



AGENDA REPORT

TO: Edward D. Reiskin
City Administrator

FROM: G. Harold Duffey
Director, Oakland Public
Works

SUBJECT: Skyline Boulevard Evacuation
Corridor Fire Prevention Project

DATE: November 22, 2021

City Administrator Approval

Date:

Dec 8, 2021

RECOMMENDATION

Staff Recommends That The City Council Adopt A Resolution Authorizing The City Administrator To Accept And Appropriate 1) Six Hundred Thousand Dollars (\$600,000) From The California Department Of Forestry And Fire Protection (CAL FIRE) Fuel Reduction Program, And 2) Two Hundred Twenty-Four Thousand (\$224,000) From The CAL FIRE Fire Prevention Grants Program, For A Total Of Eight Hundred And Twenty-Four Thousand Dollars (\$824,000) For The Completion Of The Skyline Boulevard Evacuation Corridor Project Involving The Removal Of Dead And Hazardous Trees Along Skyline Boulevard, And The Planting Of One Hundred Fifty (150) Trees As Shaded Fuel Breaks.

EXECUTIVE SUMMARY

Staff requests that City Council approve the acceptance of \$824,000 in funds from the State Department of Forestry and Fire Protection (CAL FIRE) as well as authorize Oakland Public Works (OPW) to enter into a Contract Agreement for up to \$600,000 (**Attachment A**) and a Grant Agreement for up to \$224,000 (**Attachment B**). This funding will allow OPW to selectively remove approximately 250 dead, dying, or otherwise hazardous trees, and selectively prune hazardous branches on trees lining or overhanging the Skyline Boulevard Evacuation Corridor, beginning at Shepherd Canyon Road and ending at Keller Avenue. Consecutive years of drought have exacerbated the decline of many of these trees while increasing potential fire risk, creating possible safety and traffic hazards that must be addressed to protect the functionality of the Skyline Boulevard Evacuation Corridor during a catastrophic event. One hundred and fifty new oak trees will be planted to create shaded fuel breaks in the project area.

BACKGROUND / LEGISLATIVE HISTORY

Wildfires are a natural part of California's landscape, and the potential risk of wildfires impacting communities in and adjacent to forested areas is at an all-time high. In the last few years, California has experienced the deadliest and most destructive wildfires in its history. The Oakland firestorm of 1991 was one of the largest urban wildfires in the Bay Area. The fire started on the border of Oakland and spread throughout the Oakland and Berkeley hills.

City Council
December 21, 2021

Ultimately, twenty-five lives were lost, 150 people were injured, over fifteen hundred acres of land were burned, and over 3,000 homes were destroyed. The high winds, steep terrain, and heavy fuel load made fighting this historic blaze a major challenge. The economic loss from the fire was estimated at \$1.5 billion.

On November 19, 2019, the City Council adopted Resolution No. 87940 C.M.S. declaring Wildfire Prevention a top priority for the City of Oakland, and the City Administrator established a Wildfire Prevention Working Group. This group consists of multiple City Departments working together to identify opportunities to reduce wildfire risk in the wildland-urban interface areas of Oakland that the State of California identifies to be in a Very High Fire Hazard Zone. These agencies include: OFD, OPW, Department of Transportation (OakDOT), Bureau of Planning and Building (P&B), Oakland Police Department (OPD), and the City Administrator's Office.

In September 2018, the City Council passed Resolution No. 87388 C.M.S. to accept and appropriate \$970,130.08 from CAL FIRE's Urban and Community Forestry Grant Program for completion of a citywide street and urban park tree inventory, development of Oakland's Urban Forest Master Plan, and the planting of trees in disadvantaged and low-income communities identified by the California Office of Health Hazard Assessment's CalEnviroScreen 3.0. After completing the Citywide Tree Inventory, over 200 dead, dying, and/or hazardous mature trees were identified within striking distance of the public right-of-way in the project area along Skyline Boulevard.

Per Oakland Municipal Code 12.32.020, the removal and maintenance of trees on public ground and upon roads falls under the authority of the City Manager or their designee. OPW routinely removes dead, dying, or otherwise hazardous trees from along roads and the public right-of-way. This project will help address the backlog of dead, dying, or otherwise hazardous trees along Skyline Boulevard as well as keep up with the ongoing tree die-off occurring in this area.

This project aligns with the Community Wildfire Protection Plan for Alameda County (2012), which specifically identifies addressing trees within striking distance of PG&E powerlines along the Skyline Boulevard corridor in Oakland as a priority treatment area.

The Oakland Vegetation Management Plan specifically identifies roadside treatment areas and medians within a larger geographic area, including the Skyline Boulevard Evacuation Corridor. This plan is currently in progress and not yet finalized. It aims to reduce wildfire risk by reducing fuels throughout a large area in the Oakland Hills.

ANALYSIS AND POLICY ALTERNATIVES

The proposed resolution would approve the acceptance of \$824,000 in funds from CAL FIRE as well as authorize OPW to enter a Contract Agreement for up to \$600,000 and a Grant Agreement for up to \$224,000 to pursue this project to mitigate tree hazards along the Skyline Boulevard Evacuation Corridor in Oakland. The \$600,000 funding is through a direct contract with CAL FIRE where the City will submit invoices for payment as work is completed on this project. These funds come from CAL FIRE's budget available for distribution for fire fuels reduction projects such as the Skyline Boulevard Evacuation Corridor project. The \$224,000 funding is a grant award for a grant proposal submitted by OPW to CAL FIRE. These funds are

from the California Climate Investment program administered by CAL FIRE and require a grant agreement and quarterly invoicing and project reporting.

Expected outcomes for this project include:

- A substantial reduction in the number of dead and hazardous trees within striking distance of the public right of way on Skyline Boulevard between Shepherd Canyon Road and Keller Avenue.
- A substantial reduction in the chances of a wildfire crossing the Skyline Boulevard fire evacuation route by removing dead, hazardous trees in the undeveloped right of way.
- A substantial reduction in the ability for tree branches over Skyline Boulevard to carry fire.
- A substantial reduction in the fuel load along Skyline Boulevard, reducing fire intensity in the event of a wildfire evacuation.
- Woody biomass created by operations will be disposed of in ways to minimize greenhouse gas emissions. Logs will go to a green waste facility or be used as traffic barriers on nearby roads. Branches and brush will be chipped on-site and spread to inhibit the growth of grasses and other potential fire fuels. No woody biomass will be burned or landfilled.
- The 150 new oak trees planted for this project will replace the dead and dying trees removed from the treatment area and mitigate the aesthetic impact of tree removals. The oaks will eventually develop a shade canopy to discourage ground surface fuels. These trees will be planted and maintained during the three-year establishment period by OPW Parks & Tree Division and local volunteers.

There are thousands of mature trees within striking distance of Skyline Boulevard along the seven-and-a-half-mile stretch between Shepherd Canyon Road and Keller Avenue. These trees are mostly Monterey pine (*Pinus radii*), as well as eucalyptus (*Eucalyptus* spp.), black acacia (*Acacia melanoxylon*), coast live oak (*Quercus agrifolia*), and other species. Many of the Monterey pines have reached the end of their lifespan, and/or are becoming victims of ongoing drought conditions. On average, twenty to thirty mature Monterey pines have been dying in the project area each year, and this trend is accelerating in the face of ongoing drought conditions. It is common for these trees to lose limbs or uproot without warning, and their removal has been a steady, incremental task for several years. In a major high wind event, it is common for numerous large trees to fall across the Skyline Boulevard, requiring several hours to clear the roadway. High wind events in this area are often linked to low humidity and red flag warnings, which set conditions for potential fire hazards. The CAL FIRE Fire Hazard Severity Zone map rates the Oakland Hills area, which includes the Skyline Boulevard Evacuation Corridor, as a "Very High Fire Hazard Severity Zone."

OPW has been removing an average of about fifty mature large Monterey pine trees per year along the Skyline Boulevard Evacuation Corridor. Many of these trees had been dead for years and were at a high risk of falling over or splitting. To continue addressing the backlog of dead, dying, and hazardous trees and address the ongoing additions of Monterey pine that die each

year, it will be necessary to dramatically increase the amount of resources to do this work, as reflected in this project's budget. The City does not otherwise have adequate resources to remove and/or prune this volume of trees. OPW's Tree Services Division is still suffering from the impacts of department downsizing after the 2008 global financial crisis.

Six OFD stations in this region use Skyline Boulevard as their means to travel across the Oakland Hills and reach fires. If Skyline Boulevard were blocked by a tree, tree branch, or fire during a fire emergency, this would hinder both residents from evacuating as well as hinder OFD from moving their resources into the scene of the fire. If OFD cannot access the fire, there is a greater chance that fire containment strategies will fail. Skyline Boulevard is the primary evacuation route across the Oakland Hills for 18,889 homes and 57,708 residents. The assets in the area that could be affected by a catastrophic fire event include:

- Joaquin Miller Park, Joaquin Miller Community Center, the Woodminster Amphitheater, and other facilities within the park have numerous access points for fire response from Skyline Boulevard running through the eastern boundary of the park. The Woodminster Amphitheater is an outdoor stage event venue with seating for 2000 people. It also serves as an emergency shelter site and has an underground bunker with a 30-day food storage supply. The Joaquin Miller Community Center and Sanborn Ranger Station are also located here, which host City functions and educational tours of the park.
- The Chabot Space & Science Center (10000 Skyline Boulevard) – an astronomy, educational, and NASA-sponsored research facility is located within this project area and may have as many as 500 employees, visitors, and students present during its hours of operation and evening presentations.
- The East Bay Regional Parks District (EBRP) Trudeau Center (11500 Skyline Boulevard) – a local event and regional training facility within the project area, routinely used by public safety agencies for joint planning and training including Oakland Fire, CALFIRE, East Bay Regional Parks Fire & Police, Berkeley Fire and the East Bay Municipal Utilities District. The public also utilizes this facility for civic events and meetings of up to 100 persons.
- The Anthony Chabot Equestrian Center (14600 Skyline Boulevard) – a horse stable for up to 50 horses and site for equestrian events.
- Skyline High School (12250 Skyline Boulevard) – this Oakland Unified School District public high school has a daily staff and student population of up to 2,000.
- Sunrise of Oakland Hills (11889 Skyline Boulevard) – a senior housing and care facility that is home to over 150 senior citizens, many of whom are non-ambulatory.
- Six Oakland Fire Stations (Stations 6, 7, 21, 24, 25 & 28) utilize Skyline Boulevard as a primary means of incident response.
- Pacific Gas and Electric (PG&E) high voltage power lines run throughout the Skyline Boulevard Evacuation Corridor.
- East Bay Municipal Utility District (EBMUD) has nine water reservoir tanks and facilities in numerous locations accessed from Skyline Boulevard:
 - The Palo Seco Reservoir, 10722 Skyline Boulevard.
 - The May Reservoir, Skyline Boulevard, 2000 feet southeast of Keller Avenue.
 - The City Line Pumping Plant, Sequoyah Road just west of Skyline Boulevard.
 - The City Line Reservoir, 14330 Skyline Boulevard.
 - The Madrone #2 Regulator and Madrone Reservoir, 300 feet east of Balmoral Drive and 400 feet north of Skyline Boulevard.
 - The Carisbrook reservoir, 2677 Carisbrook Drive west of Skyline Boulevard.

- The Castle reservoir, 6020 Castle Drive west of Skyline Boulevard.
- The Skyline reservoir, north of Skyline Boulevard, 1000 feet southeast of Castle Drive adjacent to the Chabot Space & Science Center.
- The Grass Valley regulator, 13711 Skyline Boulevard., 50 feet south of Barmeid Place.

The proposed resolution advances the City’s goal of building **holistic community safety** by reducing potential hazards that may affect safe travel along Skyline Boulevard during a catastrophic fire event. This affects both the emergency personnel who will need to use Skyline Boulevard to reach critical fire areas as well as the residents and other community members who will need to use Skyline to safely evacuate. Additionally, removing fuels will reduce fire spread potential to homes and infrastructure. This supports the City’s priority of building **housing, economic, and cultural security** by reducing the potential loss of residential housing and the assets and cultural sites included in the project area listed above.

Accepting the contract and grant award funds from CAL FIRE will allow the City to take the necessary steps to reduce the fuel loads in the project area, which supports the Citywide priority to be a **responsive, trustworthy government**. Without these funds, OPW will not be able to complete this fuel load reduction project.

FISCAL IMPACT

The total one-time cost to implement this project will cost \$839,000, of which \$600,000 is funded directly through a contract with CAL FIRE, \$224,000 is funded through a grant from CAL FIRE, and \$15,000 is match funding by the City located in the FY 2021-22 budget in Fund 7999 – Miscellaneous Trusts, Organization 30654 – Tree Services, Account 52114 – Trees, Project 1000642 – Paradies Park Trust, Program NB09.

A breakdown of the project costs is included in **Table 1**.

Table 1: Project Cost Summary

Cost Category	Description	Amount
Tree Removals	250 dead/dying trees	\$625,000
Tree Pruning	Limbs within close proximity to Skyline Boulevard	\$175,000
Indirect Costs	Expenses of doing business	\$24,000
Tree Planting	150 oak trees	\$15,000
Total Project		\$839,000

A breakdown of the appropriated project funding sources is included in **Table 2**.

Table 2: Project Funding Sources

FUNDING SOURCE	DESCRIPTION	AMOUNT
CAL FIRE	Contracted	\$600,000
CAL FIRE	Grant Award	\$224,000
Miscellaneous Trusts (7999); Tree Services (30654); Bedding plants and bulbs (52114); Paradies Park Trust (1000642); Program (NB09)	Match funding	\$15,000

There is no impact on the General Purpose Fund, and no additional funding is requested.

PUBLIC OUTREACH / INTEREST

The following organizations were involved in the creation of the project scope and/or provided letters of support for the project:

- Oakland Fire Safe Council
- Diablo Fire Safe Council
- Piedmont Pines Homeowners Association

Additionally, this project supports the goals and objectives of the Oakland Vegetation Management Plan as well as Alameda County's 2012 Community Wildfire Protection Plan (CWPP), which specifically identifies addressing trees within striking distance of PG&E powerlines along the Skyline Boulevard corridor in Oakland as a priority treatment area.

COORDINATION

The Skyline Boulevard Evacuation Corridor project, from inception to award, is a direct result of the City's interagency Wildfire Prevention Working Group and supports the goals and objectives of the Oakland Vegetation Management Plan. This working group consists of OFD, OPW, OakDOT, P&B, OPD, and the City Administrator's Office. The scope of work was developed through the Wildfire Prevention Working Group along with coordination among the Oakland Fire Safe Council and Diablo Fire Safe Council. Additionally, OPW will continue to collaborate with the two local Firesafe Councils to garner volunteer support in the planting and watering of 150 oak trees to create shaded fuel breaks.

The Budget Bureau and City Attorney's Office were consulted in the preparation of this report.

SUSTAINABLE OPPORTUNITIES

Economic: Accepting these funds would add \$824,000 to OPW's budget to complete necessary work to reduce fire and evacuation-related risks in the project area. Skyline Boulevard is the primary evacuation route for 18,889 homes and 57,708 Oakland residents. This project will reduce potential life and property losses should there be a catastrophic fire event in or near the project area by minimizing fuel loads that can both spread fire and block roads for local evacuation purposes and emergency vehicle access.

Environmental: Protecting the Skyline Boulevard Evacuation Corridor will allow Fire and emergency crew access to wildland-urban interface areas and reduce the potential of any fires from becoming catastrophic wildfire events in the Oakland Hills, thereby reducing greenhouse gas emissions released from burning forests and structures. Preventing structures from burning will also reduce greenhouse gas emissions released when rebuilding these structures, including the harvesting and fabrication of the construction materials and their transport.

The woody biomass from the trees removed for this project will be disposed of in ways that will reduce greenhouse gas emissions, such as disposal at a green waste facility, using the logs as permanent barriers in parks or along roadsides throughout the City, and chipping branches for on-site use as mulch to help inhibit the growth of seasonal grasses that will become potential fire fuels.

As part of this project, the City will use its own funds to plant 150 oak trees in strategic areas within the Skyline Boulevard Evacuation Corridor to provide shaded fuel breaks and wildlife refuges. As these oaks mature, they will store and sequester greenhouse gasses and provide various other environmental benefits.

Race & Equity: While no work will directly take place in flatland communities or census tracts designated as disadvantaged or low-income by CalEnviroScreen 3.0, this project has the potential to indirectly prevent additional burden on under-represented BIPOC community members should there be a fire in or near the project area. Significant resources from the City and other emergency personnel would be needed in the project area if a catastrophic wildfire were to occur, thereby reducing the availability of these resources to other parts of Oakland.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

CEQA Guidelines Section 15269(b) exempts further CEQA review for “emergency repairs to publicly or privately-owned service facilities necessary to maintain service essential to the public health, safety, and welfare. Emergency repairs include those that require a reasonable amount of planning to address an anticipated emergency.”


The removal of dead or damaged trees in the Very High Fire Severity Zone, where there is a substantial and immediate risk of fire due to the dry, dead, and damaged fuel sources such as dead or damaged trees, poses an immediate risk to public health, safety and welfare and therefore must be addressed immediately under CEQA Guidelines Section 15269.

ACTION REQUESTED OF THE CITY COUNCIL

Staff Recommends That The City Council Adopt A Resolution Authorizing The City Administrator To Accept And Appropriate 1) Six Hundred Thousand Dollars (\$600,000) From The California Department Of Forestry And Fire Protection (CAL FIRE) Fuel Reduction Program, And 2) Two Hundred And Twenty-Four Thousand Dollars (\$224,000) From The CAL FIRE Fire Prevention Grants Program, For A Total Of Eight Hundred And Twenty-Four Thousand Dollars (\$824,000) For The Completion Of The Skyline Boulevard Evacuation Corridor Project Involving The Removal Of Dead And Hazardous Trees Along Skyline Boulevard, And The Planting Of One Hundred And Fifty (150) Oak Trees As Shaded Fuel Breaks.

For questions regarding this report, please contact Brian Carthan, Park Services Manager, at (510) 615-5510.

Respectfully submitted,



G. HAROLD DUFFEY
Director, Oakland Public Works

Reviewed by:
Brian Carthan, Park Services Manager
Parks & Tree Services Division

Prepared by:
David Moore, Tree Supervisor II
Parks & Tree Services Division

Gordon Matassa, Administrative Analyst II
Parks & Tree Services Division

Attachments (2):

A: CAL FIRE Contract 8CA05462
B: CAL FIRE Grant Agreement 5GG20119

