ligustrum japonicum</i>	Wax-leaf Privet	A	10

<i>Lupinus species</i>	Lupine	B	
<i>Mahonia aquifolium</i> ('Compacta')	Oregon Grape	A	10
<i>M. fremontii</i>	Desert Mahonia	B	
<i>M. 'Golden Abundance'</i>	NCN	B	
<i>M. lomariifolia</i>	Venetian Blind Mahonia	A	
<i>Malosma</i> - See <i>Rhus</i>			
<i>Malva species</i>	Mallow	A	10
<i>Melaleuca nesophila</i>	Pink Melaleuca	A	10
<i>Mimulus species</i> (<i>Diplacus</i>)	Monkey Flower	A	10
<i>Myrica californica</i>	Pacific Wax Myrtle	B	
<i>Myrsine africana</i>	African Boxwood	A	10
<i>Myrtus communis</i> 'Compacta'	Dwarf Myrtle	A	10
<i>Nandina domestica</i> (including dwarf varieties)	Heavenly Bamboo	A	
<i>Nerium oleander</i>	Oleander	B	
<i>N.o. 'Petite Salmon'</i>	NCN	A	10
<i>Opuntia species</i>	Prickly Pear, Cholla etc.	A	
<i>Phlomis fruticosa</i>	Jerusalem Sage	A	
<i>Phoenix roebelenii</i>	Pygmy Date Palm	A	
<i>Phormium tenax</i> and Cultivars	New Zealand Flax	A	
<i>Photinia fraseri</i>	Photinia	B	
<i>Pittosporum tobira</i> ('Variegata')	Tobira	B	
<i>P.t. 'Wheeler's Dwarf'</i>	Dwarf Pittosporum	A	
<i>Punica granatum</i> 'Nana'	Dwarf Pomegranate	A	10
<i>Prunus ilicifolia</i>	Hollyleaf Cherry	B	
<i>Pyracantha species</i>	Firethorn	B	
<i>Rhamnus californica/crocea</i>	Coffeeberry	B	
<i>Raphiolepis indica</i> and Cultivars	India Hawthorn	A	10
<i>Rhus integrifolia/laurina</i>	Lemonade Berry	B	40
<i>R. ovata</i>	Sugar Bush	B	30
<i>Ribes species</i>	Currant/Gooseberry	A	10
<i>Romneya coulteri</i>	Matilija Poppy	B	
<i>Rosa species</i> (except <i>R. californica</i>)	Rose	A	
<i>Rosmarinus officinalis</i> & cultivars	Rosemary	B	
<i>Salvia species</i> - native varieties	Sage	B	
<i>S. greggii/leucantha</i>	Autumn Sage	A	10
<i>Santolina chamaecyparissus/rosmarinifolius</i>	Lavender Cotton	A	10
<i>Simmondsia chinensis</i>	Joboba	B	
<i>Strelitzia nicolai/regina</i>	Bird of Paradise	A	
<i>Tagetes lemmonii</i>	Copper Canyon Daisy	B	
<i>Tibouchina urvilleana</i>	Princess Flower	A	10
<i>Trichostema lanatum</i>	Wooly Blue Curls	B	
<i>Viburnum species</i>	Viburnum	A	10
<i>Westringia fruticosa</i>	Coast Rosemary	A	10
<i>Xylosma congestum</i>	Shiny Xylosma	B	
<i>X.c. 'Compacta'</i>	Compact Xylosma	A	10

<i>Yucca species</i>	Yucca	B	
Trees	Trees	Trees	Trees
<i>Acacia farnesiana</i>	Sweet Acacia	A	15
<i>A. greggii</i>	Catclaw Acacia	B	
<i>A. salicina</i>	Willow Acacia	A	15
<i>A. smallii</i>	NCN	A	15
<i>A. stenophylla</i>	Shoestring Acacia	A	15
<i>Acer negundo</i>	Box Elder	B	
<i>A. palmatum</i>	Japanese Maple	A	
<i>A. saccharinum</i>	Silver Maple	B	30
<i>Aesculus californica</i>	California Buckeye	B	
<i>Agonis flexuosa</i>	Peppermint Tree	B	
<i>Albizia julibrissin</i>	Silk Tree	B	
<i>Alnus rhombifolia</i>	Alder	B	
<i>Arbutus unedo</i> ('Marina')	Strawberry Tree	A	15
<i>Archontophoenix cunninghamiana</i>	King Palm	A	
<i>Bauhinia variegata</i>	Purple Orchid Tree	B	
<i>Betula pendula</i>	European White Birch	A	10
<i>Brachychiton acerifolius/populneus</i>	Flame Tree/Bottle Tree	B	
<i>Brahea armata/edulis</i>	Blue Hesper Palm	A	10
<i>Butia capitata</i>	Pindo Palm	A	10
<i>Callistemon citrinus</i>	Lemon Bottlebrush	B	
<i>C. viminalis</i>	Weeping Bottlebrush	A	15
<i>Calocedrus decurrens</i>	Incense Cedar	B	
<i>Calodendrum capense</i>	Cape Chestnut	B	
<i>Cedrus deodara</i>	Deodar Cedar	B	30
<i>Ceratonia siliqua</i>	Carob	B	30
<i>Cercidium floridum/microphyllum</i>	Blue Palo Verde	A	
<i>Cercis occidentalis/canadensis</i>	Western Redbud	A	10
<i>Chamaerops humilis</i>	Mediterranean Fan Palm	A	10
<i>Chilopsis linearis</i>	Desert Willow	A	15
<i>Chionanthus retusus</i>	Chinese Fringe Tree	A	10
<i>Chitalpa X tashkentensis</i>	Chitalpa	A	10
<i>Chorisia speciosa</i>	Floss Silk Tree	B	
<i>Cinnamomum camphora</i>	Camphor Tree	B	30
<i>Citrus species</i>	Citrus	A	10
<i>Cocculus laurifolius</i>	Laurel Leaf Snail Seed	B	
<i>Cordyline australis</i>	Giant Dracaena	A	
<i>Cyathea cooperi</i>	Australian Tree Fern	A	
<i>Dicksonia antarctica</i>	Tazmanian Tree Fern	A	
<i>Dracaena draco</i>	Dragon Tree	A	
<i>Eriobotrya deflexa/japonica</i>	Bronze Loquat/Loquat	A	10
<i>Erythrina species</i>	Coral Tree	B	

<i>Feijoa sellowiana</i>	Pineapple Guava	A	10
<i>Ficus species</i>	Fig	B	50
<i>Fraxinus species</i>	Ash	B	30
<i>Geijera parviflora</i>	Australian Willow	A	15
<i>Ginkgo biloba</i>	Maidenhair Tree	A	15
<i>Gleditsia triacanthos</i>	Honey Locust	A	15
<i>Grevillea robusta</i>	Silk Oak	B	
<i>Heteromeles arbutifolia</i>	Toyon	A	15
<i>Hymenosporum flavum</i>	Sweetshade Tree	A	15
<i>Jacaranda mimosifolia</i>	Jacaranda	B	
<i>Juglans californica</i>	Black Walnut	B	
<i>Koelreuteria bipinnata/paniculata</i>	Chinese Flame Tree	B	
<i>Lagerstroemia indica</i>	Crape Myrtle	A	10
<i>Laurus nobilis</i>	Sweet Bay	B	
<i>Leptospermum laevigatum</i>	Australian Tea Tree	A	15
<i>Liquidambar formosana</i>	Chinese Sweet Gum	A	15
<i>L. styraciflua</i>	American Sweet Gum	B	
<i>Liriodendron tulipifera</i>	Tulip Tree	B	
<i>Lithocarpus densiflorus</i>	Tanbark Oak	B	
<i>Lophystemon confertus (Tristania)</i>	Brisbane Box	A	15
<i>Lyonothamnus floribundus</i>	Catalina Ironwood	A	15
<i>Magnolia grandiflora</i>	Southern Magnolia	B	
<i>M. X soulangeana</i>	Saucer Magnolia	A	10
<i>Maytenus boaria</i>	Mayten Tree	A	10
<i>Melaleuca quinquenervia</i>	Cajeput Tree	A	15
<i>Metasequoia glyptostroboides</i>	Dawn Redwood	A	15
<i>Metrosideros excelsus</i>	New Zealand Christmas Tree	A	10
<i>Morus alba</i>	White Mulberry	B	
<i>Olea europea</i>	Olive - Fruitless only	A	15
<i>Parkinsonia aculeata</i>	Jerusalem Thorn	A	10
<i>Phoenix dactylifera</i>	Date Palm	B	
<i>Pinus species</i>	Pine	B	75
<i>Pistacia chinensis</i>	Chinese Pistache	B	
<i>Pittosporum phillyraeoides</i>	Willow Pittosporum	A	10
<i>P. rhombifolium</i>	Queensland Pittosporum	B	
<i>Platanus racemosa</i>	California Sycamore	B	
<i>Podocarpus gracilior/macrophyllus</i>	Fern Pine/Yew Pine	B	
<i>Populus fremontii</i>	Fremont Cottonwood	B	
<i>Prosopis chilensis</i>	Chilean Mesquite	B	
<i>P. glandulosa</i>	Honey Mesquite	A	15
<i>Prunus cerasifera 'Atropurpurea'</i>	Purple-leaf Plum	A	10
<i>Punica granatum</i>	Pomegranate	B	
<i>Pyrus calleryana/kawakamii</i>	Ornamental Pear	A	15
<i>Quercus species</i>	Oak	B	30
<i>Rhus lancea</i>	African Sumac	B	

<i>Robinia ambigua</i>	Locust	B	
<i>Sapium sebiferum</i>	Chinese Tallow Tree	B	
<i>Schefflera actinophylla</i>	Queensland Umbrella Tree	A	
<i>Sophora japonica</i>	Japanese Pagoda Tree	B	
<i>Stenocarpus sinuatus</i>	Firewheel Tree	A	10
<i>Syagrus romanzoffianum</i>	Queen Palm	A	
<i>Tabebuia species</i>	Trumpet Tree	A	15
<i>Tipuana tipu</i>	Tipu Tree	B	
<i>Tupidanthus calyptratus</i>	Tupidanthus	A	
<i>Trachycarpus fortunei</i>	Windmill Palm	A	
<i>Umbellularia californica</i>	California Bay	B	
<i>Washingtonia filifera</i>	California Fan Palm	B	30
<i>Zelkova serrata</i>	Sawleaf Zelkova	B	

Source: Los Angeles County Fire Department, Fuel Modification Unit.

Notes:

1. The plant list above is intended to be a representative sample of which plants are appropriate in Zones A or B considering their size, moisture content, leaf litter production, and chemical composition.
2. Plants with certain physical and chemical characteristics make them more flammable and should not be planted close to structures in fire hazard areas. These trees should be spaced to allow a minimum canopy clearance at maturity from the structure as specified in the above table.
3. Landscape Designers may choose plants that are not on this list and may be acceptable if their plant characteristics are fuel modification zone appropriate.
4. Additionally, selecting regionally appropriate plants and the consideration of climate and microclimate adaptability is the responsibility of the Landscape Designer.

Appendix C

Los Angeles County Fire Department's Undesirable Plant List in Fuel Modification Zones

Los Angeles County Fire Department's: Undesirable Plant List by FMZ

Botanical Name	Common Name	Comment ¹
<i>Adenostoma fasciculatum</i>	Chamise	F
<i>Adenostoma sparsifolium</i>	Red Shank	F
<i>Artemesia californica</i>	California Sagebrush	F
<i>Carpobrotus edulis</i>	Hottentot-fig	F, I
<i>Cortaderia spp.</i>	Pampas Grass	F, I
<i>Cupressus spp.</i>	Cypress	F
<i>Eriogonum fasciculatum</i>	Common Buckwheat	F
<i>Eucalyptus spp.</i>	Eucalyptus	F
<i>Jasminum humile</i>	Italian Jasmine	F
<i>Plumbago auriculata</i>	Cape Plumbago	F
<i>Tecoma capensis</i>	Cape Honeysuckle	F

Source: Los Angeles County Fire Department, Fuel Modification Unit.

Notes:

1. F = flammable, I = Invasive
2. Certain plants are considered to be undesirable in the landscape due to characteristics that make them highly flammable. These characteristics can be either physical or chemical. Physical properties would include large amounts of dead material retained within the plant, rough or peeling bark, and the production of copious amounts of litter. Chemical properties include the presence of volatile substances such as oils, resins, wax, and pitch. Plants with these characteristics should not be planted close to structures in fire hazard areas. These species are typically referred to as "Target Species" since their complete or partial removal from the landscape is a critical part of hazard reduction. Therefore, any plant listed in the above table is not allowed as part of an acceptable Fuel Modification Plan.
3. Plants on this list that are considered invasive are a partial list of commonly found plants. There are many other plants considered invasive that should not be planted in a fuel modification zone and they can be found on The California Invasive Plant Council's Website www.cal-ipc.org/ip/inventory/index.php. Other plants not considered invasive at this time may be determined to be invasive after further study.
4. For the purpose of using this list as a guide in selecting plant material, it is stipulated that all plant material will burn under various conditions.
5. The absence of a particular plant, shrub, groundcover, or tree, from this list does not necessarily mean it is fire resistive.
6. All vegetation used in Fuel Modification Zones and elsewhere within the Chadwick Ranch Estates Project site shall be subject to approval of the L.A. County Fire Department's Fuel Modification Unit or Fire Code official.

Appendix D

Los Angeles County Fire Department's Repopulation Information Guide Sheet

REPOPULATION

GENERAL INFORMATION

This document contains important general information and resources. Specific repopulation information for the Lake Fire, when available, can be found in the *News Release/Media Advisory Section* and/or on the current *Incident Update Information Sheet*. Click [here](#) to return to the Lake Fire Status webpage when you have finished reading this information.

REPOPULATION – GENERAL INFORMATION

Frequently asked question: The fire is out in my area; why can't I go home?

The Los Angeles County Fire Department recognizes that evacuation orders can cause undue strain on those eager to return home. Please understand that incident commanders are continuously evaluating both fire and infrastructure conditions so that repopulation can occur as quickly as possible, but not at the expense of your safety. **YOUR SAFETY IS OUR PRIMARY CONCERN.**

Some, but not all, of the factors that need to be considered before any evacuations can be lifted are:

- Amount of fire personnel still working in an area and the type of work being performed.
- Damage to roads/guardrails, etc. that must be repaired prior to allowing public access.
- Removal of trees or large debris impacting the roadway.
- Damage to utility infrastructure that must be repaired prior to allowing public access (e.g., clearing power lines from roadways, replacing downed power poles, etc.).
- Public health considerations.

When evacuations are lifted and repopulation begins to occur, it may sometimes include the entire evacuation area but, more likely, will affect only one portion of the evacuation area at a time. Repopulating in segments not only allows us to get some residents home as quickly as possible, but also reduces the impact on law enforcement officials who need to check for identification when these areas are reopened to residents only (which is usually the case).

When an area is repopulated, we ask those residents to please be mindful of people working in the area as essential services continue to be restored. Stay vigilant as you drive into areas that have been impacted by the fire as road crews, firefighters, and other personnel are focused on completing their assignments. As traffic flow is introduced into these areas, people may be more focused on the damage and not aware of their immediate surroundings. Please stay alert and pay attention.

REPOPULATION

GENERAL INFORMATION

As the area is repopulated, please be aware that there may be intermittent power outages and associated street closures as power is restored or equipment is repaired throughout the impacted areas.

Because there are many hazards that can exist when returning to your home after a wildfire, we urge you to take safety precautions, such as personal protective equipment (breathing protection, proper clothing, gloves, boots, and eye/face protection). Click [here](#) to learn more about how to safely re-enter areas burned by wildfire.

#

Appendix E

City of Bradbury Water Supply Standards

CHAPTER 8. - WATER SERVICE REQUIREMENTS

Sec. 17.08.010. - Water service requirements.

- (a) Minimum requirement. With respect to water service, the following water service requirements are hereby established and shall require that any new construction of habitable structures and accessory buildings over 1,000 square feet of interior additions or remodeling of habitable structures or accessory buildings which adds over 1,000 square feet within the City and for which a permit is required to be issued:

Lot Size	Any Lot
Fire Flow Req.	1,250 GPM
Duration Req.	Two Hours
Fire Hydrant Spacing	500 Feet

- (b) Service. All such water service shall be connected to the existing domestic water service system.
- (c) Computation of available fire flow shall be based upon a minimum of 20 pounds per square inch gauge of residual operation pressure remaining in the street main from which the flow is measured.
- (d) The City Council may reduce the 1,250 GPM fire flow requirement upon the recommendation of the Planning Commission in exceptional circumstances and where the applicant proves to the satisfaction of the Council that the condition set forth in Chapter 4 of the Bradbury Zoning Code exist.

Bradbury Municipal Code, Title IX—Development Code

May 1, 2013 **Chapter 1—Zoning Regulations** Index Page 2

Bradbury Municipal Code, Title XVII—Building Regulations

(Prior Code, § 8700; Ord. No. 347U, § 9, 3-21-2017; Ord. No. 347, § 9, 6-20-2017)

Appendix F
City of Bradbury General Plan Sections

City of Bradbury General Plan Policies

1.1 Land Use Goals, Objectives, and Policies

1.1.1 Land Use Goals

The objectives and policies expressed throughout the General Plan shall be based on achieving and implementing the following goals:

1. Financial sustainability.
 2. Independent local government.
 3. Local responsive and responsible governance.
 4. Quiet and peaceful living environment.
 5. Safety community.
 6. Compatibility between rural agriculture and residential estate development.
 7. Balance the City's rural character, including agricultural opportunities, preservation of open-space and natural topography, with residential necessities such as traditional municipal services and utilities.
 8. Living/housing opportunities for all ages and economic levels.
 9. Services for residents that encompass and are sensitive to an aging population and cultural diversity.
- Land Use Goal No. 1. The Land Use Element maintains the existing rural residential character of the City. The element designates the general location, distribution, and extent of existing and permitted development.
 - Land Use Goal No. 2. Preserve the identity, image, and environmental quality of the hillside and open space areas in perpetuity by enforcing the Hillside Development Standard.

1.1.2 Land Use Objectives

- Land Use Objective No. 1. To maintain the existing character of the community and to preserve those environmental resources and amenities that make the City of Bradbury a desirable place to live.

1.1.3 Land Use Policies

- Land Use Policy No. 1. The residential character of the community and environmental resources important to the City will be maintained.

1.1.4 Land Uses Implementation Programs

The City of Bradbury intends to complete the following items which address the objectives and policies of the Land Use Element of the General Plan:

- Land Use Action No. 1. Encourage as much hillside preservation as possible through the use of conservation easements, acquisition efforts by conservation organizations or preservation as natural preserves that promote the protection of natural hillsides as open-space in perpetuity.
- Land Use Action No. 2. Work with the City of Monrovia to adjust the common municipal boundaries to expand the City of Bradbury to the edge of the Wild Rose Avenue right-of-way to be consistent with the legal boundaries of the Bradbury Estates Community Services District.
- Land Use Action No. 3. Revise the City's Design Guidelines to promote sustainable building and development design alternatives.
- Land Use Action No. 4. Encourage the homeowners associations to consider the update or adoption of design guidelines for their respective jurisdictions.
- Land Use Action No. 5. Engage the community and the homeowner associations to explore the need to control development intensity including but not limited to re-examination of lot coverage definitions, relationship of setbacks and building height and the ratio of main dwelling unit footprints to the total parcel size.
- Land Use Action No. 6. Perform a biennial review of the Hillside Development Standards and update if necessary, to carry out the goals of the General Plan.

1.2 Health and Safety Element Goals, Objectives, and Policies

1.2.1 Safety Goals

- Safety Goal No. 1. To protect the citizens, their property, and public facilities from natural and man-made hazards.
- Safety Goal No. 2. To establish, maintain and develop awareness on the part of all residents of Bradbury as to how to react to protect themselves and each other, in the event of a natural or man-made hazard or disaster.

- Safety Goal No. 3. To achieve a greater sense of citizen satisfaction with the safety services within the community, through constantly monitoring the effective and efficient staffing of safety service personnel.
- Safety Goal No. 4. To minimize the risk to persons and property due to seismic activity.
- Safety Goal No. 5. To minimize the risk to lives and property due to fire hazards.
- Safety Goal No. 6. To minimize the risk to persons and property due to the use and storage of hazardous materials.
- Safety Goal No. 7. Protect the community from floods and landslides.
- Safety Goal No. 8. Assure that existing and new development addresses fire protection in a proactive and preventative way.

1.2.2 Safety Objectives

- Safety Objective No. 1. Prepare the community for expected or unexpected disasters resulting from natural or man-made causes.
- Safety Objective No. 2. Prepare the residents of Bradbury to be aware of potential hazards and disasters and to be prepared to be self-reliant for at least seven-days in the event of a disaster.
- Safety Objective No. 3. Communicate with Bradbury residents through all available media, that safety personnel are properly trained to provide assistance in the event of a disaster.
- Safety Objective No. 4. Implement the City's Hazard Mitigation Plan in a timely manner.
- Safety Objective No. 5. Reduce the possibility of hazardous materials becoming a health and safety issue within the community.
- Safety Objective No. 6. Assure that potential flooding and landslide hazards are reviewed during new development.
- Safety Objective No. 7. Ensure that adequate service levels of fire protection are maintained in the City.

1.2.3 Safety Policies

- Safety Policy No. 1. Support community programs that train volunteers to assist "First Responders" in the implementation of the Hazard Mitigation Plan programs.
- Safety Policy No. 2. Implement precautionary measures in high risk areas to reduce injury and loss of property caused by natural or manmade hazards.

- Safety Policy No. 3. Review all development proposals for compliance with established hazard avoidance criteria.
- Safety Policy No. 4. Provide adequate levels of service to ensure that the residents are protected to the best of the City's ability from natural and manmade disasters.
- Safety Policy No. 5. Cooperate with Federal, State and County agencies responsible for the enforcement of all health and safety laws and regulations.
- Safety Policy No. 6. Establish and maintain a variety of media sources to enable interactive safety awareness and preparedness educational opportunities for the residents.
- Safety Policy No. 7. Obtain materials and support the dissemination of written information to all Bradbury households regarding minimizing or avoiding hazards within the home.
- Safety Policy No. 8. Provide opportunities to continually advise and update community residents regarding actions and activities they should engage in after a significant natural or manmade disaster.
- Safety Policy No. 9. Support continuing review and updating of the City's Disaster Preparedness Program manual.
- Safety Policy No. 10. Work closely with adjacent cities, County, State and Federal agencies to inform, monitor and communicate the presence of wild animals.
- Safety Policy No. 11. Maintain and evaluate the level of safety services available to the community.
- Safety Policy No. 12. Restrict development in areas prone to seismic hazards.
- Safety Policy No. 13. Continue to support "mutual assistance" agreements between local and State firefighting agencies.
- Safety Policy No. 14. Continue to support programs to reduce fire hazards within the community.
- Safety Policy No. 15. Provide appropriate firefighting equipment, personnel, and peak load water supply.
- Safety Policy No. 16. Provide access to potable water for emergency purposes.
- Safety Policy No. 17. Regulate and monitor, to the extent possible, the delivery, use and storage of hazardous materials within the City.
- Safety Policy No. 18. Require all existing and new development to install and maintain adequate smoke detection systems.
- Safety Policy No. 19. All new development to install fire sprinkler systems.
- Safety Policy No. 20. Require that all new development incorporate sufficient measures to mitigate flood and landslide hazards including but not limited to on-site drainage systems and grading of site to minimize storm-water runoff.

1.2.4 Safety Implementation Program

The City of Bradbury intends to complete the following items which address the objectives and policies of the Safety Element of the General Plan:

- Safety Action No. 1. Adopt ordinances that require new development to utilize techniques and equipment that reduce consumption of renewable resources.
- Safety Action No. 2. Assure that the land use element recognizes and addresses seismic threats from development in areas of the City.
- Safety Action No. 3. Promote public education about fire safety at home.
- Safety Action No. 4. Promote public education about disaster preparedness.
- Safety Action No. 5. Update the hillside development standards which include fire prevention design measures.
- Safety Action No. 6. Continue to make emergency and disaster preparedness a community priority.
- Safety Action No. 7. Update and review the Emergency Operations Plan annually.
- Safety Action No. 8. City staff to continue to work with the LACFD on brush removal and weed abatement from April to June.
- Safety Action No. 9. Conduct public outreach on wildfire prevention awareness.
- Safety Action No. 10. Promote voluntary efforts to tree trimming and brush and weed abatement.
- Safety Action No. 11. Maintain and update the multi-hazard emergency plan for the City.
- Safety Action No. 12. Continue to support and participation with the Emergency Response Committee.

Appendix G

BehavePlus Fire Behavior Analysis Summary

BehavePlus Fire Behavior Modeling Analysis

1.1 BehavePlus Fire Behavior Modeling History

Fire behavior modeling has been used by researchers for approximately 50+ years to predict how a fire will move through a given landscape (Linn 2003). The models have had varied complexities and applications throughout the years. One model has become the most widely used as the industry standard for predicting fire behavior on a given landscape. That model, known as “BEHAVE”, was developed by the U. S. Government (USDA Forest Service, Rocky Mountain Research Station) and has been in use since 1984. Since that time, it has undergone continued research, improvements, and refinement. The current version, BehavePlus 6.0, includes the latest updates incorporating years of research and testing. Numerous studies have been completed testing the validity of the fire behavior models’ ability to predict fire behavior given site specific inputs. One of the most successful ways the model has been improved has been through post-wildfire modeling (Brown 1972, Lawson 1972, Sneeuwjagt and Frandsen 1977, Andrews 1980, Brown 1982, Rothermel and Rinehart 1983, Bushey 1985, McAlpine and Xanthopoulos 1989, Grabner, et. al. 1994, Marsden-Smedley and Catchpole 1995, Grabner 1996, Alexander 1998, Grabner et al. 2001, Arca et al. 2005). In this type of study, Behave is used to model fire behavior based on pre-fire conditions in an area that recently burned. Real-world fire behavior, documented during the wildfire, can then be compared to the prediction results of Behave and refinements to the fuel models incorporated, retested, and so on.

Fire behavior modeling conducted on this site includes a relatively high-level of detail and analysis which results in reasonably accurate representations of how wildfire may move through available fuels on and adjacent the property. Fire behavior calculations are based on site-specific fuel characteristics supported by fire science research that analyzes heat transfer related to specific fire behavior. To objectively predict flame lengths, spread rates, and fireline intensities, this analysis incorporated predominant fuel characteristics, slope percentages, and representative fuel models observed on site. The BehavePlus fire behavior modeling system was used to analyze anticipated fire behavior within and adjacent to key areas just outside of the proposed lots. Predicting wildland fire behavior is not an exact science. As such, the movement of a fire will likely never be fully predictable, especially considering the variations in weather and the limits of weather forecasting. Nevertheless, practiced and experienced judgment, coupled with a validated fire behavior modeling system, results in useful and accurate fire prevention planning information. To be used effectively, the basic assumptions and limitations of BehavePlus must be understood.

- First, it must be realized that the fire model describes fire behavior only in the flaming front. The primary driving force in the predictive calculations is dead fuels less than one-quarter inch in diameter. These are the fine fuels that carry fire. Fuels greater than one inch have little effect while fuels greater than three inches have no effect on fire behavior.
- Second, the model bases calculations and descriptions on a wildfire spreading through surface fuels that are within six feet of the ground and contiguous to the ground. Surface fuels are often classified as grass, brush, litter, or slash.
- Third, the software assumes that weather and topography are uniform. However, because wildfires almost always burn under non-uniform conditions, length of projection period and choice of fuel model must be carefully considered to obtain useful predictions.
- Fourth, the BehavePlus fire behavior computer modeling system was not intended for determining sufficient fuel modification zone/defensible space widths. However, it does provide the average length of

the flames, which is a key element for determining “defensible space” distances for minimizing structure ignition.

Although BehavePlus has some limitations, it can still provide valuable fire behavior predictions which can be used as a tool in the decision-making process. In order to make reliable estimates of fire behavior, one must understand the relationship of fuels to the fire environment and be able to recognize the variations in these fuels. Natural fuels are made up of the various components of vegetation, both live and dead, that occur on a site. The type and quantity will depend upon the soil, climate, geographic features, and the fire history of the site. The major fuel groups of grass, shrub, trees, and slash are defined by their constituent types and quantities of litter and duff layers, dead woody material, grasses and forbs, shrubs, regeneration, and trees. Fire behavior can be predicted largely by analyzing the characteristics of these fuels. Fire behavior is affected by seven principal fuel characteristics: fuel loading, size and shape, compactness, horizontal continuity, vertical arrangement, moisture content, and chemical properties.

The seven fuel characteristics help define the 13 standard fire behavior fuel models¹ and the five custom fuel models developed for Southern California². According to the model classifications, fuel models used in BehavePlus have been classified into four groups, based upon fuel loading (tons/acre), fuel height, and surface to volume ratio. Observation of the fuels in the field (on site) determines which fuel models should be applied in BehavePlus. The following describes the distribution of fuel models among general vegetation types for the standard 13 fuel models and the custom Southern California fuel models:

- Grasses Fuel Models 1 through 3
- Brush Fuel Models 4 through 7, SCAL 14 through 18
- Timber Fuel Models 8 through 10
- Logging Slash Fuel Models 11 through 13

In addition, the aforementioned fuel characteristics were utilized in the recent development of 40 new fire behavior fuel models³ developed for use in BehavePlus modeling efforts. These new models attempt to improve the accuracy of the standard 13 fuel models outside of severe fire season conditions, and to allow for the simulation of fuel treatment prescriptions. The following describes the distribution of fuel models among general vegetation types for the new 40 fuel models:

- Non-Burnable Models NB1, NB2, NB3, NB8, NB9
- Grass Models GR1 through GR9
- Grass-shrub Models GS1 through GS4
- Shrub Models SH1 through SH9
- Timber-understory Models TU1 through TU5
- Timber litter Models TL1 through TL9

¹ Anderson, Hal E. 1982. Aids to Determining Fuel Models for Estimating Fire Behavior. USDA Forest Service Gen. Tech. Report INT-122. Intermountain Forest and Range Experiment Station, Ogden, UT.

² Weise, D.R. and J. Regelbrugge. 1997. Recent chaparral fuel modeling efforts. Prescribed Fire and Effects Research Unit, Riverside Fire Laboratory, Pacific Southwest Research Station. 5p.

³ Scott, Joe H. and Robert E. Burgan. 2005. Standard fire behavior fuel models: a comprehensive set for use with Rothermel's surface fire spread model. Gen. Tech. Rep. RMRS-GTR-153. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 72 p.

- Slash blowdown Models SB1 through SB4

BehavePlus software was used in the development of the City of Bradbury Community Wildfire Protection Plan (CWPP) in order to evaluate potential fire behavior for the surrounding areas of the City. Existing site conditions were evaluated, and local weather data was incorporated into the BehavePlus modeling runs.

1.2 Fire Models

Dudek utilized the BehavePlus software package to analyze fire behavior potential for the City of Bradbury. As is customary for this type of analysis, two fire scenarios were evaluated, including one summer, onshore weather condition (northwest from the City) and two extreme fall, offshore weather condition (north and northeast of the City). Fuels and terrain at and beyond this distance can produce flying embers that may affect the more interior homes of the City. It is the fuels adjacent to and within fuel modification zones that would have the potential to affect the structures within the City from a radiant and convective heat perspective as well as from direct flame impingement. BehavePlus software requires site-specific variables for surface fire spread analysis, including fuel type, fuel moisture, wind speed, and slope data. The output variables used in this analysis include flame length (feet), rate of spread (feet/minute), fireline intensity (BTU/feet/second), and spotting distance (miles). The following provides a description of the input variables used in processing the BehavePlus models for the naturally vegetated hillsides adjacent to the City. In addition, data sources are cited and any assumptions made during the modeling process are described.

1.2.1 Vegetation (Fuels)

To support the fire behavior modeling efforts conducted for this CWPP, the different vegetation types observed adjacent to the City were classified into the aforementioned numeric fuel models. As is customary for this type of analysis, the terrain and fuels directly adjacent to the City and within the naturally vegetated hillsides of the San Gabriel Mountains are used for determining flame lengths and fire spread. It is these fuels that would have the potential to affect the structures throughout the City from a radiant and convective heat perspective as well as from direct flame impingement.

Vegetation types were derived from a site visit that was conducted by a Dudek Fire Protection Planner. Based on the site visit, four different fuel models were used in the fire behavior modeling effort presented herein. Fuel model attributes are summarized in Table G-1. Modeled areas include Coast live oak and western sycamore Riparian with non-native chaparral and shrub understory (Fuel Model SH4 = Timber-Shrub) occur near the base of the San Gabriel Mountains, north of the City. Mature tree canopies for coast live oak trees (*Quercus agrifolia*) and western sycamore trees (*Platanus racemosa*) are assumed to have a canopy base height ranging from 35 to 45 feet off the ground. Canopy bulk density, the weight of canopy fuels per cubic foot of volume, is assumed to be the maximum allowable value in BehavePlus to represent broadleaf trees which, given canopy density and leaf size, have more weight per area than conifer trees (the standard for this value input in BehavePlus (Heinsch and Andrews 2010)). Foliar moisture, the moisture content of canopy foliage, is assumed to be 100%, a reasonable estimate in lieu of site-specific data (Scott and Reinhardt 2001).

Table G-1: Existing Fuel Model Characteristics

Fuel Model	Description	Location	Fuel Bed Depth (Feet)
Sh4	Riparian Habitat (Timber Shrub)	Riverbed that runs near the base of the San Gabriel Mountains, north of the City of Bradbury	>8.0 ft.
Sh5	High Load, Dry Climate Shrub	Scrub and chaparral naturally growing throughout the hillsides of the San Gabriel Mountains north of the City of Bradbury.	>4.0 ft.
Gs2	Moderate load, Dry Climate Grass-Shrub	Scrub and grasses naturally growing throughout the hillsides of the San Gabriel Mountains north of the City of Bradbury.	<3.0 ft.
FM4	Chaparral	Chaparral fuel model naturally growing throughout the hillsides of the San Gabriel Mountains north of the City of Bradbury	>6.0 ft.

1.2.2 Topography

Slope is a measure of angle in degrees from horizontal and can be presented in units of degrees or percent. Slope is important in fire behavior analysis as it affects the exposure of fuel beds. Additionally, fire burning uphill spreads faster than those burning on flat terrain or downhill as uphill vegetation is pre-heated and dried in advance of the flaming front, resulting in faster ignition rates. Slope values ranging from 18 to 45% were measured around the perimeter of the City from U.S. Geological Survey (USGS) topographic maps.

1.2.3 Weather

Historical weather data for the Bradbury region was utilized in determining appropriate fire behavior modeling inputs for the Proposed Project area fire behavior evaluations. To evaluate different scenarios, data from both the 50th and 97th percentile moisture values were derived from Remote Automated Weather Station (RAWS) and utilized in the fire behavior modeling efforts conducted in support of this report. Weather data sets from the Henninger Flats Station RAWS⁴ were utilized in the fire modeling runs.

RAWS fuel moisture and wind speed data were processed utilizing the Fire Family Plus software package to determine atypical (97th percentile) and typical (50th percentile) weather conditions. Data from the RAWS was evaluated from August 1 through November 30 for each year between 1994 and 2018 (extent of available data record) for 97th percentile weather conditions and from June 1 through September 30 for each year between 1994 and 2018 for 50th percentile weather conditions.

Following analysis in Fire Family Plus, fuel moisture information was incorporated into the Initial Fuel Moisture file used as an input in BehavePlus. Wind speed data resulting from the Fire Family Plus analysis was also determined. Initial wind direction and wind speed values for the two BehavePlus runs were manually entered during the data input phase. The input wind speed and direction is roughly an average surface wind at 20 feet above the vegetation over the analysis area. Table G-2 summarizes the wind and weather input variables used in the Fire BehavePlus modeling efforts.

⁴ <https://wrcc.dri.edu/cgi-bin/rawMAIN.pl?caCHEN>
Latitude: 34.1142 Longitude: -118.0536; Elevation: 2,800 ft.)

Table G-2: Variables Used for Fire Behavior Modeling

Model Variable	Summer Weather (50 th Percentile)	Peak Weather (97 th Percentile)
Fuel Models	FM4, Gs2, Sh4 and Sh5	FM4, Gs2, Sh4, and Sh5
1 h fuel moisture	5%	2%
10 h fuel moisture	6%	3%
100 h fuel moisture	9%	5%
Live herbaceous moisture	39%	30%
Live woody moisture	78%	60%
20 ft. wind speed	19 mph (sustained winds)	18 mph (sustained winds); wind gusts of 50 mph
Wind Directions from north (degrees)	200 and 290	0 and 80
Wind adjustment factor	0.4	0.4
Slope (uphill)	18 to 38%	20 to 45%

1.3 Fire Behavior Modeling Efforts

As mentioned, the BehavePlus fire behavior modeling software package was utilized in evaluating anticipated fire behavior adjacent to the Proposed Project site. Three focused analyses were completed, each assuming worst-case fire weather conditions for a fire approaching the City from the north, east, and west/northwest. The results of the modeling effort included anticipated values for surface fires (flame length (feet), rate of spread (mph), and fireline intensity (Btu/ft/s)) and crown fires (critical surface intensity (Btu/ft/s), critical surface flame length (feet), transition ratio (ratio: surface fireline intensity divided by critical surface intensity), transition to crown fire (yes or no), crown fire rate of spread (mph), critical crown rate of spread (mph), active ratio (ratio: crown fire rate of spread divided by critical crown fire rate of spread), active crown fire (yes or no), and fire type (surface, torching, conditional crown, or crowning)). The aforementioned fire behavior variables are an important component in understanding fire risk and fire agency response capabilities. Flame length, the length of the flame of a spreading surface fire within the flaming front, is measured from midway in the active flaming combustion zone to the average tip of the flames (Andrews, Bevins, and Seli 2008). Fireline intensity is a measure of heat output from the flaming front, and also affects the potential for a surface fire to transition to a crown fire. Fire spread rate represents the speed at which the fire progresses through surface fuels and is another important variable in initial attack and fire suppression efforts (Rothermel and Rinehart 1983). Spotting distance is the distance a firebrand or ember can travel down wind and ignite receptive fuel beds.

1.4 Fire Behavior Modeling Results

The results presented in Table G-3 values based on inputs to the BehavePlus software and are not intended to capture changing fire behavior as it moves across a landscape. Changes in slope, weather, or pockets of different fuel types are not accounted for in this analysis. For planning purposes, the averaged worst-case fire behavior is the most useful information for conservative fuel modification design. Model results should be used as a basis for planning only, as actual fire behavior for a given location will be affected by many factors, including unique weather patterns, small-scale topographic variations, or changing vegetation patterns.

Based on the BehavePlus analysis, worst-case fire behavior is expected in untreated, surface shrub and chaparral fuels northeast and east of the proposed Project site under Peak weather conditions (represented by Fall Weather,

Scenario 3). The fire is anticipated to be a wind-driven fire from the north/northeast during the fall. Under such conditions, expected surface flame lengths reach 42 feet with wind speeds of 50+ mph. Under this scenario, fireline intensities reach 18,499 BTU/feet/second with fast spread rates of 6.2 mph and could have a spotting distance up to 2.3 miles away.

Table G-3: RAWS BehavePlus Fire Behavior Model Results – Existing Conditions

Fire Scenario	Flame Length ¹ (feet)	Spread Rate ¹ (mph ⁵)	Fireline Intensity ¹ (Btu/ft/s)	Spot Fire ¹ (miles)	Surface Fire to Tree Crown Fire	Tree Crown Fire Rate of Spread (mph)	Crown Fire Flame Length (feet)
<i>Scenario 1: 38% slope; Summer Onshore Wind (50th percentile)</i>							
Riparian Habitat - Timber Shrub ^{2,3} (Sh4)	10.9'	0.9	1,013	0.5	Crowning ⁴	0.8	110.8'
Sagebrush scrub (Sh5)	19.5'	1.5	3,599	0.7	Crowning ⁴	0.8	116.3
Moderate load grass-shrub (Gs2)	7.8'	2.3	9,509	0.4	Crowning ⁴	0.8	109.0
Chaparral (FM 4)	30.4'	0.7	500	1.0	Crowning ⁴	0.8	123.2
<i>Scenario 2: 43% slope; Fall Offshore, Extreme Winds (97th percentile)</i>							
Riparian Habitat - Timber Shrub (Sh4)	12.8' (23.5') ⁶	1.1 (4.2)	1,453 (5,471)	0.5 (1.5)	Crowning ⁴	1.0 (4.1)	133.1'
Sagebrush scrub (Sh5)	25.0' (41.8')	2.1 (6.4)	6,184 (18,966)	0.8 (2.3)	Crowning ⁴	1.0 (4.1)	141.6'
Moderate load grass-shrub (Gs2)	10.1' (19.1')	1.0 (3.9)	870 (3,450)	0.4 (1.4)	Crowning ⁴	1.0 (4.1)	131.0'
Chaparral (FM 4)	38.1' (70.4')	3.1 (11.9)	15,517 (58,853)	1.1 (3.3)	Crowning ⁴	1.0 (4.1)	151.3'
<i>Scenario 3: 20% slope; Fall, Offshore, Extreme Winds (97th percentile)</i>							
Sagebrush scrub (Sh5)	24.0' (41.3')	1.9 (6.2)	5,697 (18,499)	0.8 (2.3)	No	N/A	N/A
Moderate load grass-shrub (Gs2)	9.7' (18.9')	0.9 (3.8)	797 (3,380)	0.4 (1.3)	No	N/A	N/A
Chaparral (FM 4)	36.5' (69.6')	2.9 (11.6)	14,172 (57,575)	1.1 (3.3)	No	N/A	N/A

Note:

1. Wind-driven surface fire.
2. Riparian overstory torching increases fire intensity. Modeling included canopy fuel over Sh4, which represents surface fuels beneath the tree canopies.
3. A surface fire in the mixed sycamore riparian forest would transition into the tree canopies generating flame lengths higher than the average tree height (25 feet). Viable airborne embers could be carried downwind for approximately 1.0 mile and ignite receptive fuels.
4. Crowning= fire is spreading through the overstory crowns.
5. MPH=miles per hour
6. Spotting distance from a wind driven surface fire; it should be noted that the wind mph in parenthesis represent peak gusts of 50 mph

The following describes the fire behavior variables (Heisch and Andrews 2010) as presented in Table G-3:

Surface Fire:

- **Flame Length (feet):** The flame length of a spreading surface fire within the flaming front is measured from midway in the active flaming combustion zone to the average tip of the flames.
- **Fireline Intensity (Btu/ft/s):** Fireline intensity is the heat energy release per unit time from a one-foot wide section of the fuel bed extending from the front to the rear of the flaming zone. Fireline intensity is a function

of rate of spread and heat per unit area, and is directly related to flame length. Fireline intensity and the flame length are related to the heat felt by a person standing next to the flames.

- Surface Rate of Spread (mph): Surface rate of spread is the "speed" the fire travels through the surface fuels. Surface fuels include the litter, grass, brush and other dead and live vegetation within about 6 feet of the ground.

Crown Fire:

- Transition to Crown Fire: Indicates whether conditions for transition from surface to crown fire are likely. Calculation depends on the transition ratio. If the transition ratio is greater than or equal to 1, then transition to crown fire is Yes. If the transition ratio is less than 1, then transition to crown fire is No.
- Crown Fire Rate of Spread (mph): The forward spread rate of a crown fire. It is the overall spread for a sustained run over several hours. The spread rate includes the effects of spotting. It is calculated from 20-ft wind speed and surface fuel moisture values. It does not consider a description of the overstory.

Fire Type: Fire type is one of the following four types: surface (understory fire), torching (passive crown fire; surface fire with occasional torching trees), conditional crown (active crown fire possible if the fire transitions to the overstory), and crowning (active crown fire; fire spreading through the overstory crowns). Dependent on the variables: transition to crown fire and active crown fire.

The information in Table G-4 presents an interpretation of the outputs for five fire behavior variables as related to fire suppression efforts. The results of fire behavior modeling efforts are presented in Table G-3. Identification of modeling run locations is presented graphically in Figure 8 of the CWPP.

Table G-4: Fire Suppression Interpretation

Flame Length (ft)	Fireline Intensity (BTU/ft/s)	Interpretations
Under 4 feet	Under 100 BTU/ft/s	Fires can generally be attacked at the head or flanks by persons using hand tools. Hand line should hold the fire.
4 to 8 feet	100-500 BTU/ft/s	Fires are too intense for direct attack on the head by persons using hand tools. Hand line cannot be relied on to hold the fire. Equipment such as dozers, pumpers, and retardant aircraft can be effective.
8 to 11 feet	500-1000 BTU/ft/s	Fires may present serious control problems – torching out, crowning, and spotting. Control efforts at the fire head will probably be ineffective.
Over 11 feet	Over 1000 BTU/ft/s	Crowning, spotting, and major fire runs are probable. Control efforts at head of fire are ineffective.

Appendix H

FlamMap Fire Behavior Analysis Summary

FlamMap Fire Behavior Modeling Analysis

1.1 FlamMap Fire Behavior Modeling

The FlamMap software package (Finney et al. 2015) was used to evaluate fire hazard in the City. The FlamMap software package is a publicly available resource available through the Fire, Fuel, and Smoke Science Program of the U.S. Forest Service. FlamMap uses the same fire spread equations built into the BehavePlus software package but allows for a geographical presentation of fire behavior outputs as it applies the calculations to each pixel in an associated geographic information system (GIS) landscape (Finney 1998). FlamMap is a GIS-based software package that models potential fire behavior for constant weather conditions (wind and fuel moisture) and generates map files of potential fire behavior characteristics (e.g., flame length, crown fire activity). FlamMap outputs represent fire behavior calculated for each pixel within the analysis area independently and does not calculate fire spread across a landscape. The software requires a minimum of five input variables, including elevation, slope, aspect, fuel model, and canopy cover. To use the crown fire activity model for forested land cover types, additional input variables are necessary, including stand height, canopy base height, and canopy bulk density. Wind and weather data are also critical components to FlamMap modeling efforts. The following sections present a background on fire behavior modeling and present the methods and data sources used in performing the FlamMap fire behavior modeling analysis for this CWPP.

1.2 Fire Behavior Modeling Background

Predicting wildland fire behavior is not an exact science due to the many variables that must be considered. As such, the movement of a fire will likely never be fully predictable, especially considering the variations in weather, the limits of weather forecasting, and the weather that is often created by firestorms. Nevertheless, practiced and experienced judgment, coupled with a validated fire behavior modeling system, results in useful and accurate fire information (Rothermel 1993). To be used effectively, the basic assumptions and limitations of fire behavior modeling applications must be understood.

- First, it must be realized that the fire model describes fire behavior only in the flaming front. The primary driving force in the predictive calculations is dead fuel less than 0.25 inches in diameter. These are the fine fuels that carry fire. Fuels greater than 1 inch in diameter have little effect, while fuels greater than 3 inches in diameter have no effect on fire behavior.
- Second, the model bases surface fire calculations and descriptions on a wildfire spreading through fuels that are within 6 feet of the ground and contiguous to the ground. Surface fuels are classified as grass, grass/shrub, shrub, timber litter, timber understory, or slash.
- Third, the software assumes that weather is uniform. However, because wildfires almost always burn under non-uniform conditions, creating their own weather, length of projection period and choice of fuel model must be carefully considered to obtain useful predictions.
- Fourth, fire behavior computer modeling systems are not intended for determining sufficient fuel modification zone/defensible space widths. However, results can provide the average length of the flames, which is a key element for determining defensible space distances for minimizing structure ignition.

FlamMap can provide valuable fire behavior predictions, which can be used as a tool in the decision-making process. In order to make reliable estimates of fire behavior, one must understand the relationship of fuels to the fire environment and be able to recognize the variations in these fuels. Fuels are made up of the various components of vegetation, both live and dead, that occur in a particular landscape. The type and quantity will depend upon soil, climate, terrain, and management and disturbance (e.g., fire) history. The major fuel groups of grass, grass/shrub, shrub, trees, tree litter, and slash are defined by their constituent types and quantities of litter and duff layers, dead woody material, grasses and forbs, shrubs, regeneration, and trees. Fire behavior can be predicted largely by analyzing the characteristics of these fuels. Fire behavior is affected by seven principal fuel characteristics: fuel loading, size and shape, compactness, horizontal continuity, vertical arrangement, moisture content, and chemical properties.

The seven (7) principal fuel characteristics help define the 13 standard fire behavior fuel models (Anderson 1982). According to the model classifications, fuel models used for fire behavior modeling (BehavePlus, FlamMap, FARSITE) have been classified into four groups, based upon fuel loading (tons/acre), fuel height, and surface area-to-volume ratio. Observation of the fuels in the field determines which fuel models should be applied in modeling efforts. The following describes the distribution of fuel models among general vegetation types for the standard 13 fuel models:

- Grasses – fuel models 1 through 3
- Brush – fuel models 4 through 7
- Timber – fuel models 8 through 10
- Logging slash – fuel models 11 through 13

In addition, the aforementioned fuel characteristics were utilized in the development of 40 newer fire behavior fuel models (plus 5 non-burnable models) (Scott and Burgan 2005) developed for use in the BehavePlus, FlamMap, and FARSITE modeling systems. These newer models attempt to improve the accuracy of the 13 standard fuel models and to allow for the simulation of fuel treatment prescriptions. The following describes the distribution of fuel models among general vegetation types for the 40 newer fuel models:

- Non-burnable – models NB1, NB2, NB3, NB8, NB9
- Grass – models GR1 through GR9
- Grass shrub – models GS1 through GS4
- Shrub – models SH1 through SH9
- Timber understory – models TU1 through TU5
- Timber litter – models TL1 through TL9
- Slash blowdown – models SB1 through SB4

1.3 FlamMap Analysis

1.3.1 Base Mapping Data

FlamMap (version 6.0) was used for the modeling analysis. The base data for the modeling analysis was obtained from the LANDFIRE (Landscape Fire and Resource Management Planning Tools) data distribution site (LANDFIRE 2019). LANDFIRE is shared program between the wildland fire management programs of the U.S. Forest Service

and U.S. Department of the Interior and provides landscape-scale GIS data layers. LANDFIRE Remap (LF 2.0.0) data file was obtained and used for the model base data set. The LF Remap represents circa 2016 ground conditions and has a data resolution of 30 meters. The LANDFIRE data was obtained in a Landscape file format, which is a composite GIS file that includes the following layers:

- **Elevation:** Necessary for adiabatic adjustment of temperature and humidity and for conversion of fire spread between horizontal and slope distances.
- **Slope:** Necessary for computing slope effects on fire spread and solar radiance.
- **Aspect:** Important in determining the solar exposure of grid cells.
- **Fuel Model:** A numerical assignment of vegetation/fuels that represent distinct distributions of fuel loadings found among surface fuel components (live and dead), size classes, and fuel types. The fuel models are described by the most common fire carrying fuel type (grass, brush, timber (tree) litter or timber understory), loading and surface area-to-volume ratio by size class and component, fuelbed depth, and moisture of extinction. The fuel model set used for this analysis was the 40-fuel model set from Scott and Burgan (2005). The models included in the analysis are summarized in Table H-1.

Table H-1. Fuel Models in Modeling Area

Fuel Model	Description
GR1 (101)	Short, Sparse Dry Climate Grass
GR2 (102)	Low Load, Dry Climate Grass
GS1 (121)	Low load, Dry Climate Grass-Shrub
GS2 (122)	Moderate Load, Dry Climate Grass-Shrub
SH1 (141)	Low Load, Dry Climate Shrub
SH2 (142)	Moderate Load Dry Climate Shrub
SH5 (145)	High Load, Dry Climate Shrub
NB1 (91)	Urbane/Developed

- **Canopy Cover:** Necessary for computing shading and wind reduction factors for all fuel models. Canopy cover is measured as the horizontal fraction of the ground that is covered directly overhead by tree canopy.
- **Stand Height:** The representation of the average height of dominant and co-dominant trees in a stand (not the tallest height or average height of all trees). Stand height is used in FlamMap for computing wind reduction to midflame height and spotting distances from torching trees. Stand height is a necessary dataset for utilizing the torching, spotting, and crown fire model in FlamMap.
- **Canopy Base Height:** A variable used for determining transition from surface fire to crown fire; represents the height to the bottom of the live tree crown. Canopy base height is a necessary dataset for utilizing the torching, spotting, and crown fire model in FlamMap.
- **Canopy Bulk Density:** Used to determine the characteristics of crown fires and describes the density of available canopy fuel in a stand. It is defined as the mass of available canopy fuel per canopy volume unit. Canopy bulk density is a necessary data set for utilizing the torching, spotting, and crown fire model in FlamMap.

The FlamMap analysis area encompassed the City of Bradbury plus a buffer of approximately 5 miles. LANDFIRE data layers were projected to the NAD 83, California State Plane, Zone 5 coordinate system. In addition to the Landscape file, wind and weather data were incorporated into the model inputs, as described below.

1.3.2 Wind and Fuel Moisture

In order to utilize weather and fuel moisture variables for the fire behavior modeling area, data from the Henninger Flats Remote Automated Weather Station (RAWS)¹ was analyzed. Utilization of RAWS data is necessary for fire behavior modeling as it includes data for fuel moisture, temperature, relative humidity, and wind speed. The Henninger RAWS is located approximately 16 miles to the northwest of the City. The following summarizes the location and available data ranges for the Henninger RAWS:

Latitude: 34.1142
Longitude: -118.0536
Elevation: 2,800 feet
Data years: 1994 to 2019

Wind and weather data are a required component to fire behavior modeling efforts. The Henninger RAWS data was processed with the FireFamily Plus version 5.0 (FireFamily Plus 2019) software package to determine weather conditions to be incorporated into modeling efforts. The selected weather scenario used 97th percentile conditions to mimic a fire event during Sundowner wind conditions. The analysis period for weather data analysis was May 1–December 31.

These weather values were incorporated into the Initial Fuel Moisture file used as an input in FlamMap. Wind direction and wind speed values for the FlamMap run were manually entered during the data input phase. Table H-2 presents the wind and weather values used in the FlamMap fire behavior modeling runs conducted in support of this CWPP.

Table H-2. FlamMap Weather Input Variables

Model Variable	Value
1-hour fuel moisture	2%
10-hour fuel moisture	3%
100-hour fuel moisture	5%
Live herbaceous moisture*	30%
Live woody moisture	60%
20-foot wind speed (mph)	50 mph (maximum speed)
Wind direction	80 degrees (Santa Ana)

Note:

* Live herbaceous moisture values were lower than 30% so the herbaceous fuels are considered fully cured (Scott and Burgan 2005).

Finally, wind vectors were modeled within the FlamMap runs using the WindNinja tool embedded in the FlamMap software. WindNinja models the effect of topography on wind speed and direction and generates wind vector files for use in the modeling runs. The grid resolution for the WindNinja analysis was set at 60 meters.

1.3.3 Model Outputs

Three output grid files were generated for the FlamMap run and represent flame length, crown fire activity, and spotting potential. Flame length, the length of the flame of a spreading surface fire within the flaming front, is measured from midway in the active flaming combustion zone to the average tip of the flames (Andrews et al. 2008). It is a somewhat subjective and non-scientific measure of fire behavior but is extremely important to fireline

¹ <https://wrcc.dri.edu/cgi-bin/rawMAIN.pl?caCHEN>
Latitude: 34.1142 Longitude: -118.0536; Elevation: 2,800 ft.)

personnel in evaluating fireline intensity and is worth considering as an important fire variable (Rothermel 1993). Flame length values in the resulting grid file are in feet. Table H-3 presents an interpretation of flame length and its relationship to fireline intensity. Fireline intensity is a measure of heat output from the flaming front and also affects the potential for a surface fire to transition to a crown fire.

Table H-3. Fire Suppression Interpretation

Flame Length	Fireline Intensity	Interpretations
Under 4 feet	Under 100 BTU/ft/s	Fires can generally be attacked at the head or flanks by persons using hand tools. Hand line should hold the fire.
4 feet to 8 feet	100–500 BTU/ft/s	Fires are too intense for direct attack on the head by persons using hand tools. Hand line cannot be relied on to hold the fire. Equipment such as dozers, pumpers, and retardant aircraft can be effective.
8 feet to 11 feet	500–1,000 BTU/ft/s	Fires may present serious control problems—torching out, crowning, and spotting. Control efforts at the fire head will probably be ineffective.
Over 11 feet	Over 1,000 BTU/ft/s	Crowning, spotting, and major fire runs are probable. Control efforts at head of fire are ineffective.

Note: BTU/ft/s = British thermal units per foot per second.

Source: Roussopoulos and Johnson 1975.

Model outputs for crown fire activity include three potential options: surface fire, passive crown fire (torching), or active crown fire. Surface fires may transition to crown fire, depending on surface fire intensity and crown characteristics. Ladder fuels facilitate ignition of crown fuels by the surface fire and then transition to some form of crown fire (Seli et al. 2015). As presented in Table H-3, crown fires present significant resistance to control and are a characteristic of extreme fire behavior.

Model outputs for spotting are the maximum spotting distance (in meters) from a crown fire. FlamMap only generates spotting potential where crown fires occur (e.g., in oak woodlands), so this analysis does not account for spotting generated in a fire burning in chaparral vegetation. FlamMap outputs generate point data set coded with the maximum spotting distance. This data set was then buffered to create a spotting potential layer, where the buffer radius equaled the maximum spotting distance. The buffering exercise represented a circular area around each spotting point, which is not an accurate representation of upwind spotting distances (as the modeling scenario utilized a Sundowner wind event). However, this analysis does give an estimate of potential fire hazard associated with spotting (embers) in the downwind area of the City.

A map depicting potential flame length values is presented in Figure 9.

Appendix I

Los Angeles County Fire Department's "Ready Set, GO!" Plan



READY! SET!GO!

YOUR PERSONAL
WILDFIRE ACTION PLAN



fire.lacounty.gov

MESSAGE FROM FIRE CHIEF DARYL L. OSBY

Dear Residents,

Los Angeles County is one of the most beautiful places to live, but for those living in “wildland urban interface areas,” it does not come without risks. With a year-round fire season and ever-growing number of wildfires, firefighters and residents alike are now constantly on heightened alert for the threat of wildfires.

The Los Angeles County Fire Department, along with our partnering agencies, stand ready to quickly respond to contain wildfires, utilizing our firefighting resources from the air and ground to help protect you and your property from wildfire.



But, we can't do this without your cooperation. Preparation and prevention go hand-in-hand. This *Ready! Set! Go!* brochure was designed to provide you with critical information on creating defensible space around your home, retrofitting your home with fire-resistant materials, and preparing you to safely evacuate well ahead of a wildfire. Please protect yourself, your family, and your property from a devastating wildfire by taking the time to learn about *Ready! Set! Go!*

In Los Angeles County, wildfires will continue to be fueled by a build-up of seasonal dry vegetation and driven by dry conditions and locally strong winds, making them extremely dangerous and challenging for firefighters to control. Yet, many homeowners don't consider how a wildfire could affect them, and very few residents have properly prepared for evacuation until it is too late.

You play the most important role in protecting yourself, family, and property. Through planning and preparation, we can all be ready for the next wildfire. I hope you find the information in this brochure helpful as you prepare your home and family for a wildfire.

As always, if you need additional information about preparing for a wildfire or any other natural disaster, please contact your nearest fire station or visit us at fire.lacounty.gov.

A handwritten signature in blue ink that reads "Daryl L. Osby".

Daryl L. Osby
Los Angeles County Fire Chief

COUNTY OF LOS ANGELES BOARD OF SUPERVISORS



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KATHRYN BARGER
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kathrynbarger.lacounty.gov



SHEILA KUEHL
Supervisor, Third District
supervisorkuehl.com

INSIDE

READY!



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SET!



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GO!



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Preparing for a wildfire starts with three simple steps:



READY!



SET!



GO!

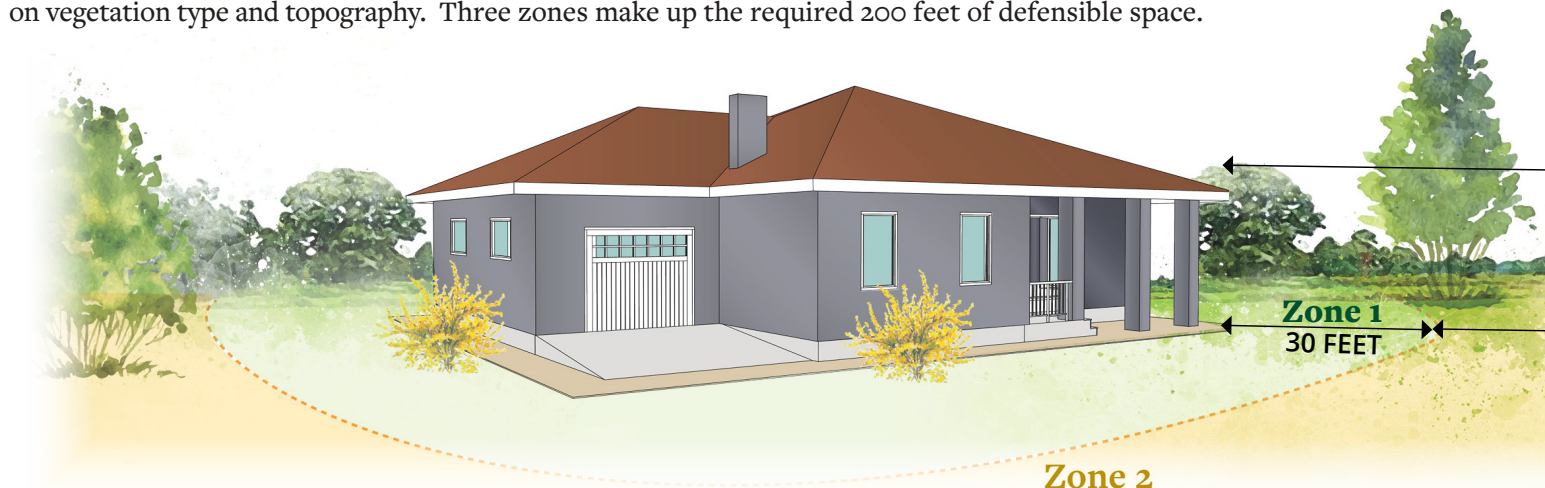
Please keep this plan on hand as a quick reference for helping your family and property be safe in the event of a wildfire.

Living in the Wildland Urban Interface

Ready! Set! Go! begins with a house that firefighters can defend.

Defensible Space

Creating and maintaining defensible space is essential for increasing your home's chance of surviving a wildfire. It's the buffer homeowners are required to create between their structure and the native landscape. This space slows the spread of wildfire and improves the safety of firefighters defending your home. Defensible space composition varies, depending on vegetation type and topography. Three zones make up the required 200 feet of defensible space.



Zone 1

Extends 30 feet out from the structure

- Remove all dead or dying vegetation.
- Remove dead or dry leaves and pine needles from your yard, roof, and rain gutters.
- Trim trees regularly to keep branches a minimum of 10 feet from other trees.
- Remove dead branches hanging over your roof. And, keep branches 10 feet away from your chimney.
- Relocate exposed woodpiles outside of Zone 1 unless they are completely contained in a fire-resistant enclosure.
- Remove vines and climbing plants from combustible structures (e.g., bougainvillea, wisteria).
- Remove or prune vegetation near windows (you should be able to see out the windows).
- Remove vegetation and items around and under decks that could catch fire.
- Create separations between trees, shrubs, and items that could catch fire, such as patio furniture, swing sets, etc.
- Irrigation is recommended to maintain vegetation moisture content.

Zone 2

Extends from the outer edge of Zone 1 to 100 feet from the structure

- Cut or mow annual grass down to a maximum height of three inches.
- Create vertical and horizontal spacing between trees and shrubs (the distance between trees should be three times the height).
- Remove fallen leaves, needles, twigs, bark, cones, and small branches. However, a mulch layer may be permitted to a depth of four inches, if erosion control is an issue.
- Irrigation is recommended to maintain vegetation moisture content.



HAZARDOUS ORNAMENTAL LANDSCAPE



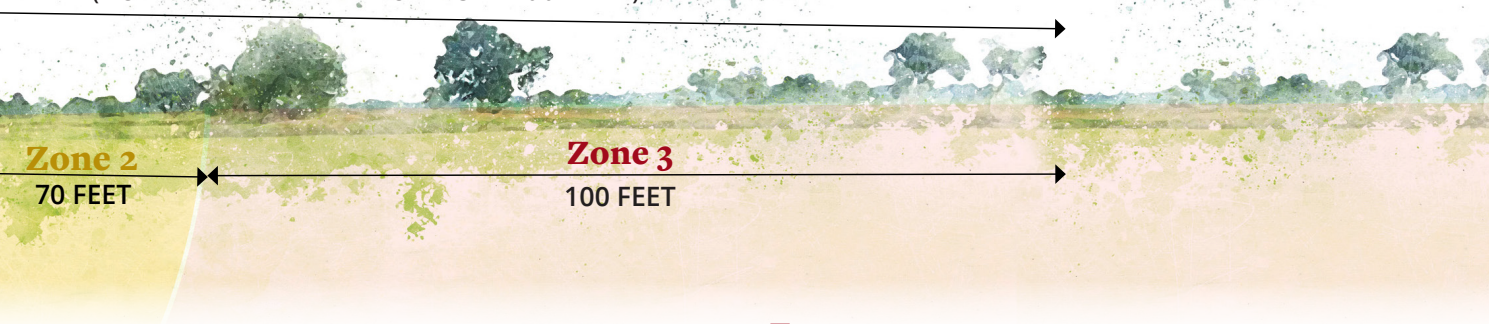
Preventing conditions where fire can travel from adjacent fuels, through an ornamental landscape to your structure, is the key to creating defensible space. Fire spreads through convection, conduction, radiation, or embers. Proper maintenance of ornamental vegetation reduces ember production, fire propagation, intensity, and duration of the approaching flames.



This home provides a good example of defensible space.

Defensible Space

(ZONE 1 + ZONE 2 + ZONE 3 = 200 FEET)



Zone 3

Extends from the outer edge of Zone 2 to 200 feet from the structure

Zone 3 consists of mostly native plants appropriately thinned and spaced by 30 to 50 percent. The objective is to reduce vegetation density and overall fuel load. This slows the rate of fire spread, reducing flame lengths and fire intensity before it reaches irrigated zones or structures.

- Irrigation systems are not required.
- Vegetation consists of modified existing native vegetation.
- Additional ornamental shrubs and trees are generally not recommended due to water conservation goals.
- Existing native vegetation is modified by thinning and removing plants constituting a high fire risk, including, but not limited to, laurel sumac, chamise, ceanothus, sage, sage brush, buckwheat, and California juniper.
- Remove the lower $\frac{1}{3}$ of large shrubs and all dead wood to reduce fuel loads.
- Trees should be limbed up to at least six feet above grade and a minimum of three times the height of underlying plants.
- As the distance from structures increases, native plants may be removed in reduced amounts.
- Spacing for large native shrubs or groups of native shrubs is 15 feet between the edge of their canopies.
- Spacing for existing native trees or small groups of trees is 30 feet between the edge of canopies. This depends on the species, topography, and orientation on the site.

HIGH-HAZARD PLANTS



Pine



Pampas Grass

Note: Special attention should be given to the use and maintenance of ornamental plants known or thought to be high-hazard plants when used in close proximity to structures. Examples include acacia, cedar, cypress, eucalyptus, Italian cypress, juniper, palms (remove all dead fronds), pine (removal within 30 feet of structures), and pampas grass. These plantings should be properly maintained and not allowed to be in mass plantings that could transmit fire from the native growth to any structure.



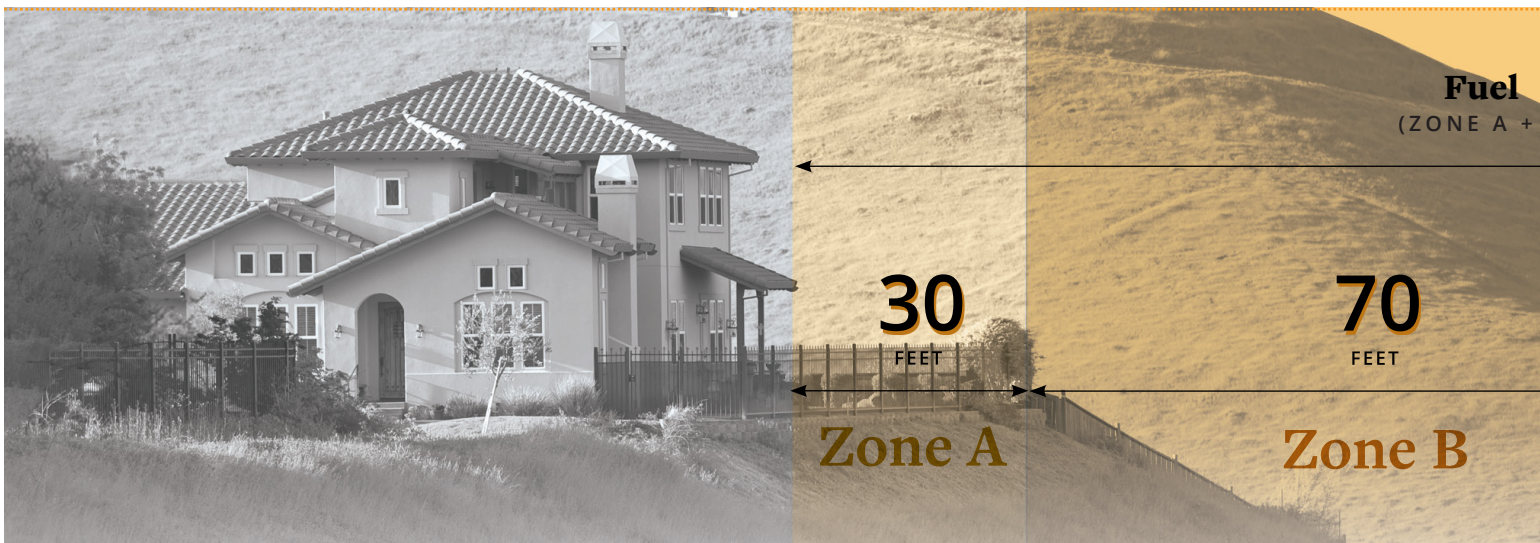
Fuel Modification

What Is Fuel Modification?

The Fuel Modification Plan Review Program affects new structures and developments built in fire hazard severity zones. A Fuel Modification Plan (or landscape plan) identifies defensible space zones and restricts or limits planting around structures.

For further information, please visit bit.ly/fuelmod or call (626) 969-5205.

Fuel Modification Zones



Zone A

EXTENDS 30 FEET FROM THE STRUCTURE

Ideal Fuel Modification Landscape:

Limited woody plant material, high moisture content, adequate spacing, and inorganic mulch throughout Zone A.

- Irrigated area consisting of low-growing, small herbaceous plants with high-moisture content immediately around structures.
- Hedges shall not be within five feet of any structures.
- Occasional accents of woody shrubs or small patio trees 10 feet from structures. Single plants and/or groups of plants are widely spaced (the distance between plants is three times the height).
- Cut annual grasses to three inches and remove leaf litter.
- Vines and climbing plants are not allowed on combustible structures.
- Use rock or non-combustible mulch within five feet of structures.



Create a Defensible Home

A home with defensible space has the greatest potential of surviving a wildfire. Defensible homes are compliant with the Los Angeles County Fire Department's brush clearance requirements. Homes built after January 1, 1996, have been through the Fire Department's Fuel Modification Program, where strict planting requirements and construction standards improve fire safety in the high and very high fire hazard severity zones.



Zone B

**EXTENDS FROM THE OUTER EDGE OF
ZONE A TO 100 FEET FROM THE STRUCTURE**

- Irrigated with slightly denser planting than Zone A. Avoid woody plants larger than three feet in height at maturity under tree canopies.
- Has zone-appropriate shade trees with adequate spacing.
- Minimize continuous canopy coverage to reduce fire transmission.
- Screening plants may be used; however, continuous hedges are discouraged as this promotes accumulation of dead litter inside the live hedge and creates a continuous fuel ladder to the structure.

Zone C

**EXTENDS FROM THE OUTER EDGE OF ZONE B
TO 200 FEET FROM THE STRUCTURE**

- Thin to remove dead vegetation and prevent overgrowth.
- Thin native species to slow the fire's progress and reduce its intensity by decreasing availability of continuous fuels.
- Native vegetation is thinned 30 to 50 percent in Zone C.

READY!

Safeguard or “Harden” Your Home

The ability of your home to survive a wildfire depends on the materials your home is constructed of and the quality of the “defensible space” surrounding it. Windblown embers from a wildfire will find the weak link in your home’s fire protection scheme and gain the upper hand because of a small, overlooked, or seemingly inconsequential factor. However, there are measures you can take to safeguard your home from wildfire. While you may not be able to accomplish all of the measures listed below, each will increase your home’s - and possibly your family’s - safety and survival.

Tour a Wildfire-Ready Home



Address 1

- Make sure your address is clearly visible from the road. The address needs to be a contrasting color to the surface that it is mounted on, so it can be seen.

Chimney 2

- Cover your chimney and stovepipe outlets with a non-flammable screen of 1/8-inch wire mesh or smaller to prevent embers from escaping and igniting a fire.
- Tree branches must be removed within 10 feet of any chimney (exception: oak trees).

Deck/Patio Cover 3

- Use heavy timber or non-flammable construction material for decks and patio covers, especially within the first 10 feet of the home.
- Enclose the underside of balconies and decks with fire-resistant materials to prevent embers from blowing underneath.
- Keep your deck clear of combustible items, such as baskets, dried flower arrangements, and other debris.

Driveways and Access Roads 4

- Driveways should be designed to allow fire and emergency vehicles and equipment to reach your home (current fire code requirement is 15 feet wide).
- Access roads should have a minimum 10-foot clearance on either side of the traveled section of the roadway and should allow for two-way traffic.
- Locked or electric gates should have a disconnect or a lock box.

- Ensure that all gates open inward and are wide enough to accommodate emergency equipment.

- Trim trees and shrubs above all roads clear to the sky, with the exception of Oak trees which only need to be cleared to a height of 13½ (or 13.5) feet.

Garage 5

- Have a fire extinguisher and tools, such as a shovel, rake, bucket, and hoe, available for fire emergencies.
- Install a solid door with self-closing hinges between living areas and the garage. Install weather stripping around and under the doors to prevent ember intrusion.
- Store all combustibles and flammable liquids away from ignition sources.
- Keep the garage closed whenever possible.

Home Site and Yard 6

- Ensure you have up to a 200-foot radius of defensible space (cleared vegetation) around your home. If the 200-foot distance is on adjacent property, contact your local fire station for assistance in obtaining adequate clearance.
- Cut dry weeds and grass before noon when temperatures are cooler to reduce the chance of sparking a fire when using metal tools.
- Landscape with fire-resistant plants that are low-growing with high-moisture content.
- Keep woodpiles, propane tanks, and combustible materials away from your home and other structures, such as garages, barns, and sheds (recommended 30 feet).
- Ensure trees and branches are at least four feet away from power lines. Notify your power company if this condition exists; they will complete required work.



READY!

Inside

- Keep a working fire extinguisher on hand and train your family how to use it. Store in an easily accessible location (check expiration date regularly).
- Install smoke alarms on each level of your home and adjacent to the bedrooms. Test them monthly and change the batteries twice a year.



Non-Combustible Boxed-In (Soffit) Eaves

- Box-in eaves with non-combustible materials to prevent accumulation of embers.



Non-Combustible Fencing 7

- Make sure to use non-combustible fencing to protect your home during a wildfire.

Rain Gutters

- Screen or enclose rain gutters to prevent accumulation of plant debris.



Roof 8

- Your roof is the most vulnerable part of your home because it can easily catch fire from windblown embers.
- Homes with wood shake or shingle roofs are at a higher risk of being destroyed during a wildfire.
- Build your roof or re-roof with fire-resistant materials that include composition, metal, or tile.
- Block any spaces between roof decking and covering to prevent ember intrusion.
- Clear pine needles, leaves, and other debris from your roof and gutters.
- Cut any tree branches within 10 feet of your roof.



Vents

- Vents on homes are particularly vulnerable to flying embers.
- All vent openings should be covered with 1/8-inch or smaller metal mesh. Do not use fiberglass or plastic mesh because they can melt and burn.
- Attic vents in eaves or cornices should be baffled or otherwise to prevent ember intrusion (mesh is not enough).

Walls 9

- Wood products, such as boards, panels, or shingles, are common siding materials. However, they are combustible and not good choices for fire-prone areas.
- Build or remodel with fire-resistant building materials, such as brick, cement, masonry, or stucco.
- Be sure to extend materials from foundation to roof.

Water Supply 10



- Have multiple garden hoses that are long enough to reach any area of your home and other structures on your property.

Windows 11

- Heat from a wildfire can cause windows to break even before the home ignites. This allows burning embers to enter and start internal fires. Single-paned and large windows are particularly vulnerable.
- Install dual-paned windows with an exterior pane of tempered glass to reduce the chance of breakage in a fire.
- Limit the size and number of windows in your home that face large areas of vegetation.

Utilities

- Ensure that your family knows where your gas, electric, and water main shut-off controls are and how to safely shut them down in an emergency.





Create Your Own Wildfire Action Plan

Now that you have done everything you can to protect your home, it's time to prepare your family. **Your Wildfire Action Plan must be prepared with all members of your household well in advance of a wildfire.** Each family's plan will be different, depending on their situation. Once you finish your plan, practice it regularly with your family, and post it in a safe and accessible place for quick implementation.



1 Important Phone Numbers

- ☐ A family communication plan that designates an out-of-area friend or relative as a point-of-contact to act as a single source of communication among family members in case of separation.
- ☐ Maintain a list of emergency contact numbers posted near your phone and in your Emergency Supply Kit (see page 12 in this guide).

2 What to Take

- ☐ Assemble an Emergency Supply Kit (see page 12 in this guide).
- ☐ Keep an extra Emergency Supply Kit in your car in case you can't get to your home because of fire.
- ☐ Have a portable radio or scanner, so that you can stay updated on the fire.

3 Prepare to Evacuate

- ☐ Designate an emergency meeting location, outside the fire or hazard area. It is critical to determine who has safely evacuated from the affected area.
- ☐ Have several different travel routes from your home and community identified. Practice these often, so everyone in your family is familiar in case of emergency.
- ☐ Have all of the necessary supplies and/or boarding options for your pets and large animals identified and/or packed. If trailers are necessary for larger animals, have a plan that is tested and ready to implement.





Your Personal WILDFIRE ACTION PLAN



During High Fire Danger days in your area, monitor your local media for information on wildfires and be ready to implement your plan. Hot, dry, and windy conditions create the perfect environment for a wildfire.

1 IMPORTANT PHONE NUMBERS

EMERGENCY CONTACTS

Name

()

Phone

Name

()

Phone

SCHOOLS

Name

()

Phone

Name

()

Phone

FAMILY & FRIENDS

Name

()

Phone

Name

()

Phone

2 WHAT TO TAKE



Insurance
Papers



Photos



Emergency
Supply Kit



Prescriptions



Important
Documents



3 EVACUATION

WHEN TO GO

WHERE TO GO

HOW TO GET THERE

DESTINATION

WHO TO TELL (BEFORE AND AFTER)

ANIMAL SHELTER

Name

()

Phone



LOS ANGELES COUNTY FIRE DEPARTMENT
IF YOU HAVE AN EMERGENCY, CALL 9-1-1

Public Information Office: (323) 881-2411
fire.lacounty.gov

SET!

Assemble Your Emergency Supply Kit

Put together your emergency supply kit long before a wildfire or other disaster occurs, and keep it easily accessible, so you can take it with you when you have to evacuate. Plan to be away from your home for an extended period of time. Each person should have a readily accessible emergency supply kit. Backpacks work great for storing these items (except for food and water) and are easy to grab. Storing food and water in a tub or chest on wheels will make it easier to transport. Keep it light to be able to easily lift it into your vehicle.

Essential Supplies

- ☐ Three-day supply of non-perishable food and three gallons of water per person
- ☐ Map marked with at least two evacuation routes
- ☐ Prescriptions or special medications
- ☐ Change of clothing and closed-toe shoes
- ☐ Extra eyeglasses or contact lenses
- ☐ An extra set of car keys, credit cards, and cash
- ☐ First aid kit
- ☐ Flashlight
- ☐ Battery-powered radio and extra batteries
- ☐ Sanitation supplies
- ☐ Copies of important documents (e.g., birth certificates, passports, etc.)
- ☐ Don't forget food and water for your pets!



If Time Allows

- ☐ Easy-to-carry valuables
- ☐ Family photos and other irreplaceable items
- ☐ Personal computer data on hard drives/flash drives
- ☐ Chargers for cell phones, laptops, etc.

Pre-Evacuation Preparation Steps

When an evacuation is anticipated and if time permits, follow these checklists to give your home the best chance of surviving a wildfire:

Animals

- ☐ Locate your pets and keep them nearby.
- ☐ Prepare large animals for transport and think about moving them to a safe location early.
- ☐ Turn off propane tanks. Move propane BBQ appliances away from structures.
- ☐ Connect garden hoses to outside water valves or spigots for use by firefighters.

Inside

- ☐ Shut all windows and doors.
- ☐ Remove flammable window shades, lightweight curtains, and close metal shutters.
- ☐ Move flammable furniture to the center of the room, away from windows and doors.
- ☐ Leave your lights on, so firefighters can see your home under smoky conditions.
- ☐ Shut off the air conditioning.
- ☐ Shut off the gas meter and all pilot lights.
- ☐ Don't leave sprinklers on or water running. They can affect critical water pressure.
- ☐ Leave exterior lights on.
- ☐ Put your emergency supply kit in your vehicle.
- ☐ Back your loaded vehicle into the driveway with all doors and windows closed. Carry your car keys with you.
- ☐ Have a ladder available in a conspicuous location for firefighter use.
- ☐ Seal attic and ground vents with a non-combustible material or commercial seals, if time permits.

Outside

- ☐ Gather flammable items from the exterior of the house and bring them inside (e.g., patio furniture, children's toys, doormats, etc.) or place them in your pool.
- ☐ Monitor your property and your wildfire situation. Don't wait for an evacuation order, if you feel threatened and need to, leave.
- ☐ Check on neighbors and make sure they are preparing to leave.



⚠️ TAKE ACTION IMMEDIATELY WHEN WILDFIRE STRIKES ⚠️

Go Early

By leaving early, you will give your family the best chance of surviving a wildfire. You also help firefighters by keeping roads clear of congestion, enabling them to move more freely throughout the neighborhood and do their job.

When to Go

Leave early enough to avoid being caught in fire, smoke, or road congestion. Don't wait to be told by authorities to leave. In an intense wildfire, they may not have time to knock on every door. If you are advised to leave, don't hesitate!

The terms "Voluntary" and "Mandatory" are used to describe evacuation orders. However, local jurisdictions may use other terminology such as "Precautionary" and "Immediate Threat." These terms are used to alert you to the significance of the danger. All evacuation instructions provided by emergency personnel should be followed immediately for your safety.

Where to Go

Leave for a pre-determined location. It should be a low-risk area, such as a well-prepared neighbor or relative's house, a Red Cross shelter or evacuation center, motel, etc.

How to Get There

Have several evacuation routes in case one route is blocked by the fire or by emergency vehicles and equipment. Choose an evacuation route away from the fire.



Follow these steps as soon as possible to get ready to GO!

- Review your Wildfire Action Plan evacuation checklist.

- Ensure your Emergency Supply Kit is in your vehicle.



- Cover up to protect against heat and flying embers. Wear long pants, a long-sleeve shirt, heavy shoes/boots, a cap, dry bandana (for face cover), goggles, or glasses. 100% cotton is preferable.



- Locate your pets and take them with you.





Survival Tips if You Become Trapped

In Your Home

- ☐ Stay calm and keep your family together.
- ☐ Call 9-1-1 and inform authorities of your location.
- ☐ Fill sinks and tubs for an emergency water supply.
- ☐ Keep doors and windows closed, but unlocked.
- ☐ Remove curtains from the windows.
- ☐ Turn your interior and exterior lights on.
- ☐ Stay inside your home.
- ☐ Shelter away from outside walls.



In Your Vehicle

- ☐ Stay calm.
- ☐ Park your vehicle in an area clear of vegetation.
- ☐ Close all vehicle windows and vents.
- ☐ Cover yourself with a wool or cotton blanket or jacket.
- ☐ Lie on the vehicle floor.
- ☐ Use your cell phone and call 9-1-1 to inform authorities of your location.



On Foot

- ☐ Stay calm.
- ☐ Go to an area clear of vegetation, a ditch or depression on level ground, if possible.
- ☐ Lie face down and cover up your body.
- ☐ Use your cell phone and call 9-1-1 to inform authorities of your location.



Returning Home After a Wildfire

Do not return home until emergency officials determine it is safe. You will receive proper notification to do so as soon as it is possible, considering safety and accessibility.

When You Return Home

- ☐ Be alert for downed power lines and other hazards.
- ☐ Check propane tanks, regulators, and lines before turning gas on.
- ☐ Check your residence carefully for hidden embers or smoldering fires.



Remember the Six P's

People and Pets



Prescriptions,
vitamins, and
eyeglasses



Plastic

(e.g., credit cards, ATM cards)
and cash



Papers, phone numbers,
and important documents



Pictures and
irreplaceable memorabilia



Personal computer

hard drives
and flash drives



OFFICIAL



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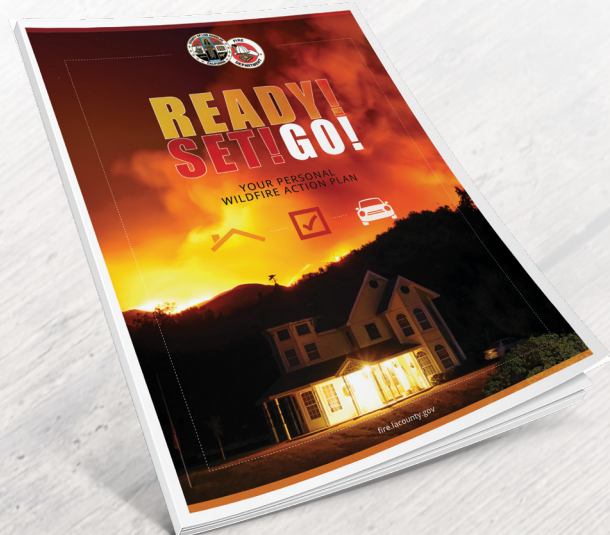
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Download the
Ready! Set! Go!
Wildfire Action Plan at
fire.lacounty.gov/rsg
or by scanning this
QR code with your
smart phone.



READY!



SET!



GO!



**LOS ANGELES COUNTY
FIRE DEPARTMENT**

Public Information Office

1320 N. Eastern Avenue
Los Angeles, California 90063
323-881-2411
fire.lacounty.gov

*Produced by the Communications Section
of the Executive Support Division.*

Revised April 29, 2021.



**LOS ANGELES COUNTY
FIRE DEPARTMENT FOUNDATION**

1320 N. Eastern Ave.
Los Angeles, CA 90063
323-793-FIRE
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*The Los Angeles County Fire Department Foundation
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or donate by texting F-I-R-E-S to 44321.*

Appendix J

Glossary of Terms

Glossary of Terms

BehavePlus: Fire behavior prediction and fuel modeling computer program designed to model fire behavior characteristics based on fuel, weather, and topographic inputs. Model outputs include flame length values, fire spotting potential, and rate of fire spread.

Brush: A collective term that refers to stands of vegetation dominated by shrubby, woody plants or low-growing trees; usually of a vegetation type undesirable for livestock or timber management.

Brush Fire: A fire burning in vegetation that is predominantly shrubs, brush, and scrub growth.

Burning Conditions: The state of the combined factors of the environment that affect fire behavior in a specified fuel type.

Canopy: The forest cover of branches and foliage formed by tree crowns. The stratum containing the crowns of the tallest vegetation present (living or dead), usually above 20 feet.

Chipping: Using a mechanical chipper to chip cut vegetation into small chips.

Closure: Legal restriction, but not necessarily elimination, of specified activities such as smoking, camping, or entry that might cause fires in a given area.

Combustible: Any material that, in the form in which it is used and under the conditions anticipated, will ignite and burn.

Conflagration: A raging, destructive fire. Often used to describe a fire burning under extreme fire weather. The term is also used when a wildland fire burns into a WUI, destroying structures.

Crown Fire: A fire that advances from top-to-top of trees or shrubs more or less independent of a surface fire.

Cured: The stage when herbaceous fuel moisture falls to 30% or less.

Defensible Space: An area either natural or man-made where material capable of allowing a fire to spread unchecked has been treated, cleared, or modified to slow the rate and intensity of advancing wildfire. This will create an area for housing increased emergency fire equipment, for evacuating or sheltering civilians in place, and a point for fire suppression to occur.

Duff: The layer of decomposing organic materials lying below the litter layer of freshly fallen twigs, needles and leaves and immediately above the mineral soil.

Exotic Pest Plant: A non-indigenous plant species, or one introduced to this state that either purposefully or accidentally escapes into the wild where it reproduces on its own either sexually or asexually.

Exposure: (1) Property that may be endangered by a fire burning in another structure or by a wildfire; (2) direction in which a slope faces, usually with respect to cardinal directions; (3) the general surroundings of a site with special reference to its openness to winds.

Extreme Fire Behavior: A level of fire behavior characteristics that ordinarily precludes methods of direct control. One or more of the following is usually involved: high rates of spread, prolific crowning and/or spotting, presence of

fire whirls, a strong convection column. Predictability is difficult because such fires often exercise some degree of influence on their environments and behave erratically, sometimes dangerously.

Fine Fuels: Fast-drying dead fuels that are less than 0.25-inch in diameter and are generally characterized by a comparatively high surface area to volume ratio. These fuels (grass, leaves, needles, etc.) ignite readily and are consumed rapidly by fire when dry.

Fire Behavior: The manner in which a fire reacts to the influences of fuel, weather, and topography.

Fire Department: Any regularly organized fire department, fire protection district or fire company regularly charged with the responsibility of providing fire protection to the jurisdiction.

Fire Front: That part of a fire within which continuous flaming combustion is taking place. Unless otherwise specified, it is assumed to be the leading edge of the fire perimeter.

Fire Hazard: A fuel complex, defined by volume, type condition, arrangement, and location that determines the degree of ease of ignition and of resistance to control.

Fire Hydrant: A valved connection on a piped water supply system having one or more outlets that is used to supply hose and fire department pumpers with water.

Fire Ladders: Areas where vegetation allows fire to quickly transmit from grass to brush and then to the canopy of trees, producing a high intensity fire with less potential for fire control.

Fire Prevention: Activities, including education, engineering, enforcement, and administration that are directed at reducing the number of wildfires, the costs of suppression, and fire-caused damage to resources and property.

Fire Protection: The actions taken to limit the adverse environmental, social, political, and economic effects of fire. Protection is relative, not absolute.

Fire Regime: Periodicity and pattern of naturally occurring fires in a particular area or vegetative type, described in terms of frequency, biological severity, and area of extent.

Fire Retardant: Any substance, except plain water, that by chemical or physical action reduces flammability of fuels or slows their rate of combustion.

Fire Season: (1) Period(s) of the year during which wildland fires are likely to occur, spread, and affect resource values sufficient to warrant organized fire management activities; (2) a legally enacted time during which burning activities are regulated by state or local authority.

Fire Triangle: Instructional aid in which the sides of a triangle are used to represent the three factors (oxygen, heat, fuel) necessary for combustion and flame production; removal of any of the three factors causes flame production to cease.

Fire Weather: Weather conditions which influence fire starts, fire behavior, or fire suppression.

Firebrand: Any source of heat, natural or human made, capable of igniting wildland fuels. Flaming or glowing fuel particles that can be carried naturally by wind, convection currents, or gravity into unburned fuels. Examples include leaves, pinecones, glowing charcoal, and sparks.

Firebreak: A natural or constructed barrier used to stop or check fires that may occur or to provide a control line from which to work.

Firefighter: A person who is trained and proficient in the components of structural or wildland fire.

Fireline: That portion of the fire upon which resources are deployed and actively engaged in suppression action. In a general sense, the working area around a fire.

Flame: A mass of gas undergoing rapid combustion, generally accompanied by evolution of sensible heat and incandescence.

Flammability: The relative ease with which fuels ignite and burn regardless of the quantity of the fuels.

Fuel Break: An area, strategically located for fighting anticipated fires, where the previously-occurring vegetation has been permanently modified or replaced so that fires burning into it can be more easily controlled. Fuel breaks divide fire-prone areas into smaller areas for easier fire control and to provide access for firefighting.

Fuel Loading: The volume of fuel in a given area generally expressed in tons per acre.

Fuel Model: Simulated fuel complex for which all fuel descriptors required for the solution of a mathematical rate of spread model have been specified.

Fuel Modification: Any manipulation or removal of fuels to reduce the likelihood of ignition or the resistance to fire control.

Fuels: All combustible material within the WUI or intermix, including vegetation and structures.

Hazard: The degree of flammability of the fuels once a fire starts. This includes the fuel (type, arrangement, volume, and condition), topography, and weather.

Ignition Time: Time between application of an ignition source and self-sustained combustion of fuel.

Invasive Plant Species: A plant species that is not native to the region and has demonstrated the ability to aggressively outcompete native plant species that would normally colonize a given area.

Ladder Fuels: Fuels that provide vertical continuity allowing fire to carry from surface fuels into the crowns of trees or shrubs with relative ease.

Limbing: To remove the lower branches from trees, brush or shrubs in an area to reduce fire ladders. The root structure of the plants is not disturbed.

McLeod: A firefighting tool used for scraping soil and small roots, and grasses to construct fire line. The tool head is a large hoe approximately 12 inches wide, with one side a solid scraping blade for scraping soil and the other side with metal fingers for scraping vegetation but leaving soil.

Mosaic: To reduce the total volume of vegetation within an area by removing vegetation in a cluster or mosaic pattern.

Multicutting: A vegetation management method where cut vegetation is reduced in size by cutting vegetation into lengths no longer than 6 inches on length. Multicut vegetation is then left on site no greater than 12 inches in depth.

Overstory: That portion of the trees in a forest that forms the upper or uppermost layer.

Peak Fire Season: That period of the year during which fires are expected to ignite most readily, to burn with greater than average intensity, and to create damages at an unacceptable level.

Pile Burn: A prescribed burn method where fire is ignited to individual piles within a project area. Vegetation in this method of burning is cut and piled into stacks within the project area and then burned.

Prescribed Burn: A wildland fire tool that uses the knowledgeable application of fire to a specific unit of land to meet predetermined fire and resource management objectives. Specific prescriptions for burning vegetation are developed for each area based on weather, topography, and fuel type.

Prescribed Fire: A fire burning within prescription. This fire may result from either planned or unplanned ignitions.

Protected Species: State- and federally listed Endangered or Threatened species of flora or fauna, and non-listed species otherwise protected by state and/or federal statutes.

Pruning: To selectively cut dead or live branches from trees, brush, or shrubs to reduce the total volume of flammable vegetation from a plant.

Pulaski: A firefighting tool used for digging out roots and soil to construct fire line. The head has one side with an axe blade and the other side with a hoe blade.

Rate of Spread (ROS): The speed at which a fire extends its horizontal dimensions, expressed in terms of distance per unit area of time. Generally thought of in terms of a fire's forward movement or head fire rate of spread.

Remote Automatic Weather Station (RAWS): A weather station at which the services of an observer are not required. A RAWS unit measures selected weather elements automatically and is equipped with telemetry apparatus for transmitting the electronically recorded data via radio, satellite or by a landline communication system at predetermined times on a user-requested basis.

Red Flag Warning Conditions: A **Red Flag Warning** is a forecast warning issued by the United States National Weather Service to inform area firefighting and land management agencies that conditions are ideal for wildland fire ignition and propagation. After drought conditions, and when humidity is very low, and especially when high or erratic winds that may include lightning are a factor, the Red Flag Warning becomes a critical statement for firefighting agencies, which often alter their staffing and equipment resources dramatically to accommodate the forecast risk.

Responsibility Area: That area for which a particular fire protection organization has the primary responsibility for attacking an uncontrolled fire and for directing the suppression action. Such responsibility may develop through law, contract, or personal interest of the fire protection agent. Several agencies or entities may have some basic responsibilities without being known as the fire organization having direct protection responsibility.

Riparian: An area of land adjacent to a stream, river, lake or wetland that contains vegetation that, due to the presence of water, is distinctly different from the vegetation of adjacent upland areas.

Sensitive Species: A plant or animal species with a special status listing from federal, state, or local regulatory agencies.

Slope: The variation of terrain from the horizontal; the number of feet rise or fall per 100 feet measured horizontally, expressed as a percentage.

Smoke: (1) The visible products of combustion rising above a fire; (2) term used when reporting a fire or probable fire in its initial stages.

Spotting: The ignition of unburned fuels ahead of the fire front as a result of ignition by firebrands. Spotting enhances the spread of wildfires.

Structure: A constructed object, usually a free-standing building above ground.

Structure Fire: Fire originating in and burning any part of all of any building, shelter, or other structure.

Suppression: The most aggressive fire protection strategy, it leads to the total extinguishment of a fire.

Surface Fuel: Fuels lying on or near the surface of the ground, consisting of leaf and needle litter, dead branch material, downed logs, bark, tree cones, and low stature living plants.

Thinning: To reduce the total volume of trees, brush or shrubs within an area by completely cutting out dead and live plants from the area or to reduce the size or volume of an individual plant by cutting out dead and live branches.

Tree Crown: The primary and secondary branches growing out from the main stem, together with twigs and foliage.

Uncontrolled Fire: Any fire that threatens to destroy life, property, or natural resources and that (a) is not burning within the confines of firebreaks or (b) is burning with such intensity that it could not be readily extinguished with ordinary, commonly available tools.

Understory: Low-growing vegetation (herbaceous, brush or reproduction) growing under a stand of trees. Also, that portion of trees in a forest stand below the overstory.

Vegetation Management: The practice of reducing and/or rearranging both the green and dead biomass (vegetation) to reduce fire hazard, to reduce the potential damage associated with wildfire, and to improve environmental habitat. Vegetation management is synonymous with the term “vegetation or fuel reduction”. Many different vegetation management methods may be used to reduce and/or rearrange both green and dead biomass.

Vegetation Management Unit: Delineated property unit based on parcel, topography, vegetation or other features used for vegetation management planning.

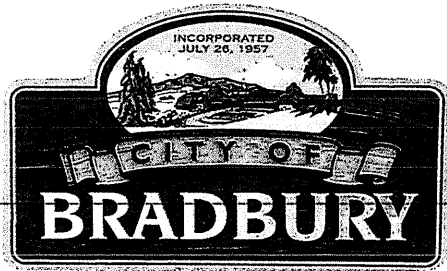
Weed: A plant species that interferes with a desired management objective. This term does not denote the native or non-native status of a plant species. Both native and non-native plants have the ability to interfere, depending on the objective.

Wildfire/Wildland Fire: A fire occurring that burns through vegetation, either in the urban interface or undeveloped areas

Wildland: An area in which development is essentially nonexistent, except for roads, railroads, power lines, and similar transportation facilities. Structures, if any, are widely scattered.

Wildland Urban Interface (WUI): The area where structures and other human developments meet or intermingle with undeveloped wildland.

Source: www.firewise.org, Los Angeles County Fire Department, 2020, NWCG 2020



Elizabeth Bruny, Mayor (District 5)
Bruce Lathrop, Mayor Pro Tem (District 4)
Richard Barakat, Council Member (District 3)
Dick Hale, Council Member (District 1)
Montgomery Lewis, Council Member (District 2)

City of Bradbury Agenda Memo

TO: Honorable Mayor and Members of the City Council

FROM: Kevin Kearney, City Manager
Sophia Musa, Management Analyst

DATE: March 15, 2022

SUBJECT: **RECOMMENDATION FOR AWARD OF BID TO FRESH COAT OF MONROVIA FOR \$17,663.31 FOR INTERIOR AND EXTERIOR PAINTING OF THE BRADBURY CIVIC CENTER**

ATTACHMENTS: 1) Fresh Coat Painting Proposal
2) Ramos Painting Proposal
3) Western Painting Proposal

SUMMARY

Staff has solicited proposals from painting vendors and received three quotes that range from \$17,663.31 to \$23,000. Quotes include interior and exterior painting of the Bradbury Civic Center and include paint.

It is recommended that the City Council award of bid to Fresh Coat of Monrovia for \$17,663.31 for interior and exterior painting of the Bradbury Civic Center. It is also recommended that the City Council approve an appropriation to account #101-16-6470 in the amount of \$20,000 for FY 21-22, which would cover painting services and any contingency that may arise.

ANALYSIS

The Bradbury Civic Center was constructed in 2010, and this was the last time the building underwent extensive painting. A quick online search suggests that a business be painted approximately every three to five years. It has been twelve years since the Civic Center was painted.

~~City Staff received three quotes in response to soliciting proposals with the following prices:~~

Fresh Coat Painting (Monrovia)

Interior Painting:	\$10,500.02
Exterior Painting:	\$ 7,163.29
TOTAL:	\$17,663.31

Ramos Painting (Duarte)

Interior Painting:	\$12,600.00
Exterior Painting:	\$ 7,000.00
TOTAL:	\$19,600.00

Western Painting (Monrovia)

Interior Painting:	\$13,400.00
Exterior Painting:	\$ 9,600.00
TOTAL:	\$23,000.00

Based on the quotes received, Staff recommends awarding services to Fresh Coat Painting of Monrovia for \$17,663.31. The company is State licensed, EPA certified and insured. Services include painting of the Council Chambers, inside City Hall, bathrooms and kitchen area. Sanding and staining of the Council Chambers wood panels is also included. Services cover external power-washing, and painting of stucco, trim, columns & beams, doors and railings.

Internal and external paint is included in the Fresh Coat Painting proposal. Internal paint consists of Dunn-Edwards Spartawall paint. Internal paint can be upgraded to Dunn-Edwards Everest paint for an additional \$538.17. Included external paint includes a choice of either Dunn-Edwards Spartashield or Evershield paint.

FINANCIAL ANALYSIS

The City's FY 21-22 budget does not include painting services but can be covered though either general anticipated year-end surplus or through the City's fund balance. Monies should be appropriated to cover such services. Staff is recommending an appropriation of \$20,000 to cover all anticipated and unanticipated costs associated with contracting with Fresh Coat Painting.

STAFF RECOMMENDATION

It is recommended that the City Council award of bid to Fresh Coat of Monrovia for \$17,663.31 for interior and exterior painting of the Bradbury Civic Center. It is also recommended that the City Council approve an appropriation to account #101-16-6470 in the amount of \$20,000 for FY 21-22, which would cover painting services and any contingency that may arise.

ATTACHMENT #1



Turn Page

Proposal

Main Office

Interior Painting



NEW COLOR

#STEPS

COST



Ceiling & Crown

2

\$798.17

Materials:
Dunn Edwards Spartawall Interior Eggshell*: Ceiling

<input checked="" type="checkbox"/>	Walls	2	\$1,104.28
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Materials:
Dunn Edwards Spartawall Interior Eggshell*: Walls

<input checked="" type="checkbox"/>	Trim	2	\$492.09
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Materials:
Dunn Edwards Suprema Semi-Gloss: Trim
Notes:
Includes any baseboard, window and door trim, chair rail, and crown molding unless otherwise noted.

<input checked="" type="checkbox"/>	Doors	2	\$174.17
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Materials:
Dunn Edwards Suprema Semi-Gloss: Trim
Notes:
Single side of door facing area to be painted unless otherwise noted.

MAIN OFFICE SUBTOTAL			\$2,568.71
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Kevin's Office



	NEW COLOR	#STEPS	COST
<input checked="" type="checkbox"/> Ceiling		2	\$220.10

Materials:
Dunn Edwards Spartawall Interior Eggshell*: Ceiling

<input checked="" type="checkbox"/>	Walls	2	\$505.35
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Materials:
Dunn Edwards Spartawall Interior Eggshell*: Walls

<input checked="" type="checkbox"/>	Trim	2	\$281.20
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Materials:
Dunn Edwards Suprema Semi-Gloss: Trim
Notes:
Includes any baseboard, window and door trim, chair rail, and crown molding unless otherwise noted.

<input checked="" type="checkbox"/>	Doors	2	\$141.49
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Materials:
Dunn Edwards Suprema Semi-Gloss: Trim
Notes:
Single side of door facing area to be painted unless otherwise noted.

KEVIN'S OFFICE SUBTOTAL	\$1,148.14
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Kevin's Restroom



	NEW COLOR	#STEPS	COST
<input checked="" type="checkbox"/> Ceiling & Crown		2	\$47.16

Materials:
Dunn Edwards Spartawall Interior Eggshell*: Ceiling

3/10/22, 9:01 AM

eBid - Sophia Musa

<input checked="" type="checkbox"/>	Walls	2	\$233.96
	Materials: Dunn Edwards Spartawall Interior Eggshell*: Walls		
<input checked="" type="checkbox"/>	Trim	2	\$46.87
	Materials: Dunn Edwards Suprema Semi-Gloss: Trim		
	Notes: Includes any baseboard, window and door trim, chair rail, and crown molding unless otherwise noted.		
<input checked="" type="checkbox"/>	Doors	2	\$70.75
	Materials: Dunn Edwards Suprema Semi-Gloss: Trim		
	Notes: Single side of door facing area to be painted unless otherwise noted.		
KEVIN'S RESTROOM SUBTOTAL			\$398.74

Hallway





NEW COLOR

#STEPS

COST



Ceiling

2

\$187.45

Materials:
Dunn Edwards Spartawall Interior Eggshell*: Ceiling

<input checked="" type="checkbox"/>	Walls	2	\$673.80
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Materials:
Dunn Edwards Spartawall Interior Eggshell*: Walls

<input checked="" type="checkbox"/>	Trim	2	\$299.94
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Materials:
Dunn Edwards Suprema Semi-Gloss: Trim
Notes:
Includes any baseboard, window and door trim, chair rail, and crown molding unless otherwise noted.

<input checked="" type="checkbox"/>	Doors	2	\$565.97
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Materials:
Dunn Edwards Suprema Semi-Gloss: Trim
Notes:
Single side of door facing area to be painted unless otherwise noted.

HALLWAY SUBTOTAL	\$1,727.16
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Kitchen



NEW COLOR

#STEPS

COST



Ceiling

2

\$65.30

Materials:
Dunn Edwards Spartawall Interior Eggshell*: Ceiling

<input checked="" type="checkbox"/>	Walls	2	\$224.60
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Materials:
Dunn Edwards Spartawall Interior Eggshell*: Walls

<input checked="" type="checkbox"/>	Trim	2	\$16.40
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Materials:
Dunn Edwards Suprema Semi-Gloss: Trim
Notes:
Includes any baseboard, window and door trim, chair rail, and crown molding unless otherwise noted.

<input checked="" type="checkbox"/>	Doors	2	\$70.75
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Materials:
Dunn Edwards Suprema Semi-Gloss: Trim
Notes:
Single side of door facing area to be painted unless otherwise noted.

KITCHEN SUBTOTAL	\$377.05
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Restroom #1



	NEW COLOR	#STEPS	COST
<input checked="" type="checkbox"/> Ceiling		2	\$70.74

Materials:
Dunn Edwards Spartawall Interior Eggshell*: Ceiling

<input checked="" type="checkbox"/>	Walls	2	\$290.10
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Materials:
Dunn Edwards Spartawall Interior Eggshell*: Walls

<input checked="" type="checkbox"/>	Trim	2	\$46.87
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Materials:
Dunn Edwards Suprema Semi-Gloss: Trim
Notes:
Includes any baseboard, window and door trim, chair rail, and crown molding unless otherwise noted.

<input checked="" type="checkbox"/>	Doors	2	\$70.75
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Materials:
Dunn Edwards Suprema Semi-Gloss: Trim
Notes:
Single side of door facing area to be painted unless otherwise noted.

RESTROOM #1 SUBTOTAL			\$478.46
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Restroom #2



	NEW COLOR	#STEPS	COST
<input checked="" type="checkbox"/> Ceiling		2	\$70.74

Materials:
Dunn Edwards Spartawall Interior Eggshell*: Ceiling

<input checked="" type="checkbox"/>	Walls	2	\$290.10
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Materials:
Dunn Edwards Spartawall Interior Eggshell*: Walls

<input checked="" type="checkbox"/>	Trim	2	\$46.87
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Materials:
Dunn Edwards Suprema Semi-Gloss: Trim
Notes:
Includes any baseboard, window and door trim, chair rail, and crown molding unless otherwise noted.

<input checked="" type="checkbox"/>	Doors	2	\$70.75
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Materials:
Dunn Edwards Suprema Semi-Gloss: Trim
Notes:
Single side of door facing area to be painted unless otherwise noted.

RESTROOM #2 SUBTOTAL	\$478.46
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Council Chamber



	NEW COLOR	#STEPS	COST
<input checked="" type="checkbox"/> Ceiling & Crown		2	\$1,151.31

Materials:
Dunn Edwards Spartawall Interior Eggshell*: Ceiling

<input checked="" type="checkbox"/>	Walls	2	\$1,160.43
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Materials:
Dunn Edwards Spartawall Interior Eggshell*: Walls

<input checked="" type="checkbox"/>	Trim	2	\$494.44
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Materials:
Dunn Edwards Suprema Semi-Gloss: Trim
Notes:
Includes any baseboard, window and door trim, chair rail, and crown molding unless otherwise noted.

<input checked="" type="checkbox"/>	Doors	2	\$517.12
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Materials:
Dunn Edwards Suprema Semi-Gloss: Trim
Notes:
Single side of door facing area to be painted unless otherwise noted.

COUNCIL CHAMBER SUBTOTAL \$3,323.30

GRAND TOTAL \$10,500.02

OPTIONS

Note: The following options have not been included in the Grand Total.

Wood Cabinets & Panels

This work will be provided at no charge upon acceptance of interior and exterior proposals from Fresh Coat.

Please feel free to check out our work on Instagram and Facebook.

Fresh_Coat_Monrovia

Fresh Coat Painters of Monrovia

	NEW COLOR	#STEPS	COST
5 Wood Panel / Front & Top		1	\$0.00
<ul style="list-style-type: none"> ▪ Sand down 5 large square panels and repair as needed. ▪ Apply color stain to match existing ▪ Touch-up color in all areas ▪ Apply clear sealer to all areas ▪ Apply clear Lacquer satin finish top coat to all areas 			

WOOD CABINETS & PANELS SUBTOTAL \$0.00

TIP Use the ← and → arrows below to turn the page and learn more.



Exterior Painting



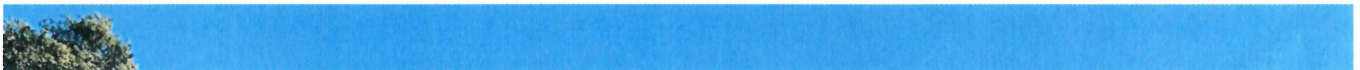
Turn Page

Proposal

Power Wash - Cleaning

	NEW COLOR	#STEPS	COST
<input checked="" type="checkbox"/> Power Washing		1	\$568.64
Materials: Simple Green:			
POWER WASH - CLEANING SUBTOTAL			\$568.64

Exterior





	NEW COLOR	#STEPS	COST
<input checked="" type="checkbox"/> Stucco <p>Materials: Dunn Edwards Evershield Exterior Flat: Color Match</p> <p>Notes:</p> <ul style="list-style-type: none"> ▪ This line item represents the scope of work and cost associated with preparing and painting the Exterior wall surfaces. The preparation work includes repairing MINOR cracked and damaged stucco, patching irregular deep depressions, priming raw materials, and caulking gaps located at transitions. 		2	\$3,008.17
<input checked="" type="checkbox"/> Trim - Gutters & Downspouts <p>Materials: Dunn Edwards Evershield Exterior Semi Gloss: White</p> <p>Notes:</p> <ul style="list-style-type: none"> ▪ This line item represents the scope of work and cost associated with preparing and painting the trim surfaces throughout the Exterior. The preparation work for these surfaces includes light sanding, minor patching, minor caulking and priming raw materials. 		2	\$1,206.32
<input checked="" type="checkbox"/> Columns & Beams <p>Materials: Dunn Edwards Evershield Exterior Eggshell: Color Match - Brown, Dunn Edwards UltraGrip Select Primer</p>		3	\$718.79

Dunn Edwards Ultragrip Select Primer.

Notes:

- This line item represents the scope of work and cost associated with preparing and *Painting the existing stained wood columns and beams*. The preparation work for these surfaces includes light sanding, minor patching and minor caulking.
- NOTE: Columns & Beams are currently covered with a Solid or Semi Transparent Stain. We are proposing to paint them for longevity.
- Should you wish to Re-Stain them an alternative quote can then be supplied.



Doors

2

\$998.05

Materials:

Dunn Edwards Aristoshield: Color Match - Red

Notes:

- Single side of door facing exterior to be painted unless otherwise noted.

EXTERIOR SUBTOTAL \$5,931.33

GRAND TOTAL \$6,499.97

OPTIONS

Note: The following options have not been included in the Grand Total.

Railings

	NEW COLOR	#STEPS	COST
Railings		2	\$663.32
Materials:			
Dunn Edwards Aristoshield: Color Match - Bronze			
RAILINGS SUBTOTAL			\$663.32

ATTACHMENT #2

ESTIMATE



Sophia Musa
600 Winston Ave.
Broadbury, CA 91008
(626) 358-3218

Ramos Painting Services

631 WoodBluff st.
Duarte, CA 91010
Phone: (626) 512-1007
Email: ramgb1023@gmail.com

Estimate # 000596
Date 03/03/2022

Description	Total
Interior	\$6,600.00
-Main office	
*Protect Floor and Furniture	
*Paint Ceiling	
*Paint Crown Molding	
*Paint Walls	
*Paint Base Molding	
*Paint Windows Trim	
*Paint Doors and Trim	
-Hallway	
*Protect Floor and Furniture	
*Paint Ceiling	
*Paint Crown Molding	
*Paint Walls	
*Paint Base Molding	
*Paint Windows Trim	
*Paint Doors and Trim	
-Office	
*Protect Floor and Furniture	
*Paint Ceiling	
*Paint Crown Molding	
*Paint Walls	
*Paint Base Molding	
*Paint Windows Trim	
*Paint Doors and Trim	
-Bathroom F	
*Protect Floor and Furniture	
*Paint Ceiling	
*Paint Crown Molding	
*Paint Walls	
*Paint Base Molding	
*Paint Windows Trim	
*Paint Doors and Trim	
-Bathroom M	
*Protect Floor and Furniture	
*Paint Ceiling	
*Paint Crown Molding	
*Paint Walls	

*Paint Base Molding
*Paint Windows Trim
*Paint Doors and Trim

Interior	\$4,000.00
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-Council Chamber
*Protect Floor and Furniture
*Paint Ceiling
*Paint Crown Molding
*Paint Walls
*Paint Base Molding
*Paint Windows Trim
*Paint Doors and Trim

Interior	\$2,000.00
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-Wood Refinish Podium Outer Face
*Sand Wood Area
*Apply Stain to Match Existing Color
*Apply Wood Clear Sealer

Exterior Paint	\$7,000.00
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-Power Wash Building
-Scrape Old Paint Peeling from Wood (Fascia Board)
-Sand Wood Fascia Board
-Repair and Patch Wood Pillars (Front Entrance)
-Apply Silicone Caulk on Joins
-Apply Primer on Wood Repaired Areas
-Paint Fascia Board
-Paint Stucco Walls and Eave
-Paint Front Entrance Stucco Ceiling
-Paint Doors and Trim
-Paint Windows Trim

Subtotal	\$19,600.00
Total	\$19,600.00

Notes:

Estimate Price included Labor and Materials
Quote is Based in using Sherwin Williams Paint Brand

License# 998692

Notes: If there is any need to do extra work that is not described above, it will be an additional cost.

**Please make all checks payable to Ramos Painting Services.
**For Zelle Payments option please use number (626)673-9913

ATTACHMENT #3

WESTERN

Painting & Wallcovering, Inc.

1925 S. Myrtle Ave., Monrovia CA 91016-4854

Telephone: 626/301-1000 Fax: 626/301-1003

CA Lic. No. 416661

DIR #100007959

February 10, 2022

City of Bradbury
600 Winston Avenue,
Bradbury, California 91008

Attention: Sophia Musa

Re: City Hall building at Bradbury
600 Winston Avenue, Bradbury, California 91008

Please find our proposal below for painting at the above referenced project. We are a union company and pay prevailing wage. We are certified Small Business Enterprise (SBE).

No Addendum noted. Project duration required 2 weeks and completion based on before end of June 30th, 2023.

Working hour based on Monday through Friday 7am - 3pm.

This work is bid to be completed as one mobilization with continuous schedule. Additional mobilization charge per occurrence \$1,500.00.

Material cost based on water based acrylic non metallic paint.

Project quote based on 2 coats finish paint. (See alternate add if additional primer coat is required.)

Scope of work: Protect interior floor and furniture cover while painting to avoid over spray.
Paint 2 coats paint on gypsum walls, gyp ceilings, wood base, crown molding, door and door frame,
Paint 2 coat on crown molding on windows only (no paint on window frames).
Exterior limited to 2 coats paint on plaster walls, doors, downspout and front porch wood structure
Exterior prep included power wash the exterior surface, prep and sand smooth the front porch wood columns before paint.

	<u>Admin offices and hallways</u>	<u>Counsel Chambers</u>	<u>SUM</u>
Interior Painting	\$8,500.00	\$4,900.00	\$13,400.00
Exterior Painting			\$9,600.00
		Total:	\$23,000.00

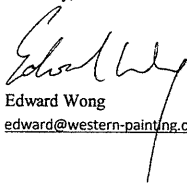
Alternate:

1. If additional primer is required before 2 coats of finish paint.	Add	\$4,600.00
2. Remove vegetation attached to the exterior building before paint.	Add	\$1,500.00
3. Owner to supply paint materials in lieu of the contractor to provide the paint.	Deduct	\$2,000.00
4. Not to paint all doors and door frames.	Deduct	\$1,600.00
5. If required to be work at night or off hours.	Add	\$3,500.00

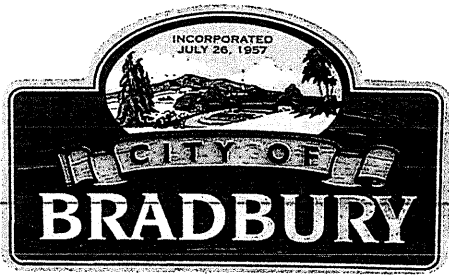
Excluded: Parking cost, remove any attachment on walls and put it back on, pre-painted or pre-finished items, repair or patching, Stain, night work, remove furniture, intumescent or fireproof coatings, signage, millwork or casework, remove any vegetation, waterproofing, graphics, Mural or art painting, striping, elastomeric coatings, traffic coatings, floor coatings or sealer, striping paint, paint or caulk aluminum storefront, water repellent coatings, wallcovering, wall panels, Kynar paint or powder coat, sandblasting, electrostatic painting, Graffiti-Resistant Coatings, bonds (Add 3%), Theme painting, paint samples or mock up (only draw downs will be provided),

- Notes:
1. Overtime and compression of schedule will add 17% of work affected
 2. Inspection and/or approval of other trades work is not included.
 3. Repair and/or repainting due to other trades quality failures is not included.
 4. This bid assumes the schedule will be in proper sequence with in reason.
 5. This proposal will be an integral part of any contract agreement but not limited to the above exclusions and notes.
 6. Provide painter's caulk base on PDCA (Painting and Decorating Contractors of America) Industry Standards.
 7. This bid proposal is valid for a period of THIRTY (30) calendar days.
 8. Fully executed payment within 35 days of completion of the contract work.
 9. This proposal is based on a continuous schedule without additional mobilizations.
 10. If we are scheduled and show up, but get turned away for job not being ready, charge per occurrence \$1,500.00.

Sincerely,



Edward Wong
edward@western-painting.com



Elizabeth Bruny, Mayor (District 5)
Bruce Lathrop, Mayor Pro Tem (District 4)
Richard Barakat, Council Member (District 3)
Dick Hale, Council Member (District 1)
Montgomery Lewis, Council Member (District 2)

City of Bradbury Agenda Memo

TO: Honorable Mayor and Members of the City Council

FROM: Kevin Kearney, City Manager

DATE: March 15, 2022

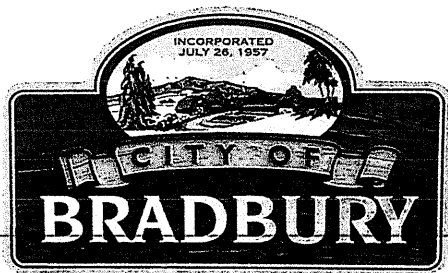
SUBJECT: **DISCUSSION ON ELECTRIC CHARGING STATIONS AT THE
BRADBURY CIVIC CENTER**

SUMMARY

Staff has been exploring the construction of electric charging stations at the Bradbury Civic Center at the request of Mayor Pro-Tem Lathrop. The idea is that one or more stations could be erected on the property with grant funding from Southern California Edison's (SCE) Electric Vehicle Charging Infrastructure Program. Prior to bringing this item to the City Council, Staff's goal was to meeting with a contractor or two who could provide quotes on the costs of such a venture. Unfortunately, Staff has been struggling to determine costs and feels that the program can only be explored by hiring a contractor/consultant, such as RKA or another, to assist Staff in determining actual costs. Once a plan is determined and costs are understood, it is only then that Staff would able to pursue grant funding through SCE.

Through initial research, Staff has determined that if the charging station is public, all access in and around the charging station must be ADA compliant. If fewer than 4 charging ports are installed, the parking areas do not need to be stripped. The area in front of City Hall might be the best suited since the slopes in the rear parking area might be too severe to be ADA compliant. Through SCE grant funding, SCE requires a minimum of 2 stations with 4 charging ports.

It is recommended that the City Council discuss the construction of electric charging stations at the Bradbury Civic Center. If the City Council desires to move forward with the charging stations, Staff will work with RKA, or another vendor, to develop plans and costs.



Elizabeth Bruny, Mayor (District 5)
Bruce Lathrop, Mayor Pro Tem (District 4)
Richard Barakat, Council Member (District 3)
Dick Hale, Council Member (District 1)
Montgomery Lewis, Council Member (District 2)

City of Bradbury Agenda Memo

TO: Honorable Mayor and Members of the City Council

FROM: Kevin Kearney, City Manager

DATE: March 15, 2022

SUBJECT: **RESOLUTION NO. 22-08: RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BRADBURY OF VOTE OF NO CONFIDENCE IN LOS ANGELES COUNTY DISTRICT ATTORNEY GEORGE GASCON.**

ATTACHMENTS: 1) Resolution No. 22-08
2) Special Directives

SUMMARY

At the request of Councilmember Barakat, this item discusses the performance of Los Angeles County District Attorney Gascón.

The Los Angeles County District Attorney's Office has a legal responsibility to execute laws enacted by voters or the state legislature. These laws protect the public and uphold prosecutorial policies. Since his December 7, 2020 swearing-in ceremony, Los Angeles County District Attorney George Gascón has issued numerous special directives which undermine these legislative and ballot processes. Additionally, they may be viewed as placing the safety of the general public at risk.

It is recommended that the City Council adopt Resolution No. 22-08, which casts a vote of no confidence in the Los Angeles County District Attorney.

DISCUSSION

Background

The District Attorney (DA) is an elected county official established by Government Code Section §26500-26543. The DA is responsible for the prosecution of criminal violations of state law and county ordinances occurring within the county in which they are elected. This includes investigation and apprehension, as well as prosecution in court. The DA serves as legal advisor to the Grand Jury and, through its family support division, enforces parental financial obligations. The Board of Supervisors exercises budgetary control over elected DAs but not operational control.

Although there are variations in every county, a typical DA's Office is assigned the following duties:

- **Municipal Court Operations** — Prosecutes all misdemeanors and presents preliminary felony hearings in Municipal Courts.
- **Superior Court Operations** — Presents all felony cases in Superior Court, including legal motions, writs, and appeals, extraditions, and Grand Jury matters.
- **Family Support Operations** — Provides civil and criminal prosecution of family support violations, welfare fraud, and child abduction. Family support policies and procedures are largely regulated by the state and federal governments, and the program's expenses can be almost always fully reimbursed to counties by those entities through direct payments and incentives (i.e., counties receive financial incentives for aggressively enforcing child support).
- **Investigation** — Provides initial investigation and assistance in trial preparation through the investigation of criminal acts.
- **Administrative Services** — Provides budget, purchasing, space planning, personnel services, payroll, clerical support, and data services functions to the DA.

Every four years, the voters of Los Angeles County elect a nonpartisan DA to serve as the chief prosecutor for the County. A candidate for office must be a law school graduate and member of the State Bar of California. The Los Angeles County DA's Office was established by an act of the California Legislature on February 27, 1850.

The elected DA is in charge of the office that prosecutes felony and misdemeanor crimes that occur within Los Angeles County. The Los Angeles District Attorney's Office prosecutes felony crimes and misdemeanor crimes in unincorporated areas and in 78 of the county's 88 cities.

District Attorney George Gascón

George Gascón was elected as the DA for Los Angeles County in November 2020. He was sworn into office on December 7, 2020. Since being sworn in, Mr. Gascón has issued numerous Special Directives and two subsequent amendments, which outline new policies and procedures for the Los Angeles County DA's Office. Each directive is of concern for the public safety of the residents of Los Angeles County and the residents of Bradbury. Three of these directives are briefly described below. The full text of the directives are attached to this report.

Special Directive 20-06: Pretrial Release Policy (Elimination of Cash Bail)

Among other things, this directive asserts Deputy District Attorneys (DDAs) shall not request cash bail for any misdemeanor, non-serious felony, or non-violent felony offense. While there is list of these felonies in this directive, there are 19 pretrial release conditions for the DDAs to consider. If none of the 19 conditions are sufficient to ensure a return to court and public safety then a DDA can consider requesting bail at an arraignment for:

- Felony offenses involving acts of violence on another person; or
- Felony offenses where the defendant has threatened another with great bodily harm; or
- Felony sexual assault offenses on another person.

It also asserts that DDAs shall not object to the release of anyone currently incarcerated in Los Angeles County on cash bail who would be eligible for release under this Special Directive.

Special Directive 20-07: Misdemeanor Case Management

This directive listed numerous misdemeanor charges that shall be declined or dismissed before arraignment and without conditions unless “exceptions” or “factors for consideration” exist. The misdemeanors include:

- Trespassing,
- Disturbing the Peace,
- Criminal Threats,
- Drinking in Public,
- Public Intoxication
- Under the Influence of Controlled Substance,
- Driving without a Valid License,
- Driving on a Suspended License,
- Drug and Paraphernalia Possession,
- Minor in Possession of Alcohol,
- Loitering,
- Loitering to Commit Prostitution, and
- Resisting Arrest

Exceptions and factors for consideration listed in Special Directive 20-07 include repeat offenders in the preceding 24 months; however, misdemeanors such as drug and paraphernalia possession, minor in possession of alcohol, drinking in public, public intoxication, under the influence of controlled substance and loitering to commit prostitution do not have exceptions or factors of consideration identified.

Special Directive 20-08: Sentencing Enhancements/Allegations

This directive provides that the following sentence enhancements or sentencing allegations shall not be filed in any cases and shall be withdrawn in pending matters:

- Any prior-strike enhancements, including the Three Strikes Law; STEP Act enhancements (also known as “gang enhancements”); violations of bail; and firearm allegations

Amendments 20-08.1 and 20-08.2 were issued on December 15, 2020, and December 18, 2020, to make further clarification of Special Directive 20-08, including:

- DDAs may pursue the following allegations, enhancements, and alternative sentencing schemes: Hate Crime; Elder and Dependent Adult Abuse; Child Physical Abuse; Child and Adult Sexual Abuse; Human Sex Trafficking; and Financial Crime.

Other topics addressed by the special directives issued by Mr. Gascón include:

- Youth Justice
- Habeas Corpus Litigation Unit
- Death Penalty Policy
- Victim Services
- Conviction Integrity Unit
- Resentencing

FINANCIAL ANALYSIS

Passing Resolution No. 22-08 poses no significant financial impact on the fiscal year budget.

STAFF RECOMMENDATION

It is recommended that the City Council adopt Resolution No. 22-08, which casts a vote of no confidence in the Los Angeles County District Attorney.

ATTACHMENT #1

RESOLUTION NO. 22-08

RESOLUTION OF THE COUNCIL OF THE CITY OF BRADBURY
OF VOTE OF NO CONFIDENCE IN LOS ANGELES COUNTY
DISTRICT ATTORNEY GEORGE GASCÓN

WHEREAS, the City of Bradbury places the utmost priority on public safety and protecting its community; and

WHEREAS, Los Angeles County District Attorney George Gascón unilaterally issued a series of Special Directives in December 2020 including Special Directives 20-06, 20-07, and 20-08; and

WHEREAS, Special Directive 20-06: Pretrial Release Policy, eliminated cash bail for any misdemeanor, non-serious felony, or non-violent felony offense; and

WHEREAS, Special Directive 20-07: Misdemeanor Case Management, lists numerous misdemeanor charges that will be declined or dismissed before arraignment and without conditions unless “exceptions” or “factors for consideration” exist. These misdemeanor charges include trespassing, disturbing the peace, criminal threats, drinking in public, drug and paraphernalia possession, under the influence of controlled substance in public, public intoxication, resisting arrest, driving without a valid license or with a suspended license, minor in possession of alcohol, loitering, and loitering to commit prostitution; and

WHEREAS, Special Directive 20-08: Sentencing Enhancements/Allegations eliminates several sentence enhancements, including the Three Strikes Law, gang enhancements, and violations of bail; and

WHEREAS, some of the Special Directives issued by Los Angeles County District Attorney George Gascón contradict state laws that were enacted through the state legislature as well as the legislative ballot initiative process to prevent and prosecute crime and protect the general public; and

WHEREAS, policies that aim to restructure or amend prosecutorial directives need to be consistent with state law and issued with reasonable intent and priority to enhance public safety and protect the general public and victims’ rights; and

NOW, THEREFORE, the Council of the City of Bradbury resolves as follows:

Section 1. The City of Bradbury strongly affirms a vote of no confidence in Los Angeles County District Attorney George Gascón and hereby direct staff to transmit the resolution to applicable and interested offices and organizations.

Section 2. The City of Bradbury demands Los Angeles County District Attorney George Gascón rescind every Special Directive issued since being sworn into office on December 7, 2020.

Section 3. The City of Bradbury insists Los Angeles County District Attorney George Gascón uphold the laws of the state, whether they were established by the state legislature or the voters of this state, and demands no Special Directives be issued by Los Angeles County District Attorney George Gascón which contradict these laws.

Section 4. The City Clerk shall certify to the adoption of this resolution and shall cause this resolution to be entered in the Book of Resolutions of the Council of this City.

PASSED, APPROVED AND ADOPTED this 15th day of March, 2022.

ELIZABETH BRUNY - MAYOR
CITY OF BRADBURY

ATTEST:

CLAUDIA SALDANA - CITY CLERK
CITY OF BRADBURY

"I, Claudia Saldana, City Clerk, hereby certify that the foregoing Resolution, being Resolution No. 22-08, was duly adopted by the City Council of the City of Bradbury, California, at a regular meeting held on the 15th day March, 2022 by the following roll call vote:"


AYES:
NOES:
ABSENT:

CLAUDIA SALDANA - CITY CLERK
CITY OF BRADBURY

ATTACHMENT #2

SPECIAL DIRECTIVE 20-06

TO: ALL DEPUTY DISTRICT ATTORNEYS

FROM: GEORGE GASCÓN 
District Attorney

SUBJECT: PRETRIAL RELEASE POLICY

DATE: DECEMBER 7, 2020

This Special Directive addresses issues of Bail and Own Recognizance in Chapter 8 of the Legal Policies Manual. Effective **December 8, 2020**, the policies outlined below supersede the relevant sections of Chapter 8 of the Legal Policies Manual.

INTRODUCTION

The purpose of this memo is to outline the new policies and protocols that will guide our recommendations for pretrial release and the use of cash bail moving forward. While these policies will take effect immediately, there will be ongoing opportunities for staff to give valuable feedback about how we can best operationalize these changes. We will continually monitor and review data collected on the implementation of these policies and we will regularly review these policies with office staff and members of the community to ensure that they are effective and successful. These new policies capture our shared vision of justice for all in Los Angeles County.

THE UNFAIRNESS OF CASH BAIL

Across the nation, bail reform is a topic of much debate. While some jurisdictions have passed statewide bail reform (New York and New Jersey), others have changed local bail setting practices by reducing reliance on cash bail. Although California voters chose not to implement SB10 through the passage of Proposition 25, the conversation about bail reform remains active and robust.

While it is nearly certain that legislation seeking to eliminate cash bail will once again be put to voters, we will not wait for statewide reform before imposing meaningful changes in the use of cash bail. We must seek to protect the public while ensuring that our practices—particularly with regard to the utilization of cash bail—do not lead to periods of unnecessary incarceration that harm individuals, families and communities.

Cash bail creates a two-tiered system of justice - one where those with financial resources are able to remain free, while those who lack such resources are incarcerated. While most justify the use of cash bail to incentivize an individual to return to court, evidence suggests that no such incentives

are required: it is exceptionally rare that individuals willfully flee prosecution or commit violent felony offenses while released pretrial and the overwhelming majority of people will return to court, even when they have no financial interest at stake.¹ In addition, appearance rates for those people who are not detained are improved when they receive effective court reminders, transportation assistance and referrals to community-based services when they are in need.

Disparities in bail setting, unduly impact low-income communities of color and set the wheels of mass incarceration in motion: individuals detained pretrial are more likely to plead guilty to a case, in turn receiving a criminal record; those with criminal records face obstacles for future employment opportunities; and those people who cannot be employed see their opportunities for economic mobility and advancement severely hindered. The negative impacts of incarceration extend well beyond an incarcerated individual into their families and communities. Jobs are lost, people are evicted and deported, children lose contact with their primary caregivers, and those who were detained return to their communities destabilized by the traumatizing conditions in our jails.

The negative consequences of cash bail have fallen unequally on the shoulders of low-income communities of color in Los Angeles County. Of the 5,885 people detained pretrial in August 2020, 84% were people of color and nearly half (42%) were incarcerated for non-serious, non-violent offenses². These individuals jailed pretrial spend, on average, 221 days in jail³ without having been convicted of a crime. While COVID-19 led to substantial declines in the Los Angeles County Jail population, early releases were not proportionate across all race categories and subpopulations, including those who are most vulnerable. Specifically, while Black people were 29% of the pre-COVID jail population, only 24% of them were released early, and, when looking at the pretrial population with mental health needs, Black and Hispanic people received early release at a significantly lower rate than white people.

The US Constitution guarantees every person – regardless of race, class or origin – the right to be presumed innocent during the pretrial phase of a criminal proceeding. America’s promise is to provide for everyone “equal justice under the law”. While one might argue that pretrial detention doesn’t remove these rights, our detention practices and the use of unaffordable cash bail eviscerates the bedrock of our democracy and undermines our principles of justice, fairness, and equality under the law.

It’s time for a change. We must adopt a more just approach to prosecution by seeking to undo the legacy of cash bail while still fulfilling our obligations to protect public safety. Freedom should be free.

¹ For a pilot project conducted by The Bail Project in Compton, 300 people had bail paid for them. 93% of clients included in the pilot were people of color. The outcomes of the pilots favor own recognizance release: 96% returned for every court date and, of clients whose cases are now disposed, 33% had their cases dismissed and 97% of those individuals who received a conviction required no additional jail time as part of their sentence.

² Charges at the time of booking

³ This reflects the average number of pretrial days spent in jail to-date on 8/19/20, which is likely an underestimate. Many people will remain detained long after the date of analysis. A truer measure would be the average number of days an individual spends from being placed in custody to being released or their case disposed, though such information is not currently available.

It is our duty as stewards of public safety to mitigate all public safety risk, and this includes ~~ensuring that our office's prosecutorial actions do not inflict needless harm on court-involved~~ individuals through unnecessary incarceration. We must, and can do better, than to continue to impose cash bail where it is not required, as evidence suggests that cash bail is neither effective nor required to keep communities safe or to ensure return to court for future appearances.

For all the reasons mentioned above, it is time to re-evaluate our policies and procedures regarding the use of cash bail and pretrial detention before conviction. The policies outlined in this memo are merely a starting point as we begin to better balance the well-being of the accused with our obligations to maintain public safety during this pretrial period. By minimizing the utilization of cash bail, reducing unnecessary pretrial detention, seeking the least restrictive conditions of release possible, and utilizing community-based support programs and interventions, the long-term safety of all Los Angeles County residents can be improved and the system will be made more fair and just.

Pretrial release recommendations shall be guided by the following principles and policies:

I. ELIMINATION OF CASH BAIL

- A. The presumption shall be to release individuals pretrial.
- B. All individuals shall receive a presumption of own recognizance release without conditions. Conditions of release may only be considered when necessary to ensure public safety or return to court.
 - 1. Pretrial release conditions, if any, shall be considered in order from least restrictive (No Conditions) to most restrictive (Electronic Monitoring / Home Detention). Release with no condition shall be the initial position. The least restrictive condition or combination of conditions for release must be determined to be inadequate to protect public safety and to reasonably ensure the defendant's return to court before considering the next least restrictive condition.
 - 2. All pretrial release conditions requested shall be reasonably related to the charges, and necessary to protect the public and to reasonably ensure the defendant's return to court.
 - 3. Only after all pretrial release conditions have been thoroughly evaluated and determined to be inadequate to protect public safety and to reasonably ensure the defendant's return to court shall bail or pretrial detention be considered.
- C. Pretrial Detention Procedures
 - 1. Pretrial detention shall only be considered when the facts are evident and clear and convincing evidence shows a substantial likelihood that the defendant's release would result in great bodily harm to others or the defendant's flight.
 - a) The substantial likelihood of the defendant's flight may include felony holds from other jurisdictions. Release conditions or detention may be considered for the limited purpose of ensuring the defendant is not removed to another jurisdiction. Considerations

shall include but are not limited to a comparison of the seriousness of the charges locally and for the hold, the uncertainty of when the defendant will be returned, and maintaining joinder of co-defendants.

2. DDAs shall not request cash bail for any misdemeanor, non-serious felony, or non-violent felony offense.
3. If pretrial release conditions have been found insufficient to ensure return to court and public safety, DDAs may consider requesting bail at arraignment for:
 - a) Felony offenses involving acts of violence on another person; or
 - b) Felony offenses where the defendant has threatened another with great bodily harm; or
 - c) Felony sexual assault offenses on another person.
- D. When cash bail is being requested under the limited circumstances delineated in this memo, DDAs shall recommend cash bail amounts that are aligned with the accused's ability to pay. There should be a presumption of indigency when the court has determined that a client is entitled to court appearance counsel.
- E. For those individuals who are indigent, DDAs shall avoid the selection of restrictive conditions of release that include fees and costs for their administration (e.g., paying a licensing fee for electronic monitoring) unless no alternative restrictive condition or combination of conditions can be applied to meet the same need.
- F. Conditions of release shall be evaluated based on all available information about the accused. Individuals with underlying conditions, such as behavioral health conditions, shall not receive overly restrictive release conditions based solely on the presence of such issues. Scores from risk assessment tools may never be the sole basis for a recommendation for detention.⁴ All pretrial release conditions requested shall be reasonably related to the charges and necessary to protect the public and ensure the defendant's return to court.
- G. If defense counsel requests a review of release conditions, the DDAs will not oppose defense counsel motion to the court to remove or modify the conditions of release, if the accused's conduct has demonstrated that a threat to a specific identifiable person or persons and/or any evidence of the accused's intention to willfully evade prosecution has been eliminated.
- H. **Covid-19 Addendum:** Regardless of charge, release with least restrictive conditions is the presumptive position when the accused belongs to a vulnerable/high risk group (as defined by the CDC and the LA County Department of Public Health) where incarceration could result in serious illness or death due to Covid-19 exposure.

⁴ There are well-documented concerns among social science researchers that risk assessment tools cannot predict what they aim to predict and perpetuate racial bias. See [Technical Flaws of Pretrial Risk Assessments Raise Grave Concerns](#).

II. APPEARANCES AND VIOLATIONS OF CONDITIONS OF RELEASE

- A. DDAs shall not oppose defense counsel's requests to waive client appearances at non-essential court appearances. The burden of appearing for short, non-consequential hearings can be hugely impactful to individuals who have to arrange to take off from work, arrange for childcare, and find their way to court. Many court appearances require minimal involvement from the accused and due to overburdened court calendars can result in extensive wait times before short appearances are held.
- B. In the event of non-appearance, DDAs will not oppose defense counsel's request for a bench warrant hold when no clear and convincing evidence exists that the non-appearance occurred as a result of the accused's willful evasion of prosecution.

III. RETROACTIVITY OF POLICY

DDAs shall not object to the release of anyone currently incarcerated in Los Angeles County on cash bail who would be eligible for release under the policies outlined in this memo.

TABLE 1
PRETRIAL RELEASE CONDITIONS FROM LEAST TO MOST RESTRICTIVE

LEAST RESTRICTIVE	• Own Recognizance Release
	• Release to community member, friend, family member or partner with promise to accompany the accused to court
	• Phone/text/online check-ins with designated agency
	• Travel Restrictions - order to not leave state, passport surrender
	• Driving prohibitions or restrictions
	• Stay away order
	• AA/NA meeting attendance (or similar community support groups)
	• Order to surrender weapon(s) to law enforcement
	• Ignition Interlock Device


MORE RESTRICTIVE	<ul style="list-style-type: none"> • In-person check-ins with designated agency
	<ul style="list-style-type: none"> • Mental health treatment
	<ul style="list-style-type: none"> • Alcohol abuse treatment
	<ul style="list-style-type: none"> • Substance abuse treatment
	<ul style="list-style-type: none"> • Drug and alcohol testing
	<ul style="list-style-type: none"> • Residential treatment program
	<ul style="list-style-type: none"> • Home relocation during case pendency
	<ul style="list-style-type: none"> • Secure Continuous Remote Alcohol Monitoring
	<ul style="list-style-type: none"> • Electronic monitoring/GPS
	<ul style="list-style-type: none"> • Home detention

The policies of this Special Directive supersede any contradictory language of the Legal Policies Manual.

gg

SPECIAL DIRECTIVE 20-07

TO: ALL DEPUTY DISTRICT ATTORNEYS

FROM: GEORGE GASCÓN 
District Attorney

SUBJECT: MISDEMEANOR CASE MANAGEMENT

DATE: DECEMBER 7, 2020

This Special Directive addresses issues of Misdemeanor Case Management in Chapter 9 of the Legal Policies Manual. Effective **December 8, 2020**, the policies outlined below supersede the relevant sections of Chapter 9 of the Legal Policies Manual.

INTRODUCTION

The public's interaction with the criminal justice system is mainly through misdemeanor prosecutions, yet the power and influence of the misdemeanor system in Los Angeles County has gone largely unnoticed. The goal of this new policy is to reimagine public safety and best serve the interests of justice and community well-being. As such, the prosecution of low-level offenses will now be governed by this data-driven Misdemeanor Reform policy directive.

Los Angeles County courts should not be revolving doors for those in need of treatment and services. Currently, over 47% of those incarcerated pre-trial on misdemeanor cases suffer from mental illness. Likewise, nearly 60% of those released each day have a significant substance use disorder. Meanwhile, individuals experiencing homelessness account for almost 20% of arrests in Los Angeles despite comprising only 1.7% of the population. The status quo has exacerbated social ills and encouraged recidivism at great public expense.

Moreover, the consequences of a misdemeanor conviction are life-long and grave, even for those who avoid incarceration. Misdemeanor convictions create difficulties with employment, housing, education, government benefits, and immigration for non-citizens and citizens alike. Deportation, denial of citizenship, and inadmissibility affect not only individuals, but also children, families, and immigrant communities. And no matter one's immigration status, the resultant costs and fees of misdemeanor convictions force many to choose between necessities such as rent, transportation, and medical care versus financial obligations to the justice system.

Despite the immense social costs, studies show that prosecution of the offenses driving the bulk of misdemeanor cases have minimal, or even negative, long-term impacts on public safety. Agencies equipped with the social-service tools necessary to address the underlying causes of offenses such as unlicensed driving, sex work, drug possession, drinking in public, and trespassing

are best positioned to prevent recidivism and will thus be empowered to provide help to those in need.

The goal of the Los Angeles County District Attorney's Office is to protect public safety. To do so as effectively as possible, we will direct those in need of services to treatment providers, divert those undeserving of criminal records to appropriate fora, and reorient our focus towards combating violent and serious criminal offenses.

I. DECLINATION POLICY DIRECTIVE

The misdemeanor charges specified below shall be declined or dismissed before arraignment and without conditions unless "exceptions" or "factors for consideration" exist.

These charges do not constitute an exhaustive list. Each deputy district attorney is encouraged to exercise his or her discretion in identifying a charge falling within the spirit of this policy directive and proceed in accordance with its mandate.

In addition, each deputy district attorney retains discretion to seek a deviation from this policy when a person poses an identifiable, continuing threat to another individual or there exists another circumstance of similar gravity. In such a situation, the deputy district attorney must consult with their supervisor, place their justification for seeking a deviation in writing, and record their supervisor's determination in the case file. Such a deviation should be the exception, not the rule. In all circumstances, the person's ability to pay shall be considered.

Trespass – Penal Code § 602(a)-(y)

- a. Exceptions or Factors For Consideration
 - i. Repeat trespass offenses on the same public or private property over the preceding 24 months
 - ii. Verifiable, imminent safety risk
 - iii. No indicia of substance use disorder and/or mental illness, or homelessness

Disturbing The Peace – Penal Code § 415(1)-(3)

- a. Exceptions or Factors For Consideration
 - i. Repeat offenses over the preceding 24 months involving substantially similar behavior to that charged
 - ii. No indicia of substance use disorder and/or mental illness

Driving Without A Valid License – Vehicle Code § 12500(a)-(e)

- a. Exceptions or Factors For Consideration
 - i. Repeat driving offenses over the preceding 24 months involving substantially similar behavior to that charged

Driving On A Suspended License – Vehicle Code § 14601.1(a)

- a. Exceptions or Factors For Consideration
 - i. Repeat driving offenses over the preceding 24 months involving substantially similar behavior to that charged

Criminal Threats – Penal Code § 422

- a. Exceptions or Factors For Consideration
 - i. Offense related to domestic violence or hate crime
 - ii. Repeat threat offenses over the preceding 24 months
 - iii. Documented history of threats towards victim
 - iv. Possession of a weapon capable of causing bodily injury or death during commission of offense
 - v. No indicia of substance use disorder and/or mental illness

Drug & Paraphernalia Possession – Health & Safety Code §§ 11350, 11357, 11364, & 11377

- a. Exceptions or Factors For Consideration
 - i. None identified

Minor in Possession of Alcohol – Business & Professions § 25662(a)

- b. Exceptions or Factors For Consideration
 - i. None identified

Drinking in Public – Los Angeles County Municipal Code §13.18.010

- c. Exceptions or Factors For Consideration
 - i. None identified

Under the Influence of Controlled Substance – Health & Safety Code § 11550

- a. Exceptions or Factors For Consideration
 - i. None identified

Public Intoxication – Penal Code § 647(f)

- a. Exceptions or Factors For Consideration
 - i. None identified

Loitering – Penal Code § 647(b),(c), (d), (e)

- a. Exceptions or Factors For Consideration
 - i. Repeat offenses over the preceding 24 months involving substantially similar behavior to that charged

Loitering To Commit Prostitution – Penal Code § 653.22(a)(1)

- a. Exceptions or Factors For Consideration
 - i. None identified

Resisting Arrest – Penal Code § 148(a)

- a. Exceptions or Factors For Consideration
 - i. Repeat offenses over the preceding 24 months involving substantially similar behavior to that charged
 - ii. The actual use of physical force against a peace officer
 - iii. The charge is filed in connection with another offense not enumerated above

If the charge is not declined, follow these sequential steps until dismissal:

- A. **Pre-Arraignment Diversion via Administrative Hearing.** Upon compliance with condition(s) imposed in the administrative hearing, the charge shall be formally declined;
- B. **Post-Arraignment, Pre-Plea Diversion.** Upon compliance with condition(s) imposed at arraignment or pretrial, the charge shall be dismissed without the entry of a plea of nolo contendere or guilty;
- C. **Post-Arraignment, Post-Plea Diversion.** Upon compliance with condition(s) imposed at pre-trial, the charge shall be dismissed following the withdrawal of a plea of nolo contendere or guilty.

The conditions of such diversion shall be the same as those statutorily required upon conviction, absent monetary fines and fees and status registration. In no circumstance may the offer of diversion be conditioned upon (1) waiver of a person's constitutional or statutory rights or (2) a temporal or procedural deadline other than commencement of trial.

II. DIVERSION POLICY DIRECTIVE

The purpose of the Diversion Policy Directive is to utilize remediation to protect public safety, promote individual rehabilitation, and encourage prosecutorial discretion. For all misdemeanor offenses not listed below under the Declination Policy Directive, pre-plea diversion shall be presumptively granted. This diversion policy shall not apply to (1) offenses excluded under Penal Code §1001.95 and (2) any driving under the influence offense.

The Diversion Policy Directive is also intended to complement statutory diversion schemes such as those codified under Penal Code §§ 1001.36, 1001.80, 1001.83, and 1001.95. The Deputy District Attorney shall utilize their discretion, in accordance with the spirit of this policy, when determining which diversionary scheme is best suited to serve the interests of justice.

The conditions of such diversion shall be the same as those statutorily required upon conviction, absent monetary fines and fees and status registration. In no circumstance may the offer of diversion be conditioned upon waiver of a person's constitutional or statutory right, except for a waiver of time under Penal Code § 1382. The duration of such diversion shall presumptively be 6 months, but in no circumstance shall it exceed 18 months. Upon compliance with the

condition(s) imposed, the charge(s) shall be dismissed without the entry of a plea of nolo contendere or guilty.

The presumption of pre-plea diversion may be rebutted upon reasoned consideration of the following factors:

- Convictions for offenses of equal or greater severity than that charged over the preceding 24 months;
- Documented history of threats or violence towards a victim;
- Clear evidence of an identifiable, continuing threat to another individual or other circumstance of similar gravity.

In such a situation, the Deputy District Attorney must consult with their supervisor, place their justification for seeking a deviation in writing, and record their supervisor's determination in the case file.

III. NON-DIVERSIONARY PLEA OFFERS

If a misdemeanor case is not subject to declination or resolved via the Diversion Policy Directive, the deputy district attorney shall adhere to the following guidelines when making plea offers:

- No offer shall require that a defendant complete combined jail time and community labor as a term of a sentence;
- No offer shall require that a defendant complete in excess of 15 days of community labor as a term of a sentence;
- No offer shall require status registration for a defendant unless mandated by statute;
- Once conveyed to the defendant, no offer shall be increased in response to the defendant exercising their right to pursue a jury trial or pretrial motion.

In seeking a deviation from any of the aforementioned guidelines, the deputy district attorney must consult with their supervisor, place their justification for seeking a deviation in writing, and record their supervisor's determination in the case file.

IV. FINES AND FEES

Fines and fees place burdens on individuals in the criminal system and their families and pose significant and sometimes insurmountable obstacles to reentry. Deputy district attorneys shall:

- Presume that an individual is indigent and unable to pay fines and fees under the following circumstances: the individual is represented by the Public Defender, the Alternate Public Defender, Bar Panel, or a free legal services organization, the defendant is receiving any type of means-tested government benefits, the defendant is experiencing homelessness or the defendant can make a showing of indigence by clear and convincing evidence;
- Actively support and in no case object to requests to waive fines and fees for indigent individuals;
- Refrain from arguing that a failure to pay a fine, fee, or court ordered program represents a violation of summary probation if the defendant is indigent as defined above, or that


summary probation should be extended based upon an alleged failure to pay, or that an individual should be incarcerated or suffer an additional sanction due to failure to pay.

The policies of this Special Directive supersede any contradictory language of the Legal Policies Manual.

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SPECIAL DIRECTIVE 20-08

TO: ALL DEPUTY DISTRICT ATTORNEYS

FROM: GEORGE GASCÓN 
District Attorney

SUBJECT: SENTENCING ENHANCEMENTS/ALLEGATIONS

DATE: DECEMBER 7, 2020

This Special Directive addresses the following chapters in the Legal Policies Manual:

Chapter 2	Crime Charging - Generally
Chapter 3	Crime Charging - Special Policies
Chapter 7	Special Circumstances
Chapter 12	Felony Case Settlement Policy
Chapter 13	Probation and Sentencing Hearings

Effective **December 8, 2020**, the policies outlined below supersede the relevant sections of the abovementioned chapters of the Legal Policies Manual. Additionally, the following sections of the Legal Policies Manual are removed in their entirety. Chapter 2.10 - Charging Special Allegations, Chapter 3.02 - Three Strikes, Chapter 7 - Special Circumstances, Chapter 12.05 - Three Strikes, Chapter 12.06 - Controlled Substances.

INTRODUCTION

Sentencing enhancements are a legacy of California's "tough on crime" era. (See Appendix.) It shall be the policy of the Los Angeles County District Attorney's Office that the current statutory ranges for criminal offenses alone, without enhancements, are sufficient to both hold people accountable and also to protect public safety. While initial incarceration prevents crime through incapacitation, studies show that each additional sentence year causes a 4 to 7 percent increase in recidivism that eventually outweighs the incapacitation benefit.¹ Therefore, sentence enhancements or other sentencing allegations, including under the Three Strikes law, shall not be filed in any cases and shall be withdrawn in pending matters.

This policy does not affect the decision to charge crimes where a prior conviction is an element of the offense [i.e., felon in possession of a firearm (Penal Code § 29800(a)(1)), driving under the influence with a prior (Vehicle Code § 23152), domestic violence with a prior (Penal Code §

¹ Mueller-Smith, Michael (2015) "The Criminal and Labor Market Impacts of Incarceration.", *available at* <https://sites.lsa.umich.edu/mgms/wp-content/uploads/sites/283/2015/09/incar.pdf>.

273.5(f)(1)), etc.], nor does it affect Evidence Code provisions allowing for the introduction of prior conduct (i.e., Evidence Code §1101, 1108, and 1109).

The specified allegations/enhancements identified in this policy directive are not an exhaustive list of all allegations/enhancements that will no longer be pursued by this office; however, these are the most commonly used allegations/enhancements.

POLICY

- Any prior-strike enhancements (Penal Code § 667(d), 667(e); 1170.12(a) and 1170.12 (c)) will not be used for sentencing and shall be dismissed or withdrawn from the charging document. This includes second strikes and any strikes arising from a juvenile adjudication;
- Any Prop 8 or “5 year prior” enhancements (Penal Code §667(a)(1)) and “3 year prior” enhancements (Penal Code §667.5(a)) will not be used for sentencing and shall be dismissed or withdrawn from the charging document;
- STEP Act enhancements (“gang enhancements”) (Penal Code § 186.22 et. seq.) will not be used for sentencing and shall be dismissed or withdrawn from the charging document;
- Special Circumstances allegations resulting in an LWOP sentence shall not be filed, will not be used for sentencing, and shall be dismissed or withdrawn from the charging document;
- Violations of bail or O.R. release (PC § 12022.1) shall not be filed as part of any new offense;
- If the charged offense is probation-eligible, probation shall be the presumptive offer absent extraordinary circumstances warranting a state prison commitment. If the charged offense is not probation eligible, the presumptive sentence will be the low term. Extraordinary circumstances must be approved by the appropriate bureau director.

II. PENDING CASES

At the first court hearing after this policy takes effect, DDAs are instructed to orally amend the charging document to dismiss or withdraw any enhancement or allegation outlined in this document.

III. SENTENCED CASES

Pursuant to PC § 1170(d)(1), if a defendant was sentenced within 120 days of December 8, 2020 they shall be eligible for resentencing under these provisions. DDAs are instructed to not oppose defense counsel’s request for resentencing in accordance with these guidelines.

APPENDIX

California has enacted over 100 sentencing enhancements, many of which are outdated, incoherent, and applied unfairly. There is no compelling evidence that their enforcement improves public safety. In fact, the opposite may be true. State law gives District Attorneys broad authority over when and whether to charge enhancements. The overriding concern is interests of justice and public safety.

The Stanford Computational Policy Lab studied San Francisco's use of sentencing enhancements from 2005 to 2017. They released their report, *Sentencing Enhancements and Incarceration: San Francisco, 2005-2017* in October of 2019. The following policy is informed by the results of the Stanford study.

As noted in the study:

“During the 1980s and 90s, enhancements became more numerous and severe. Dozens of new enhancement laws were passed in a way that critics alleged was haphazard—in “reaction to the ‘crime of the month.’”

California's massive rates of incarceration can be tied directly to the extreme sentencing laws passed by voters in the 1990's, including the 1994 Three Strikes Law. In 1980, California had a prison population of 23,264. In 1990, it was 94,122. In 1999, five years after the passage of Three Strikes, California had increased its population to a remarkable 160,000. By 2006, the prison population had ballooned to 174,000 prisoners. California now has 130,000 people in state prison and 70,000 people in local jails.

The Stanford study found that the use of sentencing enhancements in San Francisco accounted for about **1 out of 4 years** served in jail and prison. This study found that the use of sentencing enhancements -- mostly Prop. 8 priors and Three Strikes enhancements -- accounted for half of the time served for enhancements. The study concluded that we could substantially reduce incarceration by ceasing to use enhancements. These enhancements also exacerbate racial disparities in the justice system: **45% of people serving life sentences in CDCR under the Three Strikes law are black.**

Gang enhancements have been widely criticized as unfairly targeting young men of color. Recent analyses by the LA Times suggest that the CALGANG database is outdated, inaccurate and rife with abuse. According to California Department of Corrections and Rehabilitation data from 2019, more than 90 percent of adults with a gang enhancement in state prison were either black or Latinx.

According to Fordham Law Prof. John Pfaff, “There is strong empirical support for declining to charge these status enhancements. Long sentences imposed by strike laws and gang enhancements provide little additional deterrence, often incapacitate long past what is required by public safety, impose serious and avoidable financial and public health costs in the process, and may even lead to greater rates of reoffending in the long run.”

According to Pfaff, a growing body of evidence-based studies have suggested that policing deters; long sentences do little. What deters most effectively is the risk of detection and apprehension in the first place. Other studies increasingly indicate that spending more time in prison can *cause* the

risk of later reoffending; as the harms and traumas experienced in prison grow, the ability to reintegrate after release falls.

That prison may actually increase the risk of reoffending while imposing serious costs on communities starkly illuminates the need to invest in alternatives. Such options do exist. One striking example: by expanding access to (non-criminal justice based) drug treatment, the expansion of Medicaid yielded billions in reduced crime in states that participated in the expansion.

By avoiding harsh sentencing and investing in rehabilitation programs for the incarcerated, we can reduce crime *and* help people improve their lives.

The policies of this Special Directive supersede any contradictory language of the Legal Policies Manual.

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SPECIAL DIRECTIVE 20-08.1

TO: ALL DEPUTY DISTRICT ATTORNEYS

FROM: GEORGE GASCÓN
District Attorney



SUBJECT: FURTHER CLARIFICATION OF SPECIAL DIRECTIVE 20-08

DATE: DECEMBER 15, 2020

This Special Directive is intended to further supplement the language provided in SD 20-08, Section II concerning Pending Cases, issued on December 7, 2020. The introduction of that Special Directive states, "...sentence enhancements or other sentencing allegations, including under the Three Strikes law, shall not be filed in any cases and shall be withdrawn in pending matters." The language is clear that this policy is intended to put an end to the practice of alleging strike priors and all other special allegations in accordance with the constitutional authority granted solely to prosecutors across the state of California.

If a pending matter has strike priors alleged or enhancements/allegations (pursuant to SD 20-08) deputies shall make the following record:

"The People move to dismiss and withdraw any strike prior (or other enhancement) in this case. We submit that punishment provided within the sentencing triad of the substantive charge(s) in this case are sufficient to protect public safety and serve justice. Penal Code section 1385 authorizes the People to seek dismissal of all strike prior(s) (or other enhancements) when in the interests of justice. Supreme Court authority directs this Court to determine those interests by balancing the rights of the defendant and those of society 'as represented by the People.' The California Constitution and State Supreme Court precedent further vest the District Attorney with sole authority to determine whom to charge, what charges to file and pursue, and what punishment to seek. That power cannot be stripped from the District Attorney by the Legislature, Judiciary, or voter initiative without amending the California Constitution. It is the position of this office that Penal Code section 1170.12(d)(2) and Penal Code 667(f)(1) are unconstitutional and infringe on this authority. Additional punishment provided by sentencing enhancements or special allegations provide no deterrent effect or public safety benefit of incapacitation--in fact, the opposite may be true, wasting critical financial state and local resources."

Legal authority: *People v. Superior Court (Romero)* (1996) 13 Cal. 4th 497, 530 ("[T]he language of [section 1385], 'furtherance of justice,' requires consideration both of the constitutional rights of the defendant, and *the interests of society represented by the People*, in determining whether there should be a dismissal." (emphasis in original); *Dix v. Superior Court* (1991) 53 Cal. 3d at 451.


Furthermore, if a court refuses to dismiss the prior strike allegations or other enhancements/allegations based on the People's oral request, the DDA shall seek leave of the court to file an amended charging document pursuant to Penal Code section 1009.

If a court further refuses to accept an amended charging document pursuant to Penal Code section 1009, the DDA shall provide the following information to their head deputy: Case number, date of hearing, name of the bench officer and the court's justification for denying the motion (if any). The DDA shall stipulate to any stay of proceedings if requested by the defense.

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SPECIAL DIRECTIVE 20-08.2

TO: ALL DEPUTY DISTRICT ATTORNEYS

FROM: GEORGE GASCÓN 
District Attorney

SUBJECT: AMENDMENT TO SPECIAL DIRECTIVE 20-08

DATE: DECEMBER 18, 2020

This Office is committed to eliminating mass incarceration and fostering rehabilitation for those charged with crimes. As such, this Office will not pursue prior strike enhancements, gang enhancements, special circumstances enhancements, out on bail/O.R. enhancements, or Penal Code section 12022.53 enhancements. After listening to the community, victims, and my deputy district attorneys, I have reevaluated Special Directive 20-08 and hereby amend it to allow enhanced sentences in cases involving the most vulnerable victims and in specified extraordinary circumstances. These exceptions shall be narrowly construed.

Effective immediately, Special Directive 20-08 is amended as follows:

The following sentence enhancements and allegations shall not be pursued in any case and shall be withdrawn in pending matters:

- Any prior-strike enhancements (Penal Code section 667(d), 667(e), 1170.12(a) and 1170.12(c)) will not be used for sentencing and shall be dismissed or withdrawn from the charging document. This includes second strikes and any strikes arising from a juvenile adjudication;
- Any Prop 8 or “5-year prior” enhancements (Penal Code section 667(a)(1)) and “three-year prior” enhancements (Penal Code section 667.5(a)) will not be used for sentencing and shall be dismissed or withdrawn from the charging document;
- STEP Act enhancements (“gang enhancements”) (Penal Code section 186.22 et. seq.) will not be used for sentencing and shall be dismissed or withdrawn from the charging document;
- Special circumstances allegations resulting in an LWOP sentence shall not be filed, will not be used for sentencing, and shall be dismissed or withdrawn from the charging document;
- Violations of bail or O.R. release (Penal Code section 12022.1) shall not be filed as part of any new offense;
- Firearm allegations pursuant to Penal Code section 12022.53 shall not be filed, will not be used for sentencing, and will be dismissed or withdrawn from the charging document.

However, where appropriate, the following allegations, enhancements and alternative sentencing schemes may be pursued:

- Hate Crime allegations, enhancements or alternative sentencing schemes pursuant to Penal Code sections 422.7 and 422.75;
- Elder and Dependent Adult Abuse allegations, enhancements, or alternative sentencing schemes pursuant to Penal Code sections 667.9, 368(b)(2)/12022.7(c);
- Child Physical Abuse allegations, enhancements or alternative sentencing schemes pursuant to Penal Code sections 12022.7(d), 12022.9, and 12022.95;
- Child and Adult Sexual Abuse allegations, enhancements or alternative sentencing schemes pursuant to Penal Code sections 667.61, 667.8(b), 667.9, 667.10, 667.15, 674, 675, 12022.7(d), 12022.8(b), and 12022.85(b)(2);
- Human Sex Trafficking allegations, enhancements or alternative sentencing schemes pursuant to Penal Code sections 236.4(b) and 236.4(c);
- Financial crime allegations, enhancements or alternative sentencing schemes where the amount of financial loss or impact to the victim is significant, the conduct impacts a vulnerable victim population or to effectuate Penal Code section 186.11;
- Other than the enhancement or allegation prohibitions previously listed, enhancements or allegations may be filed in cases involving the following extraordinary circumstances with written Bureau Director approval upon written recommendation by the Head Deputy:
 - Where the physical injury personally inflicted upon the victim is extensive; or
 - Where the type of weapon or manner in which a deadly or dangerous weapon including firearms is used exhibited an extreme and immediate threat to human life;

Facts or circumstances that are sufficient to meet the legal definition of great bodily injury or use of a deadly or dangerous weapon alone are insufficient to warrant extraordinary circumstances. The written request and approval must be placed in the case file.

CASE SETTLEMENT

The following directives cover case settlement.

1. If the charged offense(s) is probation-eligible, probation shall be the presumptive offer.
 - a. Appropriate deviations from this presumption are as follows:
 - i. If the charged offense(s) is probation-eligible, and extraordinary circumstances exist, the Deputy District Attorney may file the basis and recommendation for a deviation in writing to their Head Deputy and the appropriate Bureau Director. Upon written approval from the Bureau Director, the Deputy District Attorney may offer a state prison sentence in accordance with this policy. The written basis for the deviation, recommendation, and approval shall be kept in the case file.
 - ii. If, but for the terms of this directive, the People could have reasonably alleged an enhancement, and defendant's conduct would have therefore been ineligible for probation, Deputy District Attorneys may file a


recommendation for a deviation in writing to their Head Deputy. Upon written approval from the Head Deputy, the Deputy District Attorney may offer a state prison sentence pursuant to the sentencing triad of the substantive offense(s). The written basis for the deviation, recommendation, and approval shall be kept in the case file.

2. If the charged offense(s) is not probation eligible, the presumptive sentence shall be the low term.
 - a. When deviating from the low term the deputy shall document the supporting reasons in the case file.

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SPECIAL DIRECTIVE 20-09

TO: ALL DEPUTY DISTRICT ATTORNEYS

FROM: GEORGE GASCÓN 
District Attorney

SUBJECT: YOUTH JUSTICE

DATE: DECEMBER 7, 2020

This Special Directive addresses current policies in the previously named Juvenile Delinquency Practice Manual. Effective **December 8, 2020**, the policies outlined below supersede the relevant sections of the Juvenile Delinquency Practice Manual.

INTRODUCTION

In upholding the laws as they presently stand, this office will support efforts that recognize children as a separate class in line with decisions¹ from the Supreme Court of the United States and state-wide legislation². This office will do its part to find alternatives to detention and make diversion the default. The following changes to existing practices seek to bring this office in step with the trend to seek “care over cages” and address “need over deed.” This will also include the creation of a juvenile division that allows for specialization and promotability, and that receives specialized training.

All prosecutorial practices in youth justice will account for the established science demonstrating young people’s unique vulnerabilities (including their impulsivity, susceptibility to peer influences, risk-taking and lesser ability to fully appreciate long-term consequences, and their lack of control over their home/family/life circumstances), their malleability and capacity for growth and maturation, and thus their diminished culpability and potential for rehabilitation.

Specifically, we will be guided by the following principles:

- Our prosecutorial approach should be biased towards keeping youth out of the juvenile justice system and when they must become involved, our system must employ the “lightest

¹ *Roper v. Simmons* 543 U.S. 51 (2005), *Graham v. Florida* 560 U.S. 48 (2010), *Miller v. Alabama* 567 U.S. 460 (2012), *Montgomery v. Louisiana* 577 U.S. ____ (2016).

² Proposition 57 (Eliminated prosecutors’ direct file authority and established new court procedures for transferring a youth’s case to adult court), SB 1391 (Repealed prosecutors’ authority to motion to transfer a case of youth age 14 or 15 to adult court), SB 439 (Set minimum age of juvenile court jurisdiction at 12, excluding murder and violent rape offenses), SB 395 & 203 (Require youth under age 18 to consult with legal counsel prior to custodial interrogation or waiving constitutional rights), SB 823 (Plans closure of DJJ and transferring the responsibility for youth to the counties).

touch” necessary in order to provide public safety;

- **A juvenile justice system must be family and child centered, holistic and collaborative with other systems and communities in order to heal trauma, foster positive youth development, and promote true public safety;**
- **A juvenile justice system must incorporate research and data in order to create effective responses to crime and youth need;**
- **We must invest in community-based services, schools, health and mental health programs and other resources that allow all children to thrive, no matter their zip code, race or gender;**
- **Any court involvement in a young person’s life should be proportionate, for the shortest duration possible and result in a pathway towards a better future for youth; and**
- **Youth justice approaches should reflect what science and data clearly demonstrate-that youth are malleable and continue to mature until their early-to mid-20s, affording the juvenile justice system a unique opportunity to support youth in achieving well-being.**

The following policies shall be implemented **immediately**:

I. FILING DECISIONS

- 1. Youth accused of misdemeanors will not be prosecuted. If deemed necessary and appropriate, youth accused of misdemeanor offenses and low-level felonies will be referred to pre-filing, community-based diversion programs.**
- 2. Crimes involving property damage or minor altercations with group home (STRTP) staff, foster parents, and/or other youth shall not be charged** when the youth’s behaviors can reasonably be related to the child’s mental health or trauma history. Involvement in the justice system can exacerbate, rather than improve, mental health issues or trauma and seeking resolution or supports through alternatives like restorative justice and health systems can better address the root causes of such behaviors,
- 3. We will decline charges for property damage or minor altercations with members of the youth’s household** when the family can be better served by DCFS, or by way of an appropriate plan by a parent or legal guardian, and the behaviors can reasonably be related to the child’s mental health, trauma history, or alleged child abuse or neglect.
- 4. We will continue to work with the Youth Justice Workgroup to develop collaborative decision-making teams** that facilitate information sharing, collaboration and input into filing decisions by other key partners, including schools, health systems, families and youth themselves.
- 5. We will support and work with the Youth Justice Workgroup and Office of Youth Development to eliminate provision of diversion programs by probation and law enforcement, such as Probation’s Juvenile Citation Diversion Program** (in which youth are cited for infractions to appear in juvenile traffic court), and instead dismiss or refer such cases where appropriate to YDD’s expanding

diversion infrastructure.

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6. **EFFECTIVE JANUARY 1, 2021: The Abolish Chronic Truancy (ACT) unit and other truancy interventions by the District Attorney is disbanded.**
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II. PETITIONS

1. **Filings will consist of the lowest potential code section that corresponds to the alleged conduct and mandate one count per incident.** (a) The only exception to misdemeanor filings will be in the case of “wobbler” offenses that warrant intervention (such as assault (Penal Code § 245)). Absent a documented history of violence, such cases will be filed as misdemeanors and require approval from the Deputy in Charge (DIC) to bypass diversion. (b) Filing Wobbler offenses as felonies will require a documented history of violence for the charged youth and/or serious injury to the alleged victim. In such cases, appropriate charging, including the decision to file a felony, must receive Head Deputy approval. Request for permission to file a felony shall include the basis for the request on a written memorandum. *This memorandum shall be forwarded from the Head Deputy to the appropriate Bureau Director.*
2. **Filing deputies are instructed to NOT file any potential strike offense if the offender is 16 or 17 years of age at the time of the offense. The only exception to this policy shall be charges involving forcible rape and murder.**
 - a. For example, all robberies will be filed, at most, as a grand theft person and/or assault by means likely to cause great bodily injury. For all open cases, a strike offense shall be withdrawn or refiled/amended as a non-strike offense, or vacated and replaced with a finding of a non-strike offense, or dismissed.
3. **Enhancements shall not be filed** on youth petitions consistent with the office wide directives on ending enhancement filings.
4. **The office will immediately END the practice of sending youth to the adult court system.**
 - a. **All pending motions to transfer youth to adult court jurisdiction shall be withdrawn** at the soonest available court date, including agreeing to defense counsel’s request to advance.
 - b. Cases will proceed to adjudication or disposition within the existing boundaries of juvenile jurisdiction.
5. **The following guidelines shall be followed in sexual offense cases:**
 - a. **We will avoid labeling normative adolescent behavior as a sex offense** and instead collaborate with appropriate partners to provide effective interventions that reduce recidivism and support a youth’s education and development around healthy sexual behavior.
 - i. Example: Child pornography statutes shall not be used to charge

- youth who consensually own or send sexually explicit photographs.
- b. **We will strive to structure charges, filing and prosecution wherever possible to avoid the requirement of sex offense registration.**
 - c. **We will withhold objections to removal from sex offense registries for individuals who were youth when they committed their offenses.**

III. TRANSPARENCY

1. **Provide timely, complete and “open discovery”,** including Brady and other information calling into question the integrity of law enforcement action involved at the earliest opportunity-- including with the initial discovery packet when available.
 - a. Consistent with the ABA rules and best prosecutorial practices, our office will approach discovery in a manner that maximizes transparency and accountability.

IV. DETENTION

1. **The office Presumption shall be against detention³.**
 - a. In the vast majority of cases, youth should be released to their families and/or caregivers, or to the least restrictive environment possible consistent with WIC § 636.
 - b. In line with the spirit of WIC § 202(a), detention will only be sought where a child poses an immediate danger to others, and only *for as long* as the child represents a danger to others.
 - c. Detention will not be sought on the grounds that a child has no other place to go, or that a child has serious mental health problems. If detention is sought in an exceptional case, the request should be for a minimal period and should only be after failed attempts at community detention (CDP).
2. **Deputies shall not seek detention for a probation violation** unless the violation constitutes an independent, serious crime that poses an imminent risk of harm to others.
3. **Deputies shall not seek detention for leaving placement.**
 - a. Engaging a Child Family Team (CFT) meeting shall be the first remedial measure taken to assist in stabilizing the youth.
 - b. If immediate replacement is not available, the youth should be sent to DCFS Transitional Shelter Care (TSC) to await Probation identifying placement.
4. **House arrest (CDP) shall not be sought in excess of 15 days** and deputies shall stipulate to house arrest credits toward maximum confinement.

V. DISPOSITION AND RESOLUTION OF CASES

³<http://www.pjdc.org/wp-content/uploads/Californias-County-Juvenile-Lockups-November-2020-Final.pdf>

1. ~~Deputies shall not oppose dismissal on competency grounds when presented with evidence of incompetence.~~

2. **Deputies shall seek to avoid immigration consequences.**

a. Deputies are instructed to offer dispositions in accordance with Penal Code § 1016.3(b):

i. “The prosecution, in the interests of justice, and in furtherance of the findings and declarations of Section 1016.2, shall consider the avoidance of adverse immigration consequences in the plea negotiation process as one factor in an effort to reach a just resolution.”⁴

3. **Deputies shall only seek probation supervision in serious felony cases and request terms that are individually tailored to a youth’s needs.**

a. Probation conditions will not include automatic search conditions, gang conditions, and other conditions that are overboard.

4. **Deputies shall not object to sealing records** pursuant to WIC § 786 and 781, or dismissing strike offenses pursuant to WIC § 782.

VI. DUAL STATUS (CROSS-OVER) YOUTH

5. **Deputies shall make every effort to prevent a dependent youth from crossing over into the delinquency system.**

a. If the court determines dual status is appropriate, deputies will encourage a dependency lead for children involved in the dependency system. When available, diverting cases to other systems will be the default position.

6. **No delinquency filing if the circumstances that give rise to the potential petition also give rise to the dependency petition.**

a. Examples: Parent and youth are delivering drugs; both are arrested and charged with drug trafficking; dependency petition is filed; teen will not be charged.

b. In a physical fight where the parent is hitting teen and the teen responds by hitting back, resulting in a dependency petition, the teen will not be charged.

7. **For any child awaiting placement, the District Attorney will support the release of youth to a temporary, non-secure setting** so that youth do not face prolonged detention simply because no safe placement has been identified.

8. **The presumption for youth in congregate care and housing based on mental health needs** will be that the alleged conduct was within the scope of behaviors to be managed or treated by the foster home or facility.

⁴ 1016.2 codifies Padilla v. Kentucky 559 U.S. 356 (2010)


- a. Formal filing in these situations will require DIC approval and conform to all other policies enumerated herein regarding misdemeanors and charging the lowest possible offense.
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The policies of this Special Directive supersede any contradictory language of the Legal Policies Manual.

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SPECIAL DIRECTIVE 20-10

TO: ALL DEPUTY DISTRICT ATTORNEYS

FROM: GEORGE GASCÓN 
District Attorney

SUBJECT: HABEAS CORPUS LITIGATION UNIT

DATE: DECEMBER 7, 2020

This Special Directive addresses issues of Bureau of Prosecution Support Operations, Habeas Corpus Litigation Team in Chapter 1.07.03 of the Legal Policies Manual. Effective **December 8, 2020**, the policies outlined below supersede the relevant sections of Chapter 1.07.03 of the Legal Policies Manual.

INTRODUCTION

Irrefutable evidence shows that wrongful convictions occur with unacceptable frequency, including convictions that are obtained in proceedings where due process violations and other fundamental constitutional errors denied a defendant their right to a fair trial. The mission of the Habeas Corpus Litigation (HABLIT) Unit is to ensure that justice is done in every case filed in that unit and that every potentially meritorious claim raised in a petition for a writ of habeas corpus is carefully reviewed and investigated.

In every case, HABLIT shall undertake a good-faith case review designed to ensure the integrity of the challenged conviction. In every case, where any injustice is uncovered, including racial injustice, whether or not it is of a constitutional magnitude, HABLIT shall examine and recommend appropriate remedies capable of redressing the harm uncovered, within the bounds of the law. For example, HABLIT is directed to ascertain whether, based on its review and investigation into claims raised in a petition, the outcome in the case comports with the office's current views what would constitute a fair and just conviction and sentence today and, if not, HABLIT shall take steps to find a remedial solution to bring the conviction and sentence into line with today's standards, such as recommending that a petitioner be considered for resentencing to a lesser term pursuant to Penal Code § 1170(d).

HABLIT shall not, as a policy, defend every conviction or raise every conceivable procedural challenge with equal fervor and without regard to the potential merits of the claims presented. Before relying on procedural challenges to defeat any claims raised in a petition, HABLIT shall make a fulsome initial assessment as to whether a petitioner's claims have potential merit, i.e., whether the facts alleged, if true, state a prima facie case for relief. Where a claim appears potentially meritorious on its face, HABLIT shall immediately commence investigating the claim, and seek the earliest possible resolution where it is determined that the claim is meritorious. If the petitioner has failed to state a prima facie case and/or the petitioner is abusing

the writ process by filing successive petitions without additional new evidence supporting the claims presented, HABLIT shall defend the conviction.

GUIDING PRINCIPLES

“The primary duty of the prosecutor is to seek justice within the bounds of the law, not merely to convict. The prosecutor serves the public interest and should act with integrity and balanced judgment to increase public safety both by pursuing appropriate criminal charges of appropriate severity, and by exercising discretion to not pursue criminal charges in appropriate circumstances. The prosecutor should seek to protect the innocent and convict the guilty, consider the interests of victims and witnesses, and respect the constitutional and legal rights of all persons, including suspects and defendants.”

-American Bar Association, Criminal Justice Standards for the Prosecution Function, Standard 3-1.2(b)

“When a prosecutor knows of new, credible and material evidence creating a reasonable likelihood that a convicted defendant did not commit an offense of which the defendant was convicted, the prosecutor shall: (1) promptly disclose that evidence to an appropriate court or authority, and (2) if the conviction was obtained in the prosecutor’s jurisdiction, (i) promptly disclose that evidence to the defendant unless a court authorizes delay, and (ii) undertake further investigation, or make reasonable efforts to cause an investigation, to determine whether the defendant was convicted of an offense that the defendant did not commit...When a prosecutor knows of clear and convincing evidence establishing that a defendant in the prosecutor’s jurisdiction was convicted of an offense that the defendant did not commit, the prosecutor shall seek to remedy the conviction.”

-American Bar Association, Model Rules of Professional Conduct, Standard 3.8(g)-(h); California Rules of Professional Conduct (F)-(G)

POLICIES GOVERNING HABLIT UNIT CASE REVIEW OF NON-CAPITAL CASES

A. Habeas Corpus Litigation

Post-conviction litigation differs significantly from the primary work of our office at the trial level. Postconviction litigation at its core is an attempt to balance the People’s interest in finality—that a jury’s verdict is presumed reliable and brings closure to a case—with an individual’s interest in fundamental Constitutional rights and statutory due process rights, and society’s interest in preventing wrongful convictions. When tasked with responding to a petition for writ of habeas corpus, HABLIT must weigh these competing interests and find the appropriate balance in each individual case.

Where a petitioner’s claims are patently meritless or plainly refuted by the record, the balance tips strongly in favor of finality and HABLIT shall defend that conviction. But where a petitioner presents allegations that are supported by reasonably available evidence, the balance tips against finality and HABLIT shall not simply oppose the petitioner’s claim, for the sake of protecting a conviction. Rather, HABLIT shall assess each claim on the merits and if it could potentially expose fundamental constitutional error and/or a statutory right to due process HABLIT’s response to the court should so indicate.

In weighing whether a conviction should be defended and protected, or whether a different outcome or resolution is in the interests of justice, HABLIT shall investigate and take into account the following considerations:

- Whether there is a reasonable probability that the applicant is actually innocent, despite the petitioner's ability or inability to articulate a legally sound claim¹;
- Whether material evidence relied upon to obtain the conviction is no longer deemed credible;
- Whether there is evidence the prosecution or conviction was tainted by racial discrimination, whether or not a court previously agreed with the applicant's assertion of racial discrimination;
- Whether the prosecution failed to disclose material evidence in the possession of any law enforcement agency that was favorable to the defense, whether exculpatory, impeaching, or mitigating;
- Whether the fact-finding process was so corrupted as to deny the applicant a fair adjudication of his or her guilt or innocence at trial;
- Whether a manifest injustice rendered the trial fundamentally unfair; and/or,
- Whether, had the office known at the time of trial what it now knows about the evidence, the office would not have chosen to prosecute the case.

The above list is intended to be illustrative; it is not exhaustive.

HABLIT's *de novo* weighing of these interests, prior to a decision to defend a conviction, will ensure greater confidence in this Office's convictions, promote transparency, and strengthen the public's confidence in our criminal justice system, which is capable of addressing errors when they are exposed.

HABLIT's approach to case review and case resolution shall be guided by this office's policy of avoiding unnecessary litigation and resolving cases at the earliest possible juncture, where it is in the interests of justice to do so. HABLIT shall consider what steps, if any, can and should be taken to remedy any injustice it uncovers, whether or not the error or errors are of a constitutional magnitude.

Where HABLIT determines, for example, that based on its review and investigation into claims raised in a petition, the outcome in the case does not comport with the office's current views and policies of what constitutes a fair and just conviction and sentence today, HABLIT shall take steps to find a remedial solution to bring the conviction and sentence into line with today's standards, including seeking dismissal of the case pursuant to P.C. 1385, moving for a reduction of sentence pursuant to P.C. 1170(d), advocating before the BPH for release on parole, supporting a petition for the restoration of rights, seeking expungement of the case, and/or supporting a request for clemency or pardon, where such remedies are in the interest of justice.

B. Screening and Litigation Prior to the Issuance of an Order to Show Cause

¹ See, Rule 3.8 Special Responsibilities of a Prosecutor (Rule Approved by the Supreme Court, Effective June 1, 2020)

Upon the filing of a petition, the reviewing court may either summarily dismiss the petition, ~~ask our office for informal briefing, or issue an order to show cause (OSC).~~ The issuance of an OSC is analogous to issuing the writ of habeas corpus, *i.e.*, requiring the body of the petitioner to be brought to court to initiate a cause of action as to whether the petitioner's confinement is constitutional. The writ—an OSC—must issue if a petitioner's allegations state a prima facie case on a claim that is not procedurally barred. *People v. Romero*, 8 Cal. 4th at 738; Pen. Code § 1476.

1. Informal Briefing

HABLIT's involvement in the foregoing process is triggered when a reviewing court requests an informal response. The purpose of an informal response to assist the court in deciding whether to summarily deny a petition or issue an OSC. *See* Cal. Rules of Ct. R. 8.385(b).

If HABLIT is tasked with informal briefing, an independent review of the petitioner's allegations must be done with the balancing between finality and individual rights discussed above as the paramount consideration. If a determination is made that the petitioner's allegations—accepted as true and resolving inferences in favor of the petitioner as the law requires—set forth a prima facie claim for relief, HABLIT's informal response to the court should be to advise it that an OSC is necessary. This does not mean that HABLIT is conceding the conviction should be overturned at this stage. It means that HABLIT acknowledges a case should be initiated, and that the court may exercise its “full power and authority” to hold a hearing, allow discovery, “and to do and perform all other acts and things necessary to a full and fair hearing and determination of the case.” Pen. Code. § 1484.

In the preparation of an informal response, HABLIT shall be cognizant of the expedited manner in which the California Legislature and Courts intend for habeas corpus petitions to be litigated. California Rules of Court 4.551; *Maas v. Superior Court* (2016) 1 Cal.5th 962, 981. The informal reply need only address the petition's sufficiency as a pleading – that is, whether it states a prima facie claim for relief, and whether there are any applicable procedural bars. *People v. Romero* (1994) 8 Cal.4th 728, 737. The informal response shall not present evidence or otherwise address the merits of the claims presented, except to state whether or not a prima facie case has been made and an OSC should issue, or that, instead, the petition fails to state a prima facie case and/or is procedurally barred.

2. Procedural

Bars

Procedural bars to post-conviction relief were erected for the express purpose of preventing abuse of the writ. When this office urges the court to dismiss a potentially meritorious claim on the basis of a procedural bar alone, it undermines confidence in our ability to fairly administer justice and, ultimately, in the People's faith in our convictions and the integrity of our system.

Because HABLIT's decision to argue that a procedural bar prevents a court from considering the merits of a petitioner's claims, such decisions shall be based on whether the petition, in fact, constitutes an abuse of the writ. Procedural bars of otherwise meritorious claims should not be argued, ***absent compelling good cause that has been approved by a supervisor. In no circumstance shall HABLIT assert a procedural bar when there is a credible claim of factual innocence.***

While HABLIT's post-conviction investigation into a petitioner's claims will often be underway while informal briefing is being prepared, that ongoing investigation should not form

the basis of any requested extension of time in which to file the informal response.

3. Post-Conviction

Investigation

The goal of a post-conviction investigation is to uncover the truth and determine whether a petitioner's claims have merit, not to defend a conviction that is unsound. These investigations shall not be undertaken as a means of "protecting" a conviction, nor shall they be adversarial in nature. Threatening a witness, recanting or otherwise, with prosecution for perjury, either directly or indirectly, is witness intimidation and prosecutorial misconduct under California law. *People v. Bryant* (1984) 157 Cal.App.3d 582.

The HABLIT Unit Head Deputy shall work with the training division and management to ensure deputies and investigators are trained in best practices for conducting post-conviction investigations and deputies shall consult with relevant experts when investigating potentially meritorious claims raised in a petition. HABLIT investigations often require looking into convictions that are decades old, where witnesses' memories have faded, and/or that involve reluctant or recanting witnesses, and therefore often require specialized knowledge and training on issues such as memory science, as eyewitness identifications, and police practices used at the time that are no longer considered best practices.

These investigations shall not be undertaken as a means of "protecting" a conviction, nor shall they be adversarial in nature. Thus, for example, investigators should not engage in tactics designed to dissuade a recanting witness by threatening to charge that witness with perjury; rather the paramount goal of a HABLIT investigation shall be to determine the reliability and truthfulness of the recantation. Using a high-pressure, coercive, or intimidating approach in these investigations wastes time and resources and sends a mixed message to office staff about the HABLIT's mission and undermines the office's credibility with the public.

HABLIT deputies and investigators shall also make all reasonable efforts to avoid *unintentional* witness intimidation. These efforts will include, but are not limited to, conducting interviews outside of a police station in a non-threatening or neutral location, if possible, and the concealing of the investigator's gun, if one is carried, except where specifically required to do so by law, or if approved by the elected District Attorney.

HABLIT deputies and investigators shall audio record and/or video record all witness interviews conducted in the course of post-conviction investigations. HABLIT shall provide copies of those recordings to the petitioner or petitioner's counsel, once an OSC has issued, and shall continue providing all discovery to which the petitioner has a right, as soon as it is discovered. All discovery provided by this office shall be documented by signed discovery receipts.

HABLIT deputies and investigators shall understand what confirmation bias is—also referred to as tunnel vision—and how to avoid it. Studies have shown that confirmation bias is pervasive in reinvestigations in wrongful conviction cases, where prosecutors tasked with checking their own work and the work of their colleagues fail to see error because they are looking to confirm that no mistakes were made in the original investigation and trial. When original police reports are viewed deferentially and/or treated as unassailable accounts of the truth of what transpired in the case, for example, confirmation bias is likely driving the investigation. Research shows that police reports are often incomplete and contain inaccuracies, due to the fast-pace at which criminal investigations unfold, following serious felony offenses, and therefore should be reviewed critically, not deferentially. HABLIT deputies and investigators shall test and probe

information in police reports, witness accounts, and other new evidence presented by an applicant, in a manner designed to uncover the truth, rather than protect the conviction.

4. Facilitating Informal Discovery and Limited Factfinding

Prior to the issuance of an OSC, the court's power to compel discovery is limited. However, Penal Code § 1054.9 and ongoing *Brady* requirements obligate our office to provide discovery where conditions are met. HABLIT should interpret these bases in good faith and in accordance with this office's policies governing discovery.

Recognizing that certain categories of otherwise privileged information and work product prepared by this office may contain exculpatory or impeachment information relevant to a petitioner's claims, and the benefit to the truth-seeking process of having both parties review this material, HABLIT shall err on the side of disclosing the complete LACDA trial file to the petitioner's counsel for independent review, subject only to reasonable and necessary disclosure agreements. Any redactions shall be limited to those deemed strictly necessary to protect victim or witness privacy.

Moreover, absent clearly abusive or frivolous attempts to obtain information, HABLIT shall facilitate a petitioner's ability (or petitioner's counsel's ability) to speak with law enforcement agents and prosecution experts to obtain information and/or materials the petitioner needs to further support the claims raised in the petition, where such communications can be facilitated.

In the event the petitioner's case file(s) have been lost in whole or part, HABLIT shall immediately inform the petitioner, or their counsel, that the file(s) is lost or incomplete. HABLIT shall work with the Post-conviction Discovery Unit to reconstruct the case file by complete files from law enforcement agencies responsible for investigating the case, including:

- The LACDA's internal files;
- The LAPD, LASD, LAFD, and/or any other law enforcement agency or emergency services provider involved in the case;
- Crime labs;
- The coroner's office, in homicide cases;
- The original trial deputy's personal file;
- The superior court file;
- The courthouse exhibit room;
- The court of appeal; and
- Any other source reasonably likely to have relevant materials, records, and/or evidence, such as medical records, where appropriate releases are provided, 911 dispatch call recordings, etc.
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5. Red

Flags

Documented wrongful conviction cases show that convictions obtained by the presentation of certain types of evidence are at a higher risk of producing an unreliable or unconstitutional outcome. HABLIT shall pay special attention to claims involving any of the following high-risk

factors, most of which are considered to be the most common causes of wrongful convictions:

- the petitioner was convicted based, in whole or in part, on eyewitness identification evidence or testimony, particularly where it was a stranger identification or cross-racial identification, or both²;
- the petitioner was convicted based, in whole or in part, on a confession and there are allegations that this confession was false or coerced³;
- the petitioner was convicted based, in whole or in part, on testimony that has since been recanted as false or coerced;
- the petitioner's conviction is alleged to have been borne from official misconduct, including witness tampering, misconduct in interrogations, fabricated evidence and confessions, the concealment of exculpatory evidence, and misconduct at trial⁴;
- law enforcement personnel involved in the investigation or arrest of the petitioner were subsequently discharged or relieved of their duties for misconduct;
- the petitioner was convicted based on forensic evidence grounded in methodologies that have since been largely or wholly discredited as unreliable, including but not limited to bloodstain pattern analysis, comparative bullet lead analysis, forensic odontology (bitemarks), hair microscopy for the purpose of determining whether known/unknown hairs share a common source, Shaken Baby Syndrome (SBS). HABLIT shall review the forensic methods used to analyze the evidence and ensure that forensic evidence used to obtain a conviction has standardized scientific principles and/or otherwise remains foundationally valid and valid as applied⁵;

² HABLIT shall verify that eyewitness identifications supporting a conviction comport with standards and research accepted by the scientific community and do not run afoul of the best practice and recommendations in the 2019 Third Circuit Eyewitness Identification Report. The CIU shall assess the reliability of eyewitness identification evidence in light of the non-exhaustive lists of system and estimator variables set forth in *State v. Henderson* (N.J. 2011) 27 A.3d 872, and continually examine and apply emerging research related to eyewitness identifications, including but not limited to the American Psychological Association white papers Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence (2020) and Eyewitness Identification Procedures: Recommendations for Lineups and Photospreads (1998).

³ HABLIT shall consult the 2010 American Psychological Association white paper on police interrogation and confessions, and any emerging literature or research regarding false confession and recanting witnesses, to inform its review of convictions supported by testimony that has since been recanted.

⁴ HABLIT shall consult the National Registry of Exonerations report *Government Misconduct and Convicting the Innocent: The Role of Prosecutors, Police and Other Law Enforcement* (2020), and any emerging literature or research regarding official misconduct, to inform its review of convictions alleged to have resulted in whole or in part from official misconduct.

⁵ The use of unreliable and misleading forensic evidence, which we know is a common cause of wrongful convictions imperils the integrity of the criminal legal system. The CIU shall critically and continually examine emerging scientific literature, which may also call into question older forensic methods, and train staff about these changes, so that case review criteria can be updated as needed. The CIU shall ensure that forensic evidence supporting a conviction complies with the findings, recommendations, and best practices set forth in specific reviews of the relevant sciences, including but not limited to:

- the petitioner was convicted based on forensic evidence that the LACDA has generally accepted as reliable, but the particular conclusions or opinions presented to the jury in support of the prosecution's case exceeded the bounds of what is now recognized to be valid science – for example, through testimony purporting to “identify” a petitioner as the unique source of an item of biological evidence through a method other than DNA analysis, or through expert testimony implying or stating a statistical basis for the likelihood of a particular conclusion that is not verifiable or otherwise valid;
- the conviction was based on evidence, the reliability of which has since been called into question, and was corroborated only with jailhouse informant testimony or testimony by an informant that has been used by law enforcement or this office on more than one occasion;
- a gang allegation was found true by a jury where the only evidence of gang membership was presented by a gang expert, and that evidence would now be deemed inadmissible hearsay under *People v. Sanchez* (2016) 63 Cal. 4th 665, and the evidence of gang membership served as the only evidence of motive used to obtain the conviction;
- evidence based on analysis by crime labs that were not accredited when the analysis was conducted, and/or have been implicated in scandals related to their handling and testing of evidence;
- evidence supporting the conviction was corroborated by one or more of the above types of unreliable evidence;
- defense counsel was disbarred or otherwise disciplined after the challenged conviction was obtained, or was found by a court to have provided ineffective assistance of counsel in one or more other cases.

6. Forensic

Evidence

Where a petitioner challenges the reliability of forensic evidence the prosecution presented at trial to obtain the conviction, HABLIT shall examine the reliability of the forensic testing obtained at the time of trial. Where the reliability of that evidence is in question, HABLIT shall consult with experts and determine whether re-testing the evidence in question would be probative, in that it may tend to help identify the identity of the perpetrator of the crime, or may otherwise exculpate the petitioner. HABLIT shall request that forensic test results be expressed in reports

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- American Association for the Advancement of Science (AAAS) reports on Fire Investigation (2017) and Latent Fingerprint Examinations (2017)
 - American Statistical Association (ASA) Position on Statistical Statements for Forensic Evidence (2019)
 - National Academy of Sciences (NAS) report *Strengthening Forensic Science in the United States: A Path Forward* (2009)
 - National Institute of Standards and Technology (NIST) report on Latent Print Examination and Human Factors (2012), Working Group on Human Factors in Handwriting Examination (2020), and Scientific Foundation Studies on DNA mixture interpretation, bitemark analysis, firearms examination, and digital evidence (forthcoming)
 - President's Council of Advisors on Science and Technology (PCAST) report *Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods* (2016).

and testimony using clear and comprehensible language, to inform the HABLITS's decision making.

Where a petitioner seeks DNA testing of evidence as part of new evidence sought in support of a claim raised in a petition and has facially satisfied the requirements of P.C. 1405, HABLIT shall not raise procedural challenges or defenses to oppose, nor shall it oppose, requests DNA testing, where the testing may lead to evidence identifying the perpetrator of a crime. Where a petitioner requests DNA testing and needs assistance in ascertaining the status of the evidence to be tested, HABLIT shall assist the petitioner in ascertaining the status of physical evidence by facilitating contacts between petitioners seeking DNA testing, or their attorneys, and the crime lab, the coroner's office, law enforcement, or other entities, who can assist in searching the locations where the evidence may be stored in an effort to locate the evidence in question.

HABLIT shall carefully scrutinize cases in which experts or others opined or testified using terms like "reasonable degree of scientific certainty," which have no accepted scientific meaning, yet convey an unsupported measure of reliability or conclusiveness to the factfinder. HABLIT shall request that all information concerning the limitations of forensic techniques should be disclosed alongside the results of any analyses. All forensic methods have limitations, and none are error free. Where error rates for a method are not known or have not been adequately measured, reports shall state that fact. HABLIT shall carefully scrutinize any conviction based in whole or in part upon testimony that states or implies a "zero error rate" or which purports to provide an error rate that has not been independently validated. HABLIT shall similarly make those limitations clear in communications with the applicant and/or their counsel and the court. HABLIT shall also request that all methods of forensic analyses be documented in the first instance to permit HABLIT's review and disclosure of all steps followed and the methodology used to arrive at the conclusions reached.

HABLIT shall ensure that the petitioner and/or their counsel receive certificates or reports of forensic analyses, as well as complete documentation of the methods used and the results reached. HABLIT shall disclose to the petitioner or petitioner's counsel all inconclusive and exculpatory forensic results. If a petitioner alleges that evidence was improperly analyzed and/or mishandled by the crime lab or coroner's office, or other governmental entity, HABLIT shall seek and provide the petitioner with any information discovered concerning "corrective actions" taken in a laboratory relating to problematic methods and personnel, and proficiency testing of individual analysts, if any, where relevant.

Once HABLIT learns that a petitioner is seeking to test forensic evidence, HABLIT shall make a request to preserve any forensic evidence in the case.

7. Cumulative

Error

Claims

Where a petitioner alleges a claim of cumulative error, the allegation is that there are at least two separately cognizable trial errors which, while viewed independently may be harmless error, but when the prejudice from the two or more errors is viewed cumulatively it rises to the level of prejudicial error. *People v. Hill* (1998) 17 Cal.4th 800, 844.

HABLIT shall be cognizant that errors can be and are made, both during the investigation and prosecution of felony cases. HABLIT shall, where a cumulative error claim is raised, affirmatively and fairly assess the combined prejudice to a petitioner, where the petition states a

prima case for relief as to one or more claims in the petition. HABLIT shall consider, in assessing whether the petitioner was denied the right to a fair trial, whether the court, during the direct appeal or a prior habeas proceeding, ruled that another error, or other trial errors, did occur (in addition to the errors alleged in the petition), but denied relief as to the earlier-identified error(s) on the ground that they were harmless. Any prejudice flowing from the error or errors earlier ruled to be harmless, must be considered along with the prejudice arising from the additional error identified in the petition, in determining whether the errors, combined, can together sustain a cumulative error claim. *In re Reno* (2012) 55 Cal.4th 428, 483. As with other claims, if a petitioner's cumulative error claim sets forth a prima facie claim for relief, HABLIT shall so advise the court in its informal response and indicate that an OSC as to the cumulative error should issue.

8. C.C.P.

§170.6

Challenges

The superior court generally assigns habeas corpus petitions to the same department that presided over the trial and/or sentencing proceedings. On occasion, the matter will be reassigned to another judge, such as when a judge retires or where there may be a conflict of interest.

Conflicts are not infrequent because the vast majority of criminal court judges are former prosecutors, and petitions often allege government or prosecutorial misconduct that implicates former LACDA colleagues of the judge assigned to hear the post-conviction case.

When such reassignments occur, HABLIT shall not challenge, pursuant to Civil Procedure §170.6, any judge who is not a former prosecutor unless there is a non-pretextual and articulable justification for the filing of a §170.6 challenge, approved by a supervisor. When HABLIT files a C.C.P. §170.6 challenge to an assigned judge who is not a former prosecutor, it creates the appearance that this office believes it will receive more favorable treatment from a judge who was a former prosecutor than one who was not. While the law does not require that any specific reason be articulated in the public filing, HABLIT shall avoid even the appearance of judge-shopping and shall not file §170.6 challenges for that purpose.

C. Post-OSC Litigation

When the court issues an OSC, formal briefing begins. During this formal briefing and up to and including an evidentiary hearing, HABLIT's role shall not be merely adversarial to the petitioner but—again—one of seeking justice and balancing the interest of finality with potentially meritorious claims indicating a wrongful conviction.

1. Post-OSC

Discovery

Once the court issues an OSC, the petitioner is entitled to discovery and has subpoena power to seek materials from sources outside this office. To the extent HABLIT did not already provide discovery to the petitioner informally as set forth in B.4., *infra*, once the OSC issues, HABLIT shall do so and shall continue providing the petitioner with additional new materials that are discovered, as they become available. As noted above, HABLIT deputies and investigators shall audio record or video record all witness interviews conducted in the course of post-conviction investigations and shall provide copies of those recordings to the petitioner. All discovery shall be documented through the use of signed discovery receipts.

2. The

Return

Upon issuance of the OSC, HABLIT shall file a timely Return that admits or denies the material factual allegations in the petition. Denials shall be supported by citations to evidence; general denials may be deemed “admissions,” and shall be avoided. The Return is the People’s opportunity provide the court with the factual bases for any denial, and allege new facts in support of petitioner’s conviction. HABLIT shall provide, in the Return, an articulable reason or justification for any allegation being denied, supported by a factual basis and evidence. HABLIT shall admit factual allegations where there is no basis for denying them. The purpose of the admission and denial of facts in the Return is to assist the court in determining whether the merits of the petition can be reached, without the need for an evidentiary hearing, and to limit the scope of any required evidentiary hearing only to those facts actually in dispute.

3. Communications with Petitioner’s Trial Counsel

This Office respects the sanctity of the attorney-client privilege between a defendant and defense counsel. A petitioner who alleges Ineffective Assistance of Counsel may have impliedly waived some portion of the attorney-client privilege as to communications with petitioner’s trial counsel. This waiver is not absolute, however, and is extremely limited.

HABLIT shall err on the side of caution and notify a petitioner before seeking to contact defense counsel and provide petitioner with a chance to object or modify a claim to avoid an inadvertent or implied waiver of the attorney-client privilege. HABLIT will not seek disclosure of anything beyond that which is strictly necessary and legally allowable under California and Federal law, including information that exceeds the limited scope of a pending ineffective-assistance-of-counsel claim.

HABLIT shall not encourage any attorney to violate their ethical duties of confidentiality and loyalty to former clients, as articulated in the California Rules of Professional Conduct; rather, HABLIT attorneys or investigators speaking to defense counsel must remind defense counsel of the attorney-client privilege prior to the start of a substantive interview.

D. Case

Resolution

Where the court, or HABLIT, determines that a petitioner’s conviction and sentence must be vacated for any reason, HABLIT shall ascertain (i) if determined by the court, whether the court’s decision should be appealed; (ii) whether there still exists constitutionally permissible evidence sufficient to prove that person’s guilt beyond a reasonable doubt; and/or (iii) whether there are identifiable avenues for obtaining constitutionally permissible evidence sufficient to prove that person’s guilt beyond a reasonable doubt.

If there are grounds for appealing a court’s ruling, and it is in the interests of justice to do so, HABLIT shall ensure that a notice of appeal is timely filed. If a decision is made to appeal the grant of a habeas corpus petition, a memorandum shall be submitted to a supervisor for approval, justifying the decision to appeal before a notice of appeal is filed. If an appeal is taken, there shall be a strong presumption that a petitioner who has secured a grant of habeas relief in the superior court should be released OR, or granted bail, pending that appeal.

If, in HABLIT’s assessment, there exists constitutionally permissible evidence sufficient to prove that person’s guilt beyond a reasonable doubt and/or there are identifiable avenues for

obtaining constitutionally permissible evidence sufficient to prove that person's guilt beyond a reasonable doubt, and it is in the interests of justice to do so, HABLIT shall articulate what the remaining evidence is and, if approved by the District Attorney, shall announce that the LACDA intends to retry the petitioner.

If there are no grounds for appealing the court's ruling, and where there no longer exists constitutionally permissible evidence sufficient to prove that person's guilt beyond a reasonable doubt and there are no identifiable avenues for obtaining constitutionally permissible evidence sufficient to prove that person's guilt beyond a reasonable doubt, HABLIT shall announce that the LACDA does not intend to appeal, nor does it intend to retry, the petitioner.

1. Re-Sentencing

Cases

Where HABLIT determines that the fair and just resolution in a case involves, among other relief, seeking a reduction in the petitioner's sentence pursuant to P.C. 1170(d), and the decision is approved by the District Attorney, HABLIT shall inform the petitioner or petitioner's counsel of the decision at the earliest possible opportunity. With the petitioner's agreement, HABLIT shall coordinate with deputies tasked with resentencing so that a motion for resentencing can be filed by the LACDA at the earliest opportunity.

HABLIT's decision to seek a sentence reduction shall not be dependent upon the petitioner's agreement to withdraw any claims made in a pending petition. For example, a petitioner who maintains that they are actually innocent of the crimes of conviction shall not be forced to choose between dropping the claim of innocence and receiving the support of the LACDA for a P.C. 1170(d) reduction in sentence.

2. Reentry Assistance & Compensation Assistance

HABLIT shall not delay the release of any person whose entitlement to post-conviction relief and release from custody has been established, for any reason; it is the duty of the HABLIT to immediately arrange for conditional release of those individuals pending the formalization of the conviction being vacated, including facilitating the release process by coordinating with the CDCR, providing the CDCR with court orders and any other documentation required to secure the petitioner's release from custody.

Where HABLIT determines that a conviction should be overturned and a case dismissed based on actual innocence, HABLIT shall assist the petitioner in securing necessary support and documentation, such as a finding of actual innocence, that facilitate successful reentry into the community and will support the enactment of systems of compensation for those wrongfully convicted.

3. Findings of Factual Innocence

This office recognizes that monetary compensation is essential to a wrongfully convicted person's ability to rebuild their life. Under California law, wrongfully convicted persons who are innocent of the crimes for which they were convicted may file a claim for compensation with the California Victim Compensation and Government Claims Board (CVCGC Board), under California Penal Code section 4900.

Under current law, the CVCGC Board determines whether to approve a claim by either: (i) ~~holding a hearing at which the claimant presents evidence supporting their claim of innocence, and~~ reaching a determination as to whether the claimant has met the standard; or, (ii) receiving a “finding of factual innocence” made by the superior court, which is binding on the CVCGC Board.

Under current law, a wrongfully convicted person must demonstrate that they are innocent by a preponderance of the evidence. The burden is on the wrongfully convicted person to prove their innocence. Because that standard is antithetical to the bedrock principle of our criminal justice system—which presumes a person is innocent until they are proven guilty beyond a reasonable doubt⁶—absent extenuating circumstances and supervisor approval, it shall be the policy of this office to move jointly for and/or concede in the superior court that “a finding of factual innocence” should be made, where the conviction has been overturned, the charges have been dismissed, the LACDA does not intend to appeal the court’s ruling overturning the conviction, and there no longer exists constitutionally permissible evidence sufficient to prove that person’s guilt beyond a reasonable doubt.

In such cases, the LACDA shall proactively assist the petitioner in seeking the statutory compensation to which they are entitled, including filing in the superior court, jointly with the petitioner, if requested, a motion “for a finding of factual innocence by a preponderance of the evidence that the crime with which he or she was charged was either not committed at all or, if committed, was not committed by him or her.” Cal. Pen. Code 1485.55 (b). Because the court’s “finding of factual innocence,” is binding on the CVCGC Board, this office’s joint request for that finding will expedite and facilitate the compensation process. HABLIT shall also assist the petitioner, in the above-described circumstance, by supporting their claim before the CVCGC Board, when filed, if requested.

4. Victim Outreach & Advocacy

HABLIT shall comply with all statutes and rules governing victims’ rights and may engage a victim representative at any stage in the investigation when doing so may be in the best service of the investigation and/or the victim. HABLIT will be respectful of victims and institute a culture of keeping victims abreast of investigation outcomes, when the outcome affects or changes the nature of the conviction and/or sentence. Upon the District Attorney’s decision to seek relief in a case, HABLIT shall engage a victim representative to liaise with the victim or victims.

5. “Learning Organization”

⁶ “Absent conviction of a crime, one is presumed innocent.” *Nelson v. Colorado*. (2017) 137 U.S. 1249, 1255 (explaining that once a criminal conviction is erased, the presumption of innocence is restored and holding that the state “may not presume a person, adjudged guilty of no crime, nonetheless guilty *enough* for monetary exactions”), citing *Johnson v. Mississippi* (1988) 486 U. S. 578, 585 (1988) (holding that after a “conviction has been reversed, unless and until [the defendant] should be retried, he must be presumed innocent of that charge”); *Coffin v. United States* (1895) 156 U. S. 432, 453 [“axiomatic and elementary,” the presumption of innocence “lies at the foundation of our criminal law.”]


The outcomes of HABLIT investigations are intended to provide a critical opportunity to identify systemic gaps that go beyond just one individual's error and can reinforce the idea that the District Attorney's office is a "learning organization." HABLIT will have a clear avenue for recommending policy and procedural changes, as well as enhanced training, to address any deficiencies that are uncovered.

The policies of this Special Directive supersede any contradictory language of the Legal Policies Manual.

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SPECIAL DIRECTIVE 20-11

TO: ALL DEPUTY DISTRICT ATTORNEYS

FROM: GEORGE GASCÓN 
District Attorney

SUBJECT: DEATH PENALTY POLICY

DATE: DECEMBER 7, 2020

This Special Directive addresses issues of Special Circumstances Cases in Chapter 7 of the Legal Policies Manual. Effective **December 8, 2020**, the policies outlined below supersede the relevant sections of Chapter 7 of the Legal Policies Manual.

A sentence of death is never an appropriate resolution in any case. The office will strive to ensure that all actions taken are consistent with this policy, including refraining from filing letters stating an intention to seek the death penalty, filing briefs, seeking discovery, or making arguments in court that indicate that the death penalty is an appropriate sentence.

INTRODUCTION

Racism and the death penalty are inextricably intertwined.¹ Numerous studies have found that race influences who is sentenced to die in this country and in California; this includes both the race of the defendant and the race of the victims.²

Los Angeles County has historically been one of the nation's most prolific death penalty counties,³ and it exemplifies how racism infects death penalty proceedings. There are currently 215 people on California's death row who were sentenced to death as a result of capital prosecutions in Los Angeles County.⁴ An astonishing 85% of those people are people of color.⁵ This makes Los

¹ Stephen B. Bright, *Discrimination, Death and Denial: The Tolerance of Racial Discrimination in Infliction of the Death Penalty* (1995) 35 Santa Clara L. Rev. 433, 439; see also Equal Just. Initiative, *Lynching in America: Confronting the Legacy of Racial Terror* 5 (3d ed. 2017), <<https://lynchinginamerica.eji.org/report/>>.

² Alexis Hoag, *Valuing Black Lives: A Case for Ending the Death Penalty* (2020) 51 Colum. Hum. Rts. L. Rev. 983 [collecting and describing studies].

³ Death Penalty Info. Ctr., *Outlier Counties: Los Angeles County Has Nation's Largest – and Still Expanding – Death Row* (Nov. 21, 2016), <<https://deathpenaltyinfo.org/news/outlier-counties-los-angeles-county-has-nations-largest-and-still-expanding-death-row>>.

⁴ Brief of Amicus Curiae The Honorable Gavin Newsom in Support of Defendant And Appellant McDaniel, *People v. McDaniel* (S171393, app. pending), Attachment A, at p. 79, <<https://www.gov.ca.gov/wp-content/uploads/2020/10/10.26.20-Governor-Newsom-McDaniel-Amicus-Brief.pdf>>.

⁵ *Ibid.*

Angeles County an outlier even within the state's flawed system; the rest of California's death row is populated by 59% people of color.⁶

In light of its unequal application to people of color, the death penalty inflicts an extraordinary amount of harm to the moral authority of our justice system. In addition, the death penalty serves no penological purpose as state sanctioned killings do not deter crime,⁷ and any retributive value of the death penalty is undermined by California's dysfunctional death penalty system. California has executed 13 people since 1978, while over 11 times that number of people have died of other causes awaiting execution.⁸

The death penalty is also costly and makes no fiscal sense from the perspective of public safety. The strains upon the state's and the county's financial health are extraordinary. Los Angeles can no longer waste huge taxpayer resources to pursue the death penalty when so many needs are unmet. California has spent more than \$5 billion since 1978 prosecuting death penalty cases, defending death judgments, and maintaining a death row that houses approximately 712 people.⁹ These funds are better spent on programs that improve the quality of life and safety of the Los Angeles County community. A majority of Los Angeles County residents agree.¹⁰

Finally, by imposing the death penalty, there is a real risk of executing innocent people. According to a peer-reviewed study published in the National Academy of Sciences, one in 25 people sentenced to death in the United States from 1973 to 2004 was erroneously convicted.¹¹ This "conservative estimate"¹² would mean that at least 9 people currently on death row who were convicted in Los Angeles County are innocent. Maintaining a system of capital punishment when

⁶ *Ibid.*

⁷ Michael L. Radelet & Traci L. Lacoock, *Do Executions Lower Homicide Rates: The Views of Leading Criminologists*, (2009) 99 *Journal of Criminal Law and Criminology* 489, 501 ["88.2% of the polled criminologists do not believe that the death penalty is a deterrent"]; National Research Council of the National Academies, *Deterrence and the Death Penalty*, 70-71 (Daniel S. Nagin & John V. Peppers eds., 2012) [finding deterrent effect as justification for capital punishment is "patently not credible" based on meta-analysis of studies conducted].

⁸ Cal. Dept. of Corr. & Rehab, *Condemned Inmates Who Have Died Since 1978*, <<https://www.cdcr.ca.gov/capital-punishment/condemned-inmates-who-have-died-since-1978/>>.

⁹ Judge Arthur L. Alarcón and Paula M. Mitchell, *Costs of Capital Punishment in California: Will Voters Choose Reform this November?* (2012) 46 *Loy. L.A. L. Rev.* S1 [concluding that California had spent over \$4 billion on the death penalty from 1978-2011 and estimating that the state's death penalty system costs approximately \$184.2 million annually]; Cal. Dep't of Corr. & Rehab., *Condemned Inmate List (Secure)* (Nov. 16, 2020), <<https://www.cdcr.ca.gov/capital-punishment/condemned-inmate-list-secure-request/>> (listing 712 people on death row).

¹⁰ Rachel Lawler, Public Policy Institute of California, *Is Momentum Growing to End California's Death Penalty?*, (Apr. 9 2019), <<https://www.ppic.org/blog/is-momentum-growing-to-end-californias-death-penalty/>> [polling data that 62% of Los Angeles County voters prefer life in prison over the death penalty]; California Secretary of State, November 8, 2016 General Election – Statement of Vote, State Ballot Measures p. 71, <<https://elections.cdn.sos.ca.gov/sov/2016-general/sov/65-ballot-measures-formatted.pdf>> [52.3% of Los Angeles County voters voted in favor of Proposition 62 in 2016]; California Secretary of State, November 6, 2012 General Election – Statement of Vote, State Ballot Measures p. 67, <<https://elections.cdn.sos.ca.gov/sov/2012-general/15-ballot-measures.pdf>> [54.5% of Los Angeles voters voted in favor of Proposition 34 in 2012].

¹¹ Samuel R. Gross, Barbara O'Brien, Chen Hu, & Edward H. Kennedy, *Rate of false conviction of criminal defendants who are sentenced to death*, 111 *Proceedings of the National Academy of Sciences of the United States of America* 7230-7235 (2014), <<https://www.pnas.org/content/pnas/111/20/7230.full.pdf>>.

¹² *Id.* at p. 7234.

there is a significant risk that an innocent person will be executed is intolerable. (See policy memo on Conviction Integrity for additional steps that will be taken related to innocence issues.)

The immediate steps detailed below recognize that it is essential to communicate with victims' family members and other stakeholders in order to conduct a thorough review of every case in which this office previously made a decision to seek the death penalty and those cases in which this office previously obtained death judgments. Victims' family members deserve the utmost care and consideration, and it is critical for this office to provide information and services to them and to ensure that their voices are heard. (See policy memo on Victims' Services for additional steps that will be taken related to the needs of victims.)

THE USE OF THE DEATH PENALTY AT TRIAL

In any case charged from this day forward, the District Attorney's Office will not seek the death penalty. In any case currently charged with special circumstances that does not fall into the categories listed below, the case shall now proceed as a non-death penalty case. The Special Circumstance Committee is hereby permanently disbanded.

The following specific policies apply to all filed cases where a letter of intent to seek the death penalty has been filed or verbally noticed in court, or a jury has returned a verdict of death.

1. All Deputy District Attorneys are to request a continuance of at least 30 days to enable the District Attorney or his designee, to review the case. If a deadline cannot be continued, the Deputy District Attorney shall immediately notify the District Attorney or his designee. No new briefs or documents will be filed in these cases without direct approval from the District Attorney or his designee.
2. Further instructions will be provided on a case-by-case basis.

CASES WITH A JUDGEMENT OF DEATH ARISING OUT OF LOS ANGELES COUNTY

The District Attorney's Office will not seek an execution date for any person sentenced to death.

The District Attorney's Office will not defend existing death sentences and will engage in a thorough review of every existing death penalty judgment from Los Angeles County with the goal of removing the sentence of death. The Office will continue to defend validly obtained convictions in all cases where the evidence supports the conviction beyond a reasonable doubt, consistent with the policies established for conviction integrity review.

Consistent with this policy, in any post-conviction case in which the District Attorney is counsel for the People of the State of California in record correction proceedings or counsel or co-counsel for the Secretary of the Department of Corrections and Rehabilitation in post-conviction proceedings, the following specific policies apply:


1. All Deputy District Attorneys are to request a continuance of at least 30 days to enable the District Attorney or his designee to review the case. ~~If a deadline cannot be continued, the~~ Deputy District Attorney shall immediately notify the District Attorney. No new briefs or documents will be filed, nor any evidentiary hearing dates set, in any case without direct approval of the District Attorney or his designee.
2. For cases arising from death judgments in Los Angeles County in which the District Attorney is not currently counsel or co-counsel for any party to the litigation, the office will consult with the Attorney General and seek his assistance with implementing the goals of this Office. This Office authorizes and encourages the Attorney General to adopt positions and negotiate resolutions in state and federal post-conviction proceedings consistent with this policy in any capital case arising out of Los Angeles County.

The policies of this Special Directive supersede any contradictory language of the Legal Policies Manual.

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SPECIAL DIRECTIVE 20-12

TO: ALL DEPUTY DISTRICT ATTORNEYS

FROM: GEORGE GASCÓN 
District Attorney

SUBJECT: VICTIM SERVICES

DATE: DECEMBER 7, 2020

This Special Directive addresses issues of Bureau of Victim Services in Chapter 1.05.02 and Victim-Witness Relations in Chapter 8 of the Legal Policies Manual. Effective **December 8, 2020**, the policies outlined below supersede the relevant sections of Chapter 1.05.02 and Chapter 8 of the Legal Policies Manual.

INTRODUCTION

Supporting victims in their journey to becoming survivors is fundamental to community safety. When a person has been harmed, wronged, or experienced loss at the hands of another, they need justice and healing. The criminal justice system must ensure that they have the rights and resources necessary to defend themselves, as well as services to facilitate their re-entry to the community. Attention and resources must be directed to the victims whose lives may be forever changed by the act of another, as crime victimization takes away a person's power and safety and many endure the effects of trauma long after the justice system has completed its role. It is a sad reality that the vast majority of victims do not find justice in the system, as many offenders are not known, arrested, charged, or convicted. It is important for us to have a system that takes care of victims and survivors *regardless of the outcome of the criminal case*.

The Los Angeles County District Attorney's Office will pursue a system of parallel justice, where we not only seek legal prosecution of offenders, but also provide support services for victims in their evolution to becoming survivors. Below are the policies that shall be implemented immediately in connection with other services currently provided by the Bureau of Victim Services.

POLICY

1. The Bureau of Victim Services (BVS) will contact all victims of violent crime within 24 hours of receiving notification. This includes sexual assault, homicide, attempted homicide, domestic and intimate partner violence. Support will be provided to both victims/survivors as well as any children witnessed or were indirectly affected by violence and crime.

2. BVS will also contact the families of individuals killed by police and provide support services including funeral, burial and mental health services immediately following the death regardless of the state of the investigation or charging decision.
3. BVS will support survivors and all others harmed by violence and crime regardless of immigration status, reporting, cooperation or documentation.
 - a. Immigration status will not be asked or needed to secure Advocacy services, California Victims of Crime Compensation or Restitution.
4. BVS will establish a Victim Emergency Fund to provide immediate financial resources to victims and family members impacted by violent crime. to
 - a. This fund will help to compensate for expenses not covered by the California Victims of Crime Compensation (Cal VCB) including relocation, funeral and burial costs, and essential needs such as food, shelter, clothing expenses.

Additionally, BVS shall not require cooperation as a condition of offering services.


Furthermore, DDAs are directed to immediately stop seeking body attachments for victims.

The policies of this Special Directive supersede any contradictory language of the Legal Policies Manual.

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SPECIAL DIRECTIVE 20-13

TO: ALL DEPUTY DISTRICT ATTORNEYS

FROM: GEORGE GASCÓN 
District Attorney

SUBJECT: CONVICTION INTEGRITY UNIT

DATE: DECEMBER 7, 2020

This Special Directive addresses issues of Bureau of Prosecution Support Operations, Conviction Integrity Unit (formerly known as the Conviction Review Unit) in Chapter 1.07.03 of the Legal Policies Manual. Effective **December 8, 2020**, the policies outlined below supersede the relevant sections of Chapter 1.07.03 of the Legal Policies Manual.

INTRODUCTION

The CIU shall conduct strategically collaborative, good-faith case reviews designed to ensure the integrity of challenged convictions, remedy wrongful convictions, and take any remedial measures necessary to correct injustices uncovered, within the bounds of the law. The CIU will also study and collect data on the causes of wrongful convictions in L.A. County, in service of informing office wide policies and procedures designed to prevent such injustices going forward and strengthen community confidence in the criminal legal system overall. The CIU is committed to seeking the truth and ensuring transparency in the review process and shall openly and regularly report its case review numbers to the public. To fulfill its mission, the CIU will operate independently from litigation units in the office and approach its review and investigation in a non-adversarial manner to ensure that justice prevails in each and every case.

GUIDING PRINCIPLES

“The primary duty of the prosecutor is to seek justice within the bounds of the law, not merely to convict. The prosecutor serves the public interest and should act with integrity and balanced judgment to increase public safety both by pursuing appropriate criminal charges of appropriate severity, and by exercising discretion to not pursue criminal charges in appropriate circumstances. The prosecutor should seek to protect the innocent and convict the guilty, consider the interests of victims and witnesses, and respect the constitutional and legal rights of all persons, including suspects and defendants.”

-American Bar Association, Criminal Justice Standards for the Prosecution Function, Standard 3-1.2(b)

~~“When a prosecutor knows of new, credible and material evidence creating a reasonable likelihood that a convicted defendant did not commit an offense of which the defendant was convicted, the prosecutor shall: (1) promptly disclose that evidence to an appropriate court or authority, and (2) if the conviction was obtained in the prosecutor’s jurisdiction, (i) promptly disclose that evidence to the defendant unless a court authorizes delay, and (ii) undertake further investigation, or make reasonable efforts to cause an investigation, to determine whether the defendant was convicted of an offense that the defendant did not commit...When a prosecutor knows of clear and convincing evidence establishing that a defendant in the prosecutor’s jurisdiction was convicted of an offense that the defendant did not commit, the prosecutor shall seek to remedy the conviction.”~~

-American Bar Association, Model Rules of Professional Conduct, Standard 3.8(g)-(h); California Rules of Professional Conduct (F)-(G)

POLICIES GOVERNING CIU CASE REVIEW

In view of the growing body of evidence demonstrating that wrongful convictions occur with greater frequency than is acceptable in our criminal legal system, as well as the legislature’s recent revisions to the Penal Code that expand the legal avenues available for review of new evidence supporting claims of wrongful conviction, and based on a review of best practices employed in CIUs in other jurisdictions, the policies governing this office’s CIU shall be as follows:

The CIU shall be an independent unit that reports directly to the District Attorney or his designee. It shall be staffed with specially trained deputies, investigators, paralegals and other staff who are committed to its mission.¹ The CIU shall be comprised of members with diverse backgrounds and experiences.

The CIU has a broad mandate to review a wide range of issues relating to wrongful convictions but shall prioritize claims of actual innocence brought by individuals who are currently in custody. The CIU shall not reject any case because a conviction is based on a guilty plea, an appeal is pending, the case is in active litigation, or where the applicant has completed his or her sentence. The CIU shall be authorized to fast-track cases submitted by applicants who are represented by counsel, including innocence organizations, where those cases have undergone substantial, reliable investigation and where new evidence supporting the wrongful conviction claim is presented.

CASE REVIEW CRITERIA

The CIU shall accept for review cases in which:

- (1) the applicant was prosecuted by the Los Angeles County District Attorney’s Office; and,

¹ The CIU shall work with defense organizations and members of the post-conviction legal community, including innocence organizations, as well as relevant experts, to develop and implement trainings on best practices for conducting post-conviction investigations.

- (2) there is a claim of actual innocence or wrongful conviction; and,
- (3) the CIU identifies one or more avenues of investigation that have the potential to substantiate the applicant's claim(s) of actual innocence and/or wrongful conviction.

The intake criteria shall always include an "interest of justice" exception. Under this exception, the CIU shall be authorized to undertake a review and investigation in cases that do not meet the intake criteria, if doing so is in the interests of justice. The interests of justice may be met where the applicant alleges and/or the CIU concludes that further investigation is warranted to determine whether:

1. There is a reasonable probability that the applicant is actually innocent²;
2. Some or all of the evidence relied upon to obtain the conviction is no longer deemed credible;
3. There is evidence the prosecution or conviction was tainted by racial discrimination, whether or not a court previously agreed with the applicant's assertion of racial discrimination;
4. The prosecution failed to disclose material evidence in the possession of any law enforcement agency that was favorable to the defense, whether exculpatory, impeaching, or mitigating;
5. The fact-finding process was so corrupted as to deny the applicant a fair adjudication of his or her guilt or innocence at trial;
6. A manifest injustice rendered the trial fundamentally unfair; and/or,
7. Had the office known at the time of trial what it now knows about the evidence, the office would not have chosen to prosecute the case, or would have charged the case differently.

The above list is intended to be illustrative; it is not exhaustive.

The CIU shall pay special attention to cases where the applicant claims the conviction was obtained based on any of the following high-risk factors, or common causes of wrongful conviction, which shall not be rejected without meaningful review and investigation:

1. The applicant was convicted based, in whole or in part, on eyewitness identification evidence or testimony, particularly where it was a stranger identification or cross-racial identification, or both³;

² See, Rule 3.8 Special Responsibilities of a Prosecutor (Rule Approved by the Supreme Court, Effective June 1, 2020).

³ Both at the application stage and in the investigation of cases accepted for review, the CIU shall verify that eyewitness identifications supporting a conviction comport with standards and research accepted by the scientific community and do not run afoul of the best practice and recommendations in the 2019 Third Circuit Eyewitness Identification Report. The CIU shall assess the reliability of eyewitness identification evidence in light of the non-exhaustive lists of system and estimator variables set forth in *State v. Henderson* (N.J. 2011) 27 A.3d 872, and continually examine and apply emerging research related to eyewitness identifications, including but not limited to the American Psychological Association white papers Policy

2. The applicant was convicted based, in whole or in part, on the applicant's confession and there are allegations that this confession was false or coerced⁴;
3. The applicant was convicted based, in whole or in part, on testimony that has since been recanted as false or coerced;
4. The applicant's conviction is alleged to have been borne from official misconduct, including witness tampering, misconduct in interrogations, fabricated evidence and confessions, the concealment of exculpatory evidence, and misconduct at trial⁵;
5. Law enforcement personnel involved in the investigation or arrest of the applicant were subsequently discharged or relieved of their duties for misconduct;
6. Law enforcement personnel involved in the investigation or arrest of the applicant who have been adjudicated by a court or an internal investigation by a law enforcement entity to have been committed an act of dishonesty or sexual assault as defined by Cal. Penal Law Section 832.7 (b) (B) and (C);
7. The applicant was convicted based on forensic evidence grounded in methodologies that have since been largely or wholly discredited as unreliable, including but not limited to bloodstain pattern analysis, comparative bullet lead analysis, forensic odontology (bitemarks), hair microscopy for the purpose of determining whether known/unknown hairs share a common source, Shaken Baby Syndrome (SBS). The CIU shall review the forensic methods used to analyze the evidence and ensure that forensic evidence used to obtain a conviction is foundationally valid and valid as it was applied in the case⁶;

and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence (2020) and Eyewitness Identification Procedures: Recommendations for Lineups and Photospreads (1998).

⁴ The CIU shall consult the 2010 American Psychological Association white paper on police interrogation and confessions, and any emerging literature or research regarding false confession and recanting witnesses, to inform its review of convictions supported by statements obtained during custodial interrogations that have since been recanted or disavowed by the person who allegedly made the statement. [https://web.williams.edu/Psychology/Faculty/Kassin/files/White%20Paper%20-%20LHB%20\(2010\).pdf](https://web.williams.edu/Psychology/Faculty/Kassin/files/White%20Paper%20-%20LHB%20(2010).pdf)

⁵ The CIU shall consult the National Registry of Exonerations report *Government Misconduct and Convicting the Innocent: The Role of Prosecutors, Police and Other Law Enforcement* (2020), and any emerging literature or research regarding official misconduct, to inform its review of convictions alleged to have resulted in whole or in part from official misconduct.

⁶ The use of unreliable and misleading forensic evidence, which we know is a common cause of wrongful convictions, imperils the integrity of the criminal legal system. The CIU shall critically and continually examine emerging scientific literature, which may also call into question older forensic methods, and train staff about these changes, so that case review criteria can be updated as needed. The CIU shall ensure that forensic evidence supporting a conviction complies with the findings, recommendations, and best practices set forth in specific reviews of the relevant sciences, including but not limited to:

- I. American Association for the Advancement of Science (AAAS) reports on Fire Investigation (2017) and Latent Fingerprint Examinations (2017)
- II. American Statistical Association (ASA) Position on Statistical Statements for Forensic Evidence (2019)
- III. National Academy of Sciences (NAS) report *Strengthening Forensic Science in the United States: A Path Forward* (2009)

8. The applicant was convicted based on forensic evidence that the LACDA has generally accepted as reliable, but the particular conclusions or opinions presented to the jury in support of the prosecution's case exceeded the bounds of what is now recognized to be valid science – for example, through testimony purporting to “identify” an applicant as the unique source, or through expert testimony implying or stating a statistical basis for the likelihood of a particular conclusion that is not verifiable or otherwise valid;
9. A conviction was based either on the factors identified above but corroborated only with jailhouse informant testimony or testimony by an informant that has been used by law enforcement or this office on more than one occasion;
10. The conviction was based, in whole or in part on jailhouse informant testimony or testimony by an informant that has been used by law enforcement or this office on more than one occasion;
11. The conviction was based in whole or in part on the testimony of witnesses who received benefits from this office or law enforcement in exchange for, or close in time to, their testimony against the applicant;
12. A gang allegation was found true by a jury where the only evidence of gang membership was presented by a gang expert, and that evidence would now be deemed inadmissible hearsay under *People v. Sanchez* (2016) 63 Cal. 4th 665, and the evidence of gang membership served as the only evidence of motive used to obtain the conviction;
13. Evidence based on analysis by crime labs that were not accredited when the analysis was conducted, and/or have been implicated in scandals related to their handling and testing of evidence;
14. Evidence supporting the conviction was corroborated by one or more of the above types of unreliable evidence;
15. The applicant was convicted after one or more retrials, following a hung jury;
16. Defense counsel was disbarred or otherwise disciplined after the challenged conviction was obtained, and/or presented no evidence to counter the prosecution's case at trial, and/or was found by a court to have provided ineffective assistance of counsel in one or more other cases.

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- IV. National Institute of Standards and Technology (NIST) report on Latent Print Examination and Human Factors (2012), Working Group on Human Factors in Handwriting Examination (2020), and Scientific Foundation Studies on DNA mixture interpretation, bitemark analysis, firearms examination, and digital evidence (forthcoming)
 - V. President's Council of Advisors on Science and Technology (PCAST) report *Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods* (2016).

SPECIAL CONCERNS IN EVALUATING FORENSIC EVIDENCE

In cases involving forensic evidence, the CIU shall request or permit the applicant's counsel to conduct forensic testing, when doing so could be probative, in that it may tend to identify the identity of the perpetrator of the crime or may exculpate the applicant seeking review of their conviction. The CIU shall request that forensic results be expressed in reports and testimony using clear and comprehensible language, to inform the CIU's own decision making and that of other legal actors. Where such testing is conducted, the CIU shall permit any forensic analysts retained by the CIU to speak freely and independently with the applicant's counsel and shall make the analysts' underlying data and case materials available to the defense.

The CIU shall not raise procedural challenges or defenses to oppose, nor shall it oppose, requests for seeks forensic testing, including but not limited to DNA testing, fingerprint analysis, firearms comparison, GSR, toxicology, where the testing may lead to evidence relevant to the applicant's claim of actual innocence or wrongful conviction, including but not limited to testing that is capable of identifying the perpetrator of a crime. The CIU shall assist applicants in ascertaining the status of physical evidence by facilitating contacts between individuals seeking testing and/or their attorneys and the crime lab and/or law enforcement personnel needed to search evidence and property rooms to locate the evidence in question.

The CIU shall carefully scrutinize cases in which experts or others opined or testified by using terms like "reasonable degree of scientific certainty," which have no accepted scientific meaning yet convey an unsupported measure of reliability or conclusiveness to the factfinder. The CIU shall request that all information concerning the limitations of forensic techniques should be disclosed alongside the results of any analyses. All forensic methods have limitations, and none are error free. Where error rates for a method are not known or have not been adequately measured, reports shall state that fact. The CIU shall carefully scrutinize any conviction based in whole or in part upon testimony that states or implies a "zero error rate" or which purports to provide an error rate that has not been independently validated. The CIU shall similarly make those limitations clear in communications with the applicant and/or their counsel and the court. The CIU shall also request that all methods of forensic analyses be documented in the first instance to permit the CIU's review and disclosure of all steps followed and the methodology used to arrive at the conclusions reached.

The CIU shall ensure that the applicant and/or their counsel receive not just certificates or reports of forensic analyses, but also complete documentation of the methods used, and the results reached. The CIU shall disclose the applicant and/or their counsel all inconclusive and exculpatory forensic results, in addition to any information about corrective actions taken in a laboratory or proficiency testing of individual analysts. The CIU shall also make routine requests to preserve forensic evidence, especially where the applicant and/or their counsel seek preservation for potential future testing.

The CIU shall facilitate a CODIS, AFIS or NBIN search of evidence that may help demonstrate an individual was wrongly convicted.

PRO SE APPLICANTS

When a case accepted for review is submitted by a *pro se* applicant, the CIU shall determine whether appointment of independent legal representation would promote justice and facilitate review of the case, such as in cases involving high-risk factors, listed above. In the absence of those factors, the determination as to whether appointment of counsel would promote justice shall be determined on a case-by-case basis. In such cases, the CIU shall recommend that the applicant seek legal representation and, if requested, assist by referring the individual to an appropriate innocence project, law school clinic, *pro bono* counsel, or public defender office. The CIU shall also consider whether to file a joint petition for writ of habeas corpus stipulating that an order to show cause should issue and counsel should be appointed pursuant to Penal Code section 1484.

Where an applicant is represented by counsel, the CIU shall use joint discovery and/or limited disclosure agreements, in appropriate cases, to share work product information. The CIU will seek to conduct investigations jointly and collaboratively with counsel, sharing exculpatory or improperly withheld information as quickly as practicable. Any attorney-client or work-product privileged information that is shared between a claimant and the CIU shall not be shared with other units in the office and shall not be used at trial or in post-conviction proceedings by other units for any purpose.

COMMUNICATIONS WITH APPLICANT'S COUNSEL

This Office respects the sanctity of the attorney-client privilege between an applicant and defense counsel. An applicant who alleges Ineffective Assistance of Counsel may have, unwittingly, impliedly waived some portion of the attorney-client privilege as to communications with their trial counsel. This waiver is not absolute, however, and is extremely limited.

The CIU shall err on the side of caution and notify an applicant before seeking to contact defense counsel or seeking to obtain counsel's file and provide the applicant with a chance to object or modify a claim to avoid an inadvertent or implied waiver of the attorney-client privilege. The CIU shall not seek disclosure of anything beyond that which is strictly necessary and legally allowable under California and Federal law, including information that exceeds the limited scope of the ineffective-assistance-of-counsel claim.

The CIU shall not encourage any attorney to violate their ethical duties of confidentiality and loyalty to former clients, as articulated in the California Rules of Professional Conduct; rather, CIU attorneys or investigators speaking to defense counsel must remind defense counsel of the attorney-client privilege prior to the start of a substantive interview.

ACCESS TO DISCOVERY

If the CIU accepts a case for review, the CIU shall assist the applicant in obtaining all discovery the applicant is entitled to under P.C. 1054.9, as well as any and all *Brady* materials in the constructive possession of the office. The CIU shall also allow applicants and/or their attorneys

to have access to all non-privileged and non-sensitive information in the case files under review, including information in police reports and lab reports concerning the testing of forensic evidence.

Recognizing that certain categories of otherwise privileged information and work product prepared by this office may contain exculpatory or impeachment information relevant to an applicant's claims, and the benefit to the truth-seeking process of having both parties review this material, the CIU shall err on the side of disclosing the complete LACDA trial file to the applicant's counsel for independent review, subject only to reasonable and necessary disclosure agreements. Any redactions shall be limited to those deemed strictly necessary to protect victim or witness privacy.

The CIU shall not condition its review of a case or its own disclosures on any reciprocal commitment by the part of the applicant to waive any aspect of the attorney-client or work-product privilege or waive such privileges generally. Where otherwise privileged information may be necessary for the CIU to fully investigate and consider an applicant's claims for relief – for example, to speak with the applicant's trial counsel or review portions of the trial file to determine if certain *Brady* information was or was not timely disclosed – the CIU shall limit its waiver requests to only those necessary to investigate the claim or issue. Similarly, where the CIU seeks to interview the applicant or the applicant's prior counsel, the CIU shall afford the applicant's current counsel the opportunity to be present (or waive counsel's presence) at the interview.

The CIU shall proactively seek to obtain complete files from law enforcement agencies pertaining to the case, including forensic evidence and files maintained by laboratories and coroner or medical examiner's offices. In the event the CIU discovers that the case file(s) have been lost in whole or in part, the CIU shall immediately inform the person seeking review of their conviction, or their counsel, that the file(s) has been lost. The CIU shall work with the Discovery Unit to reconstruct the file by obtaining records from:

- The LACDA's internal files;
- The LAPD, LASD, LAFD, and/or any other law enforcement agency or emergency services provider involved in the case;
- Crime labs;
- The coroner's office, in homicide cases;
- The original trial deputy's personal file;
- The superior court file;
- The courthouse exhibit room;
- The court of appeal; and
- Any other source reasonably likely to have relevant materials, records, and/or evidence, such as medical records, where appropriate releases are provided, 911 dispatch call recordings, etc.

The CIU shall review every case previously rejected by the former CRU, whether at the screening stage or after an investigation, in light of all of the above.

INVESTIGATIONS IN CLAIMS OF WRONGFUL CONVICTION

CIU investigations often require looking into convictions that are decades old, where witnesses' memories have faded, and/or that involve reluctant or recanting witnesses, and therefore often require specialized knowledge and training on issues such as memory science, eyewitness identifications, and police practices used at the time that are no longer considered best practices. CIU deputies and investigators shall consult with outside experts, as needed, to obtain relevant materials concerning best practices regarding conducting CIU investigations.

These investigations shall not be undertaken as a means of "protecting" a conviction, nor shall they be adversarial in nature. Thus, for example, investigators shall not engage in tactics designed to dissuade a recanting witness and shall not threaten to charge that witness with perjury; rather the paramount goal of a CIU investigation shall be to determine the reliability and truthfulness of the recantation. Using a high-pressure, coercive, or intimidating approach in these investigations wastes time and resources and sends a mixed message to office staff about the CIU's mission and undermines the CIU's credibility with the public.

CIU deputies and investigators shall also make all reasonable efforts to avoid *unintentional* witness intimidation. These efforts shall include, but are not limited to, conducting interviews in non-threatening or neutral locations (rather than in this office or another law enforcement entity's office or station), if possible, and the concealing of the investigator's weapon, if one is carried, except where specifically required to do so by law, or if approved by the elected District Attorney.

CIU deputies and investigators shall understand what confirmation bias is—also referred to as tunnel vision—and how to avoid it. Studies have shown that confirmation bias is pervasive in the reinvestigations in wrongful conviction cases. It can occur, for example, when original police reports are viewed deferentially and/or treated as unassailable accounts of the truth of what transpired in the case, when research shows that police reports are often incomplete and contain inaccuracies, sometimes due to the fast-pace at which criminal investigations unfold, following serious felony offenses. CIU deputies and investigators shall test and probe information in police reports, witness accounts, and other new evidence presented by an applicant, in a manner designed to uncover the truth.

INDEPENDENCE OF THE CIU

To the extent possible the CIU shall not disclose or discuss ongoing investigations with other units within this office, other than the elected District Attorney and/or his designee. Nor will the CIU share information from ongoing investigations with other governmental entities, except where specifically required to do so by law, or if approved by the elected District Attorney. In addition, to ensure a full and fair review of each case, investigations and case reviews shall be conducted independently by CIU deputies and investigators, without consultation or input from the original trial deputy, Head Deputy, or Assistant District Attorney of the trial division, except as needed to obtain historical information about the case.

The trial deputies who handled the original prosecution shall be afforded a reasonable opportunity to respond to any challenges that have been made to the prior handling of the case, but

shall not take part in the office's determination as to whether to accept a case for review or whether to recommend that relief from a conviction be granted. This unique investigative and litigation perspective underscores the need for CIU independence from other areas of the office and should be read to encourage collaboration with an applicant seeking review of a conviction wherever possible.

CASE RESOLUTION & REMEDIAL OPTIONS

Once a case that has been accepted for review undergoes a full investigation, the CIU shall make a recommendation to the District Attorney as to whether it is in the interest of justice to seek relief from the applicant's conviction or sentence.

If the CIU concludes that it is not in the interests of justice to revisit the conviction and/or sentence, the CIU shall inform the District Attorney of its conclusion and recommendation. The District Attorney shall have final decision-making authority to determine whether it is in the interest of justice for the office to seek relief from a conviction or sentence. If the determination is made that relief is not warranted, the CIU shall communicate the reasons for its decision, in writing, to the applicant with an explanation as to why and how the decision was reached, including what investigative steps were taken.

If the determination is made that relief is warranted, the CIU shall determine and consider all available and appropriate remedies, including seeking dismissal of the case pursuant to P.C. 1385, moving for a reduction of sentence pursuant to P.C. 1170(d), joining the applicant in filing a joint petition for writ of habeas corpus that stipulates to the need for an issuance of an order to show cause, advocating before parole boards for early release, supporting a petition for the restoration of rights, seeking expungement of the case, and/or supporting a request for clemency or pardon, where such remedies are in the interest of justice.

The CIU shall not delay the release of those persons whose entitlement to post-conviction relief has been established, for any reason; it is the duty of the CIU to immediately arrange for conditional release of those individuals pending the formalization of the conviction being vacated.

VICTIM OUTREACH & ADVOCACY

The CIU shall comply with all statutes and rules governing victims' rights and may engage a victim representative at any stage in the investigation when doing so may be in the best service of the investigation and/or the victim. The CIU will be respectful of victims and institute a culture of keeping victims abreast of investigation outcomes, when the outcome affects or changes the nature of the conviction and/or sentence. Upon the District Attorney's decision to seek relief in a case, the CIU shall engage a victim representative to liaise with the victim or victims.

REENTRY ASSISTANCE & COMPENSATION ASSISTANCE

Where the CIU determines that a conviction should be overturned and a case dismissed based on actual innocence, the CIU shall assist in securing necessary support and documentation,

such as a finding of actual innocence, that facilitate successful reentry into the community and will support the enactment of systems of compensation for those wrongfully convicted.

FINDINGS OF FACTUAL INNOCENCE

This office recognizes that monetary compensation is essential to a wrongfully convicted person's ability to rebuild their life. Under California law, wrongfully convicted persons who are innocent of the crimes for which they were convicted may file a claim for compensation with the California Victim Compensation and Government Claims Board (CVCGC Board), under California Penal Code section 4900.

Where the CIU determines that an applicant has demonstrated their innocence, the CIU shall proactively assist the applicant in seeking the statutory compensation to which they are entitled, including filing in the superior court, jointly with the applicant, if requested, a motion "for a finding of factual innocence by a preponderance of the evidence that the crime with which he or she was charged was either not committed at all or, if committed, was not committed by him or her." Cal. Pen. Code 1485.55 (b). The court's "finding of factual innocence," is binding on the CVCGC Board and this office's joint request for that finding will expedite and facilitate the compensation process. The CIU shall also assist the applicant by supporting their claim before the CVCGC Board, when filed, if requested.

Under current law, to obtain a "finding of factual innocence" in the superior court, a wrongfully convicted person must demonstrate that they are innocent by a preponderance of the evidence. The burden is on the wrongfully convicted person to prove their innocence. Because that standard is antithetical to the bedrock principle of our criminal justice system, which presumes a person is innocent until they are proven guilty beyond a reasonable doubt,⁷ it shall be the policy of this office, absent extenuating circumstances and with supervisor approval, to move jointly for and/or concede in the superior court that "a finding of factual innocence" should be made, where the conviction has been overturned, the charges have been dismissed, and there no longer exists constitutionally permissible evidence sufficient to prove that person's guilt beyond a reasonable doubt.

TRANSPARENCY

The CIU will conduct business in the most transparent manner possible, with biannual updates to the website on the number of cases submitted, under review, rejected, and outcomes. The CIU shall have open discussions with a designated ethics officer about critical case-related

⁷ "Absent conviction of a crime, one is presumed innocent." *Nelson v. Colorado*. (2017) 137 U.S. 1249, 1255 (explaining that once a criminal conviction is erased, the presumption of innocence is restored and holding that the state "may not presume a person, adjudged guilty of no crime, nonetheless guilty *enough* for monetary exactions"), citing *Johnson v. Mississippi* (1988) 486 U. S. 578, 585 (1988) (holding that after a "conviction has been reversed, unless and until [the defendant] should be retried, he must be presumed innocent of that charge"); *Coffin v. United States* (1895) 156 U. S. 432, 453 ["axiomatic and elementary," the presumption of innocence "lies at the foundation of our criminal law."]

decisions; the pursuit of justice and the interest in avoiding and remedying wrongful convictions shall be at the forefront of each decision.

The CIU's expansive scope of review and transparent practices are designed to remedy past individual wrongful convictions and enhance community confidence in the justice system, as well as provide a tool for improving office wide practices in a manner that reduces the likelihood of errors occurring again in the future.

"LEARNING ORGANIZATION"

The outcomes of CIU investigations are intended to provide a critical opportunity to identify systemic gaps that go beyond just one individual's error and can reinforce the idea that the District Attorney's office is a "learning organization." The CIU will have a clear avenue for recommending policy and procedural changes, as well as enhanced training, to address any deficiencies that are uncovered, including but not limited to:


- Consistent with its commitment to ensure that the forensic evidence underlying convictions is scientifically sound and accepted, the CIU shall develop appropriate systems, curricula, and CLE opportunities to help ensure that forensic evidence is used appropriately office-wide, prospectively, at every stage of criminal and post-conviction proceedings.
- Consistent with its commitment to the use of best practices in policing, the CIU shall develop appropriate systems, curricula, and CLE opportunities to help ensure that, officewise, deputies are regularly trained on what constitutes best practices in policing and rely on evidence obtained through policies and procedures reflecting the use of best practices in policing prospectively, at every stage of criminal and post-conviction proceedings.
- The CIU shall develop and maintain a database to track errors and other causes of wrongful convictions uncovered in the course of its case reviews. On a periodic basis, not less than once a year, the CIU shall review and synthesize the data collected to proactively recommend policy and procedural changes officewise. The CIU shall develop a well-defined method to develop, implement, and train the office on these changes. The CIU shall publish these findings and policy changes on the website not less than once a year.
- The database shall track official misconduct, including the names of law enforcement officers, prosecuting attorneys, agents of law enforcement including jailhouse informants and crime lab analysts, expert witnesses, and any other actor found to have committed misconduct or whose testimony has otherwise been proven to be unreliable. Not less than once a year the CIU shall use the data compiled in the database to compile a list of all other cases office wide, past and present, in which those actors participated in a case that resulted in a plea or conviction. The CIU shall review each of those cases and notify the applicant and/or defense counsel that their case is being reviewed and the reason for the review.

The policies of this Special Directive supersede any contradictory language of the Legal Policies Manual.

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SPECIAL DIRECTIVE 20-14

TO: ALL DEPUTY DISTRICT ATTORNEYS

FROM: GEORGE GASCÓN 
District Attorney

SUBJECT: RESENTENCING

DATE: DECEMBER 7, 2020

This Special Directive addresses issues of the Bureau of Prosecution Support Operations in Chapter 1.07.03 and Probation and Sentencing Hearings in Chapter 13 and Postconviction Proceedings in Chapter 17 of the Legal Policies Manual. Effective **December 8, 2020**, the policies outlined below supersede the relevant sections of Chapter 13 and Chapter 17 of the Legal Policies Manual.

INTRODUCTION

Today, California prisons are filled with human beings¹ charged, convicted and sentenced under prior District Attorneys' policies. Effective today, District Attorney George Gascón has adopted new charging and sentencing policies.

Justice demands that the thousands of people currently serving prison terms imposed in Los Angeles County under earlier, outdated policies, are also entitled to the benefit of these new policies. Many of these people have been incarcerated for decades or are serving a "[virtual life sentence](#)" designed to imprison them for life. The vast majority of incarcerated people are members of groups long disadvantaged under earlier systems of justice: Black people, people of color, young people, people who suffer from mental illness, and people who are poor. While resentencing alone cannot correct all inequities inherent in our system of justice, it should at least be consistent with policies designed to remedy those inequities.

The new Resentencing Policy is effective immediately and shall apply to all offices, units and attorneys in the Los Angeles County District Attorney's Office (hereinafter "Office"). While particular attention will be paid to certain people as discussed herein, every aspect of existing sentencing or resentencing policy will be subject to examination. The intent of this Resentencing Policy is that it will evolve with time to ensure that it reflects the values of the District Attorney, and by extension, the people of Los Angeles County.

¹ We will seek to avoid using dehumanizing language such as "inmate," "prisoner," "criminal," or "offender" when referencing incarcerated people.

LENGTH OF SENTENCE

The sentences we impose in this country, in this state, and in Los Angeles County are far too long. Researchers have long noted the high cost, ineffectiveness, and harm to people and communities caused by lengthy prison sentences; sentences that are longer than those of any comparable nation. DA-elect Gascón campaigned on stopping the practice of imposing excessive sentences.

With regard to resentencing, the Model Penal Code recommends judicial resentencing hearings after 15 years of imprisonment for all convicted people:

The legislature shall authorize a judicial panel or other judicial decision maker to hear and rule upon applications for modification of sentence from prisoners who have served 15 years of any sentence of imprisonment.

(American Law Institute (2017) Model Penal Code Sentencing, Proposed Final Draft, p. 681.)

National parole experts Edward Rhine, the late Joan Petersilia, and Kevin Reitz have endorsed this recommendation, adding: “We would have no argument with a shorter period such as 10 years.” ... These time frames correspond with criminological research showing that people age out of crime, with most “criminal careers” typically lasting less than ten years.” (Rhine, E. E., Petersilia, J., & Reitz, R. 2017. “The Future of Parole Release,” pp. 279-338 in Tonry, M. (Ed.) *Crime and Justice*, Vol. 46, p. 294.)

Accordingly, this Office will reevaluate and consider for resentencing people who have already served 15 years in prison. Experts on post-conviction justice recommend that resentencing be allowed for all people (not just those convicted as children or as emerging adults) and some experts recommend an earlier date for reevaluating continued imprisonment.

APPLICATION OF SENTENCE ENHANCEMENT POLICY FOR OPEN/PENDING CASES

For any case that is currently pending, meaning that judgment has not yet been entered, or where the case is pending for resentencing, or on remand from another court, the Deputy District Attorney in charge of the case shall inform the Court at the next hearing of the following:

“At the direction of the Los Angeles County District Attorney, in accordance with Special Directive 20-08 concerning enhancements and allegations, and in the interest of justice, the People hereby

1. join in the Defendant’s motion to strike all alleged sentence enhancement(s); or
2. move to dismiss all alleged sentence enhancement(s) named in the information for all counts.

FURTHER DIRECTIVES FOR OPEN/PENDING CASES

The following rules apply to any case where a defendant or petitioner is legally eligible for resentencing or recall of sentence, including but not limited to:

- Habeas corpus cases.
- Cases remanded to Superior Court by the Court of Appeal or Supreme Court.
- Cases referred to the Superior Court under Penal Code section 1170(d)(1).
- Cases pending resentencing under Penal Code sections 1170.126, 1170.127, 1170.18, 1170.91, and 1170.95.
- Cases pending under Penal Code section 1170(d)(2).
- All cases where the defendant was a minor at the time of the offense.
- Any other case that may be the subject of resentencing not specified here.

Any Deputy District Attorney assigned to a case pending resentencing or sentence recall consideration under any valid statute shall comply with the following directives until further notice.

- 1) If the defendant or petitioner is serving a sentence that is higher than what he/she would receive today, due to operation of law or by operation of the District Attorney's new Sentencing Policy, the deputy in charge of the case shall withdraw any opposition to resentencing or sentence recall and request a new sentence that complies with current law and/or the District Attorney's new Sentencing Policy. This policy applies even where enhancements were found true in a prior proceeding. This policy shall be liberally construed to achieve its purposes.
- 2) If the defendant or petitioner is seeking relief under Penal Code section 1170.95, the DDA may concede that the petitioner qualifies for relief. If the assigned DDA does not believe that the petitioner qualifies for relief, the DDA must request a 30 day continuance, during which time the assigned DDA shall review the case in light of the Office's specific Penal Code 1170.95 Policy, *see below*. If the DDA continues to oppose relief, the DDA shall submit the reasons in writing to the Head Deputy. The Head Deputy shall then seek approval from the District Attorney or his designee in order to determine whether the Office will continue to oppose relief.
- 3) If a defendant or petitioner would not qualify for a reduced sentence by operation of law if convicted today or under the Office's new Sentencing Policy, then the DDA in charge of the case may seek a 30-day continuance. During that time, the deputy shall evaluate whether to support or oppose the resentencing (or sentence recall) request. If the deputy believes that compelling and imminent public safety concerns justify opposition to revisiting the sentence, then the deputy must submit those concerns in writing to her Head Deputy who shall then seek approval from the District Attorney or his designee.
- 4) All laws concerning victim notification and support shall be honored.

PENAL CODE § 1170.95/SB 1437 RESENTENCING POLICY

1. We start with a position of respect for our co-equal branch of government, the legislature. Like the courts, we presume that laws passed by the legislature are constitutional. “[U]nder long-established principles, a statute, once enacted, is presumed to be constitutional.” (*Lockyer v. City and County of San Francisco* (2004) 33 Cal.4th 1055, 1119.) We will no longer seek to delay implementation of laws by making arguments that laws that provide retroactive relief are unconstitutional.
2. The Office’s position is that defense counsel should be appointed when the petition is filed and there should be no summary denials by the court. (*People v. Cooper* (2020) 54 Cal.App.5th 106; *People v. Tarkington* (2020) 49 Cal.App.5th 892, 917, review granted Aug. 12, 2020, S263219 [dis. opn. of Lavin, J.])
3. Many people accepted plea offers to manslaughter, made by this Office in order to avoid a conviction for murder. It is this Office’s policy that where a person took a plea to manslaughter or another charge in lieu of a trial at which the petitioner could have been convicted of felony murder, murder under the natural and probable consequences doctrine, attempted murder under the natural and probable consequences doctrine, or another theory covered by Senate Bill 1437, that person is eligible for relief under section 1170.95. Such a position avoids disparate results whereby a person who this Office has already determined to be less culpable -- as evidenced by allowing a plea for manslaughter -- serves a longer sentence than a similarly situated person who is now eligible for relief under section 1170.95.
4. Section 1170.95 (d)(2) states, “[I]f there was a prior finding by a court or jury that the defendant did not act with reckless indifference to human life or was not a major participant in the felony, the defendant is entitled to have his or her murder conviction vacated.” This prior finding includes cases where a magistrate found that there was insufficient evidence of major participation in a felony or reckless indifference to human life following a preliminary hearing, or at any stage in the proceedings.
5. The Office’s position is that, consistent with the definition of “prima facie,” the court must not engage in fact finding at the prima facie stage. (*People v. Drayton* (2020) 47 Cal. App. 5th 965.)
6. The Office’s position is that if the person was an accomplice to the underlying felony, and had a special circumstance finding that was decided before *People v. Banks* (2015) 61 Cal 4th 788 or *People v. Clark* (2016) 63 Cal. 4th 522, then the filing of a Penal Code section 1170.95 petition is adequate to trigger the section 1170.95 process. There is no requirement that the petitioner file a separate habeas petition first. (*People v. York* (2020) 54 Cal. App. 5th 250, 258.) The next stage is an evidentiary hearing.
7. The Office’s position is that if allegations pursuant to Penal Code section 190.2 (a) (17) were dismissed as part of plea negotiations and the petitioner was not the actual killer, this Office will not attempt to prove the individual is ineligible for resentencing. This Office will stipulate to eligibility per section 1170.95(d)(2).

8. The Office's position is that, consistent with *People v. Medrano* (2019) 42 Cal. App. 5th 1001, 1008, rev. granted, that a person who was convicted of attempted murder under the natural and probable consequences doctrine is eligible for resentencing under section 1170.95. Among other reasons, this avoids the great disparity that arises when one who was convicted of murder under the now abolished natural and probable consequences doctrine is able to be resentenced but one who was convicted of attempted murder is not.
9. If the client has previously won relief under *People v. Chiu* (2014) 59 Cal. 4th 155, the Office will not attempt to argue that the petitioner is ineligible for resentencing, or could be convicted as a direct aider and abettor.
10. If the jury was never instructed on direct aiding and abetting, implied malice murder, or any other intent-to-kill theory, or if the trial prosecutor never argued one of these theories, this Office will not argue that the petitioner can now be convicted under one of these theories during 1170.95 proceedings. Theories must remain consistent.
11. Relatedly, if a jury was not even instructed on implied malice murder or some other theory of homicide not covered by section 1170.95, the prosecution cannot now meet our burden of proof beyond a reasonable doubt that the petitioner is ineligible for resentencing.
12. If the petitioner was convicted of murder and the petitioner's jury was instructed on the natural and probable consequences theory doctrine and/or a first or second degree felony murder instruction at trial, then it may have been possible that petitioner was convicted under one of these theories and this Office will not seek to rebut petitioner's prima facie showing. The case must proceed to the evidentiary hearing.
13. Because jury deliberations are secret, in the absence of special findings, it is not possible to determine the actual basis of a jury verdict when multiple theories were before the jury. Therefore, at an evidentiary hearing, if the petitioner was convicted of murder and the petitioner's jury was instructed with a felony murder or a natural and probable consequences doctrine instruction along with other theories, there is a reasonable doubt that the jury convicted petitioner under the old felony murder rule or the now abolished doctrine of natural and probable consequences. Because the statute allows for the introduction of "new or additional evidence," the deputy district attorney may introduce evidence to show, for example, that the petitioner was the actual killer, or acted as a major participant with reckless indifference to human life, or was convicted under a still-valid theory on which the jury was instructed. See below for this Office's position on evidence that we will and will not seek to admit.
14. At an evidentiary hearing pursuant to section 1170.95 (d)(3), the prosecution must prove beyond a reasonable doubt that the petitioner is ineligible for resentencing. A deputy district attorney may not argue that the standard for the court to determine whether a petitioner is ineligible for resentencing is whether there is "sufficient evidence" to uphold the conviction. This is a standard of proof for an appellate court affirming a conviction. It is not the standard of proof for a trial court in a section 1170.95 proceeding. (*People v. Lopez* (2020) 56 Cal.App. 5th 936, 949-950.)

15. It is this Office's position that the Evidence Code applies to any evidentiary hearing pursuant to section 1170.95. Statements made after promises of leniency or threats of punishment (express or implied) are unreliable. A parole hearing is a coercive environment and therefore statements made in them are unreliable and involuntary. This Office will not seek to introduce statements by a petitioner made in parole hearing transcripts into court for any purpose.
16. As a matter of due process, it is this Office's policy that a petitioner has a right to confrontation at a hearing under section 1170.95. Accordingly, this Office will not seek to admit statements of a declarant when the petitioner did not have an opportunity to cross-examine the declarant or when a purported expert's opinion is based on inadmissible hearsay. (See *People v. Sanchez* (2016) 63 Cal.4th 665.)
17. The Office will comply with all of our obligations under *Brady v. Maryland* and its progeny during resentencing procedures.
18. The Office's position is that any defendant who was under the age of 25 when the crime occurred is entitled to present mitigation documents pursuant to *People v. Franklin* and Penal Code section 3051.
19. The Office's position is that a person's age and the "diminished culpability of youth," a person's mental illness, or cognitive impairment, or a person's intoxication is relevant to the determination whether a petitioner meets the standard of "reckless indifference to human life."
20. On resentencing, this Office will dismiss enhancements consistent with our current enhancement policies and otherwise not seek a sentence that is inconsistent with this Office's current sentencing policies.

RESENTENCING UNIT

This Office declares that new Sentencing, Enhancement and Juvenile policies must apply with equal force to sentences where the judgment is final. Accordingly, this Office commits to a comprehensive review of cases where the defendant received a sentence that was inconsistent with the charging and sentencing policies in force after Tuesday, December 8, 2020, at 12:01 AM.

In such cases, this Office shall use its powers under Penal Code section 1170(d)(1) to recommend recall and resentencing. While priority shall be given to the cases enumerated below, the ultimate goal shall be to review and remediate every sentence that does not comport with the new Sentencing, Enhancement and Juvenile Policies.

Specifically, this Office commits to an expedited review of the following categories of cases, which are themselves a subset of a universe of 20,000-30,000 cases with out-of-policy sentences:

- People who have already served 15 years or more;
- People who are currently 60 years of age or older;
- People who are at enhanced risk of COVID-19 infection;
- People who have been recommended for resentencing by CDCR;

- People who are criminalized survivors;
 - People who were 17 years of age or younger at the time of the offense and were prosecuted as an adult.
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In formulating this policy, we rely on current statistical data from the California Department of Corrections and Rehabilitation (CDCR). (See Appendix.) Over time, the data may be subject to change; the urgency of our mission will not be. In seeking resentencing under 1170(d)(1), this Office shall argue that resentencing is necessary to eliminate disparity of sentences and to promote uniformity of sentencing.

At all types of resentencing hearings, filing deputies shall assist the Resentencing Court by setting forth any and all postconviction factors that support resentencing, including, but not limited to: mitigation evidence; CDCR disciplinary records and record of rehabilitation and positive programming while incarcerated; evidence that reflects whether age, time served, and diminished physical condition, if any, have reduced the risk for future violence; evidence that reflects that circumstances have changed since the original sentencing so that continued incarceration is no longer in the interest of justice; and post-release reentry plans, demonstrating any family or community support that is available upon release. (See e.g. Assembly Bill 1812, Pen. Code § 1170, subd. (d).)

LIFER PAROLE HEARINGS

This Office recognizes that parole is an effective process to reduce recidivism, ensure public safety, and assist people in successfully rejoining society. The CDCR's own statistics show that people paroled from life terms have a recidivism rate of less than four percent.

We are not experts on rehabilitation. While we have information about the crime of conviction, the Board of Parole Hearings already has this information. Further, as the crime of conviction is of limited value in considering parole suitability years or decades later, (see *In re Lawrence* (2008) 44 Cal.4th 1181; *In re Shaputis* (2008) 44 Cal. 4th 1241, 1255), the value of a prosecutor's input in parole hearings is also limited. Finally, pursuant to Penal Code section 3041, there is a presumption that people shall be released on parole upon reaching the Minimum Eligible Parole Date (MEPD), their Youth Parole Eligible Date, (YEPD), or their Elderly Parole Date (EPD). Currently, sentences are being served that are much longer than the already lengthy mandatory minimum sentences imposed. Such sentences are constitutionally excessive. (See *In re Palmer* (2019) 33 Cal.App.5th 1199.)

This Office's default policy is that we will not attend parole hearings and will support in writing the grant of parole for a person who has already served their mandatory minimum period of incarceration, defined as their MEPD, YEPD or EPD. However, if the CDCR has determined in their Comprehensive Risk Assessment that a person represents a "high" risk for recidivism, the DDA may, in their letter, take a neutral position on the grant of parole.

This Office will continue to meet its obligation to notify and advise victims under California law, and is committed to a process of healing and restorative justice for all victims.

YOUTH AND CHILDREN²

Currently, there are thousands of people from Los Angeles County serving sentences in the CDCR for crimes they committed as children. As recent developments in adolescent brain science teach us, young people are uniquely capable of rehabilitation and can lead productive lives as contributing members of society without serving long sentences.

Under new Juvenile Directives, available here, people who are 17 or younger at the time of their offense, will not be transferred to adult court and will remain committed to the youth system until they are mature enough to reenter society. Accordingly, any person who was a minor at the time of the offense and meets the eligibility requirements for recall and/or resentencing in adult court, including but not limited to actions pursuant to Penal Code sections 1170(d)(2), or 1170(d)(1), falls within this Office's policy to oppose transfer of minors to adult court. In such cases, DDAs shall join in any defense motion seeking to transfer the person to juvenile court for further proceedings, and the deputy on the case shall state the reasons for supporting such transfer, consistent with this Office's policies, on the record.

² We will refer to "youth," "child," or "children" instead of "juvenile(s)." The word "juvenile" is used almost exclusively as a way to describe children who are in the criminal legal system or as police descriptors. As a result, it has become a way to mark certain children as "other." To the extent possible, we will refer to the children in the criminal legal system as we would to all children, as "young person(s)" or "children." In accordance with Penal Code § 3051, we will refer to persons age 18 to 25 as "youths."

APPENDIX

A. Current CDCR Population from Los Angeles County

Table A.1: Descriptive Statistics for Demographic and Other Data

Variable	Level	Number	Percentage
Total CDCR Prison Population Originating in Los Angeles County = 29,556* (*excluding LWOP and condemned cases)			
<i>Gender</i>			
	Female	1,078	3.65%
	Male	28,478	96.35%
<i>Race/Ethnicity</i>			
	Black	11,139	37.69%
	Latinx/Hispanic	14,683	49.68%
	White	2,263	7.66%
	Other	1,471	4.98%
<i>Age Group</i>			
	Less than 20	31	0.10%
	20-29	5,945	20.11%
	30-39	9,098	30.78%
	40-49	6,489	21.95%
	50-59	5,043	17.06%
	60+	2,950	9.98%
<i>Offense Category</i>			
	Crimes Against Persons	25,391	85.91%
	Drug Crimes	461	1.56%
	Property Crimes	2,230	7.54%
	Other Crimes	1,474	4.99%
<i>Time Served</i>			
	Less than 5	8,307	28.11%
	5 to less than 10	6,762	22.88%
	10 to less than 15	5,123	17.33%
	15 to less than 20	3,446	11.66%

	20+	5,918	20.02%
<i>Sentence Type</i>			
	2nd Strike	8,106	27.43%
	3rd Strike	2,395	8.10%
	Determinate Sentence	9,841	33.30%
	Life with Parole	9,214	31.17%

Table A.1: Time Served, Age at Time of Offense, Current Age, Classification Scores, and Serious Rules Violation Reports (RVRs) Received in Past 3 Years

	Count/ Percentage of Total LAC Prison Population
Served 20 Years or More	5,918 (20.02%)
Served 15 Years or More	9,364 (31.68%)
Served 10 Years or More	14,487 (49.02%)
Served 7 Years or More	18,206 (61.60%)
Currently 60 Years or Older	2,950 (9.98%)
Currently 65 Years or Older	1,367 (4.62%)
Age 25 or Younger at Time of Offense	13,410 (45.37%)
Age 18 or Younger at Time of Offense	3,291 (11.13%)
Age 17 or Younger (Under 18) at Time of Offense	1,557 (5.27%)

Age 16 or Younger at Time of Offense	778 (2.63%)
Age 15 or Younger at Time of Offense	255 (0.86%)
Classification Score of 25 or Below	12,297 (41.61%)
Classification Score of 19 or Below	10,700 (36.20%)
No Serious RVRs in Past 3 Years	25,501 (86.28%)
CS of 25 or Below with No Serious RVRs in Past 3 Years	12,016 (40.66%)
CS of 19 or Below with No Serious RVRs in Past 3 Years	10,490 (35.49%)

Table A.3: Eligibility by Offense Type and Time Served (mix of lower-level offenses)

Offense Type	Served 10 Years or More		Served 7 Years or More		All	
	Frequency	Percentage of Total Prison Population Originating in LAC*	Frequency	Percentage of Total Prison Population Originating in LAC*	Frequency	Percentage of Total Prison Population Originating in LAC*
Drug Offenses	132	0.45%	158	0.53%	461	1.56%
Residential Burglaries	476	1.61%	688	2.33%	1,643	5.56%
Robberies	2,045	6.92%	2,828	9.57%	5,297	17.92%
Residential Burglaries & Robberies	2,521	8.53%	3,516	11.90%	6,940	23.48%
Non-Sex Offenses	12,393	41.93%	15,618	52.84%	26,029	88.07%
Non-Murder & Non-Sex Offenses	5,731	19.39%	7,937	26.85%	17,048	57.68%
All Non-Violent, Non-Serious, Non-Sex Crimes	527	1.78%	644	2.18%	2,236	7.57%
All Non-Non-Non Crimes (with Residential Burglaries)	1,003	3.39%	1,332	4.51%	3,879	13.12%
All Non-Non-Non Crimes (with Res. Burglaries & Robberies)	3,048	10.31%	4,160	14.07%	9,176	31.05%
All Incarcerated*	14,463	48.93%	18,167	61.47%	29,556	100.00%

*The total prison population originating in LAC in this table excludes all LWOP and condemned cases.

B. Background on Our Incarceration Crisis

Our ballooning prison population [did not result from an increase in crime](#). In fact, our crime rate has declined dramatically since the early 1990's. Rather, [harsher sentencing laws like](#) Life Without the Possibility of Parole, an increase in mandatory minimum sentences for indeterminate sentences, Three Strikes sentencing, and requirements that that restrict people to complete 85% of their imposed time now keep people in prison for longer than ever before, long after they pose any safety risk to their community.

There are currently [more people serving life sentences](#) in America than were locked up in prison at all during the 1970s. [One in seven](#) people behind bars is serving a life sentence.

California has led the way in this explosion. We had [23,000 people](#) incarcerated in 1980. By 2000, [we had over 160,000](#) people. By 2010 we had 164,000. In the last 10 years, spurred by a [United States Supreme Court decision](#) holding that California's overcrowded prisons constituted cruel and unusual punishment, as well as by a growing public awareness that we are incarcerating too many people for too long, we have moved to reduce our prison population. However, we have five times as many people incarcerated as we had in 1980.

California spent [a shocking \\$15.7 billion on prisons in 2019-2020](#). This represents 7.4% of all state funds. This is occurring while people are sleeping in our streets, our parks are trash-ridden, our schools are in need of repair, our once-free public universities are underfunded and tuition rises, people are hungry, and we need major infrastructure repair to even do things like provide clean water to the people of California.

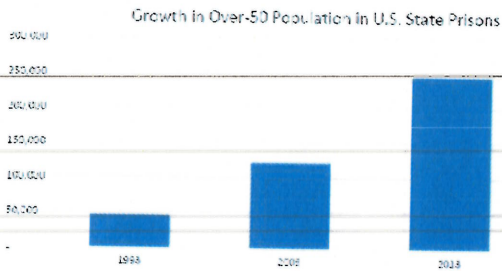
In Los Angeles County alone we currently have almost 30,000 people in CDCR.

Nationally, our criminal justice policies have disproportionately impacted minority populations. 60% of people in prison are Black, despite making up just 13% of the population. One out of every five Black persons behind bars has a life sentence.

Almost 93% of people sent to prison from Los Angeles County are Black people and people of color. Black people are approximately 9% of Los Angeles's population. They constitute 38% of Los Angeles's state prison population. We can no longer deny that our system of hyper-criminalization and incarceration is anything other than racist.

The incarceration rate of women [is also on the rise](#). In 1980, there were 13,206 women in prison; in 2017, there were 111,360.

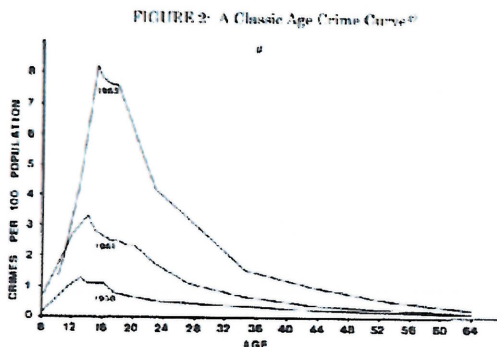
Harsh sentencing laws have also meant that the prison population is old. If we continue at current rates, [one in three people behind bars](#) in state prisons will be over 50 by 2030. In 1993, there were 45,000 people over 50 in U.S. state prisons. Twenty years later, there were 243,800. The growth in the aging prison population has continued. Since 1999, New York has decreased its prison population by 30 percent [but during that same time span saw a doubling](#) of its over 50 population. Between 2001 and 2014, [29,500 people over 55](#) died in federal and state prisons.



Current estimates show that the U.S. spends upwards of \$16 billion a year to care for its elderly population. In 2013 in Virginia, **nearly half of the Department of Corrections budget** for prisoner health care went to caring for the elderly.

Recidivism and the Age-Crime Curve

Research consistently shows that individuals age out of crime, even those convicted of the most serious offenses. By the time individuals reach their thirties, their odds of committing future crimes drop dramatically. Much of this is due to neurological changes, which take place in profound ways up until an individual turns 26. The prefrontal cortex, which is highly involved in executive functioning and behavior control, continues to develop until age 26, making it harder for young people to make what adults consider logical and appropriate decisions.



Given these changes, it makes little sense to sentence children and adolescents to lengthy terms of incarceration without any meaningful opportunity for review, as the odds are extremely high that those children can be rehabilitated and reenter society.

Likewise, incarcerating an aging population makes little penological sense. Those aged 50-64 have [far lower recidivism rates](#) than the national average: seven percent compared to 43.3 percent. And those over 54 have just a four percent recidivism rate. In other words, we are spending billions to lock up people, 96% of whom will not even commit a technical violation once released.

Jurisdictions that allow for a “second look” or increased parole opportunities

“Look back” provisions allow sentenced individuals to petition for a reduced sentence after they have shown meaningful signs of rehabilitation that indicate an ability to return to society. While several jurisdictions have parole eligibility, only California has enacted a robust “look back” Act thus far. Delaware has implemented one to address those sentenced under habitual offender laws.