CITY OF SANTA BARBARA

COMMUNITY DEVELOPMENT DEPARTMENT, PLANNING DIVISION

INITIAL STUDY/ ENVIRONMENTAL CHECKLIST

PROJECT TITLE: City of Santa Barbara Community Wildfire Protection Plan

JULY 2020

This Initial Study has been completed for the project described below because the project is subject to review under the California Environmental Quality Act (CEQA). CEQA serves as the main framework of environmental law and policy in California. CEQA emphasizes the need for public disclosure and identifying and preventing environmental damage associated with proposed projects. Unless the project or program is deemed categorically or statutorily exempt, CEQA is applicable to any project or program that must be approved by a public agency in order to be processed and established. The proposed project considered herein does not fall under any of the statutory or categorical exemptions listed in the 2018 CEQA Statute and Guidelines (California Public Resources Code, Section 21000 et seq.; 14 CCR 15000 et seq.) and therefore must meet CEQA requirements.

Considering the proposed project has the possibility of creating a significant impact, the preparation of an environmental impact report (EIR) is required by CEQA. The EIR will be analyzed at a program level because the proposed project fits under the scope of a program EIR (PEIR). As stated in Section 15168(a) of the CEQA Statute and Guidelines: A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:

- 1. Geographically,
- 2. A[s] logical parts in the chain of contemplated actions,
- 3. In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
- 4. As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

The intent of this document is to provide an overview and analysis of the environmental impacts associated with the project proposed (the implementation of the Community Wildfire Protection Plan) for the City of Santa Barbara. This document is accessible to the public, in accordance with CEQA, in order to receive feedback and input to be discussed in the PEIR.

LEAD AGENCY AND PROJECT PROPONENT

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PROJECT ADDRESS/LOCATION

The Community Wildfire Protection Plan (CWPP) would encompass the jurisdictional limits of the City of Santa Barbara, with the exception of the Santa Barbara Airport. The airport property was excluded from the CWPP as it does not exhibit high wildfire hazard conditions, as identified in the 2017 Santa Barbara Airport Master Plan. The City is located between the coastal Santa Ynez Mountains and the Pacific Ocean, approximately 100 miles northwest of Los Angeles (Figure 1). The City borders the Los Padres National Forest and unincorporated areas of Montecito, Mission Canyon, Hope Ranch, and Eastern Goleta Valley.

PROJECT DESCRIPTION

The City of Santa Barbara Fire Department (SBFD) is proposing to implement a comprehensive, coordinated Community Wildfire Protection Plan (CWPP) to protect lives, property, and natural resources threatened by wildland fire. The proposed CWPP updates the City's 2004 Wildland Fire Plan consistent with the federal Healthy Forests Restoration Act passed in 2003 and subsequent guidance booklet "Preparing a Community Wildfire Protection Plan; A Handbook for Wildland-Urban Interface Communities," issued in 2004, accounting for changes in the City of Santa Barbara's (City's) fire environment and work completed under that 2004 Wildland Fire Plan. While not a governing document requiring action, a CWPP is a strategic plan that outlines a series of policies and action items that 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 SBFD, and other responsible City departments, to achieve the stated goal of protecting lives, property, and natural resources threatened by wildland fire. 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 the proposed CWPP.

The proposed CWPP includes various goals, policies, and actions that represent a compilation of existing and newly proposed policies and actions related to codes and standards, funding, fire rehabilitation, evacuation, fire protection, vegetation/fuels management, and public education. Current activities conducted by the SBFD under the 2004 Wildland Fire Plan were analyzed in the Final Program Environmental Impact Report for the 2004 Wildland Fire Plan (City of Santa Barbara 2004) and are incorporated herein by reference. This description only addresses new proposed policies and/or actions that could result in impacts to the environment, which include the following categories:

- Proposed modifications to the High Fire Hazard Area
- Proposed modifications to the Vegetation Management Areas
 - Defensible space
 - Roadside clearing
 - City Vegetation Management Units (VMUs)
 - Community Fuels Treatment Network (CFTN)
- Proposed modifications to the Vegetation Management Methods
- Communication Facility Maintenance

The proposed CWPP also includes several other policies and actions that would not involve any physical impacts to the environment, including public education, interagency coordination, acquisition of funding, data gathering and management, acquisition of firefighting and communications equipment, and evacuation planning.

Purpose, Need, and Objectives

The purpose of the proposed Project is to update the 2004 Wildland Fire Plan to account for changes in the City's fire environment and work completed under the 2004 Wildland Fire Plan. The intended result is a comprehensive, coordinated plan to mitigate the impact of wildland fire to the City. The need for the proposed CWPP stems from the inherent risk of wildfire hazards, the history of which is presented in Table 1 and shown on Figure 2. The proposed CWPP's objectives include:

- Develop a comprehensive plan that incorporates procedures and programs to mitigate wildfire risks to the City.
- Engage stakeholders including the people, businesses, and organizations that live and work in the City, especially in the City's High Fire Hazard Areas, as well as the adjacent jurisdictions.
- Inform and educate stakeholders about wildfire risk and shared community and individual responsibilities for fire safety.
- Add, remove, or leave unchanged High Fire Hazard Areas based on technical data and fire modeling.
- Provide guidance for future vegetation maintenance activities, and future roadway access strategies, and development strategies, defensible space and home hardening within the High Fire Hazard Areas.
- Maintain consistency between the CWPP and existing City plans and policies, including but not limited to the City of Santa Barbara General Plan, Climate Action Plan, and Coastal Land Use Plan.

- Balance fire mitigation strategies with the City's goals of maintaining a vibrant economy and protecting natural resources, historic resources, and community character.
- Provide a basis to seek grant funding or other funding mechanisms to support the policies and actions of the proposed CWPP.
- Reduce potential greenhouse gas emissions resulting from a wildfire by reducing vegetative fuel and structural ignition potential.
- Provide a policy framework to enable property owners in areas with wildland fire risk to work with private insurance companies on issues of coverage and cost of insuring private property.

Regional Fire History

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. Several large-scale fires have been recorded by fire agencies in the area, primarily associated with the Santa Ynez Mountain foothills. The topography, vegetation, and climatic conditions in the Santa Barbara area combine to create a unique situation capable of supporting large-scale, high-intensity, and sometimes damaging wildfires, such as the 2017 Thomas Fire. The history of regional wildfires in the Santa Barbara area is summarized in Table 1 and graphically presented in Figure 2.

Fire	Date	Cause	Acres Burned	Structures Damaged or Destroyed	Deaths
Cave	November 2019	Under investigation by U.S. Forest Service Los Padres National Forest	3,126	0	0
Holiday	July 2018	Power lines	113	24 structures destroyed	0
Thomas	December 2017	Power lines	281,893	1,063 structures destroyed, 280 structures damaged	2
Alamo	July 2017	Under Investigation by San Luis Obispo County/CAL FIRE	28,687	1 residence destroyed, 1 structure damaged	0
Whittier July 2017 Vehicle		Vehicle	18,430	16 residences destroyed,1 residence damaged,30 outbuildings destroyed,6 outbuildings damaged	0
Rey	August 2016	Under investigation by U.S. Forest Service	32,606	0	0
Sherpa	June 2016	Misc. – disposal of burning log from fireplace	7,474	1	0
Gibraltar	October 2015	Arson	21	0	0
White	May 2013	Escaped embers from approved fire-use day site	1,984	0	0
La Brea			91,622	1	0
Jesusita	May 2009	Equipment Use	8,733	80	0
Tea	November 2008	Campfire	1,940	238	0
Gap	July 2008	Arson	9,443	4	0
Zaca	July 2007	Equipment Use	240,207	1	0
Perkins	July 2006	Lightning	14,988	0	0
Gaviota	July 2004	Lightning	7,440	1	0
Marre	September 1993	Smoking	43,882	0	0
Paint	June 1990	Arson	4,270	673	1
Wheeler	July 1985	Miscellaneous	119,361	26	0

Fire	Date	Cause	Acres Burned	Structures Damaged or Destroyed	Deaths
Sycamore	July 1977	Kite into power lines	806	234	0
Romero	October 1971	Arson	14,538	N/A	4
Coyote	September 1964	Undetermined	65,338	94	1
Refugio	September 1955	Structure Fire	79,428	20	0

Sources: SBCFD 2018; VCFD 2020.

As presented in Table 1, 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 Sundowner winds are prominent. While not all the fires shown in Table 1 were associated with Sundowner winds, the largest and most damaging fires have occurred during such winds.

The history of wildfire ignitions in the Santa Barbara area is directly related to human activity. Wildfire occurrence in the Santa Barbara area predominately occurs in the Santa Ynez Mountains. Mechanized and power equipment use (e.g., mowers) on private, residential parcels is a potential ignition source and was responsible for the Jesusita and Zaca Fires. Arson, campfires, and a vehicle fire have also been sources of significant wildland fires in the Santa Barbara area, including the Whittier, Gibraltar, La Brea, Tea, and Gap fires. However, the largest recorded fire within the County, the Thomas Fire, ignited as a result of line slap (lines coming into contact with each other, creating an electrical arc, which deposits hot, burning or molten material onto the ground into a receptive fuel bed).

Interestingly, most vegetation fires ignited within the City occur in the more urban areas rather than in the foothill areas. However, ignitions in the foothill areas have the potential to spread throughout large expanses of wildland fuels and cause more widespread landscape damage than would a vegetation ignition in an urban setting (Dudek 2014).

Regional Fire Management

Fire management in the region spans the City and adjacent jurisdictions. The City boundaries adjoin the Los Padres National Forest and County of Santa Barbara (County). Within southern Santa Barbara County, there are several agencies that also have approved CWPPs for their jurisdictions. These CWPPs include the following.

- County of Santa Barbara San Marcos Pass/Eastern Goleta Valley Mountainous Areas: The San Marcos Pass and Eastern Goleta Valley Mountainous Communities CWPP is the result of efforts by members of the CWPP Development Team. This CWPP is written to ensure that recommended actions developed during the CWPP planning process are in balance with sustainable ecological and cultural resource management practices and fiscal resources.
- County of Santa Barbara Mission Canyon: The Mission Canyon CWPP recommends priorities and strategies in the wildland-urban interface and vicinity and identifies surrounding lands, including federal and state lands, at risk from catastrophic wildland fire. This CWPP also recommends best practices fuel-reduction treatments to protect lives and reduce structural ignitability of property while protecting other ecological, social, and economic values.
- Montecito Fire Protection District: Montecito's CWPP includes fuel mitigation strategies and community programs to guide future actions of the Montecito Fire Protection District, property owners, businessowners, homeowners' associations, and other interested parties in their efforts to reduce the wildfire threat to the community of Montecito.
- Carpinteria-Summerland Fire Protection District: The Carpinteria-Summerland Fire District CWPP identifies communities and individuals that collaborate to form an action plan to mitigate wildfire risk in the wildland-urban interface communities. Additionally, the Carpinteria-Summerland Fire District CWPP assesses wildfire risks, increasing the community's ability to prepare for, respond to, and recover from wildland fires, and protects economic, social, and ecological resources by using sound best practices for fuel reduction and structural ignitability improvements.
- City of Goleta: Goleta's CWPP identifies measures such as community action plans, development standards, fuel mitigation, maintenance, and monitoring strategies.

The CWPP proposes to maintain the 2004 Wildland Fire Plan activities in relation to neighboring jurisdictions. Both the Montecito Fire Protection District and the Santa Barbara County Fire Department have fuel mitigation strategies independent of SBFD, to reduce the potential or slow the progress of wildfires. These programs include fuel reduction

through identified VMUs, structural hardening (i.e., defensible spaces), and emergency preparedness. The SBFD coordinates vegetation management efforts with the Montecito Fire Protection District and Santa Barbara County Fire Department in areas adjacent to the City, where feasible. Proposed vegetation management activities performed by the SBFD would generally remain the same as considered in the 2004 Wildland Fire Plan and Program EIR. The City's proposed CWPP takes into account the planning and policies of these adjacent CWPPs.

Proposed Modifications to the High Fire Hazard Area

Current High Fire Hazard Area

The 2004 Wildland Fire Plan established the High Fire Hazard Area based on results of the City's hazard and risk assessment. The hazard assessment classified topography, weather, and fuels (vegetation) as the three variables to influence fire behavior and severity. The risk assessment looked at factors that had the potential to increase the loss of life, property, and natural resources. Six factors were evaluated: roof type, proximity of structures to other structures, road systems, water supply, fire response times, and historic fire starts. Four fire hazard zones were identified within the High Fire Hazard Area: (1) Extreme Foothill Zone, (2) Foothill Zone, (3) Coastal Zone, and (4) Coastal Interior Zone (Figure 3). Each zone is described below.

Extreme Foothill Zone

The Extreme Foothill Zone is located along the northern boundary of the City and includes the areas of the West Mountain Drive, upper Gibraltar Road, Parma Park, Coyote Road, upper San Roque Road, and upper Santa Teresita Drive in the Cielito and Foothill residential neighborhoods. Elevations of this zone range from approximately 450 to 1,250 feet above mean sea level (AMSL). This zone is defined by dense chaparral and oak forests along steep (higher than 30% gradient) south- to southwest-oriented slopes. Canyons in this zone are typically aligned north to south, which can act to funnel and accelerate down-slope Sundowner winds to result in frequent and severe, hot, dry wind conditions. These combined hazards make this zone vulnerable to extreme fire behavior (SBFD 2004; USGS 2015). Building density in this zone is low. Roads are steep and winding, and many properties have long driveways. Resources or developments in this zone include but are not limited to Parma Park, Skofield Park, the Skofield Pump Station, and St. Mary's Seminary. There are also front country publicly accessible trails. This zone is strategically important to SBFD since it is the last line of defense for fire protection resources to suppress a wildfire before it enters more highly populated areas of the City (SBFD 2004).

Foothill Zone

The Foothill Zone is located within the northwest and northeast portions of the lower foothills, which include either entirely or portions of the residential neighborhoods of Cielito, Riviera, Lower Riviera, Eucalyptus Hill, Foothill, Upper East, and the San Roque area surrounding Stevens Park. Elevations range from approximately 100 feet AMSL to the north of Andrée Clark Bird Refuge and U.S. Highway 101 to approximately 1,050 feet AMSL near Mount Calvary Road. This zone typically contains a mixture of flammable chaparral, oak forest, riparian vegetation, eucalyptus groves, and landscaped fuels intermixed with residential areas. The eucalyptus groves within this area are extensive, dense, and have significant accumulations of dead fuel that threaten the surrounding area. Most slopes in this area have a gradient of 20% to 40% and are oriented to the southeast, south, and southwest. As with the Extreme Foothill Zone, canyons in this zone are aligned north to south and can act to funnel and accelerate down-slope Sundowner winds, which contributes to extreme fire behavior conditions (SBFD 2004; USGS 2015).

Building density in this zone is typically low to moderate. A few areas of high structure density are present in the Foothill Road/Laurel Canyon Road area and in the southern portion of the Riviera. Roads in the zone are variable, with some portions in the south including wider, more heavily traveled roadways (e.g., Alameda Padre Serra, Sycamore Canyons Road, and Foothill Road) and other portions including steep, narrow, and winding roadways (e.g., Las Alturas Road, Mission Canyon Road, and Conejo Road). Resources or developments in this zone include, but are not limited to, the Mission, Hale Park, Franceschi Park, Montecito Country Club, Stevens Park, Riviera Business Park, El Encanto Hotel, Santa Barbara Bowl, Cater Water Treatment Plant, Sheffield Open Space, City Public Works buildings, and City Fire Station No. 7. There is also front country trail access within the area.

Coastal Zone

The Coastal Zone is located along the southwest boundary of the City and includes the Campanil Hill and Hidden Valley residential neighborhoods. Elevation within this zone ranges from 150 to 600 feet AMSL. The majority of fuels are coastal sage scrub, grassland, and ornamental plants though other vegetation types such as coast live oak and eucalyptus, intermixed with residential areas. Slopes in this zone range from 10% to 35%. The ocean influence dominates this area for much of the year, resulting in lower temperatures and increased fuel moistures, which reduce fire hazard. However, there are several

canyons directly aligned to result in periodic hot, dry wind conditions that occur during our late summer and fall months. This zone has many pockets of moderate fuel made up of chaparral and landscape vegetation. Isolated areas of heavy fuel consisting of eucalyptus and oak vegetation increase the hazard in specific areas within this zone (SBFD 2004; USGS 2015).

Building density in this zone is typically low. Moderate and higher building density occurs in the southern portion of the zone, in the Alan Road/Vista del Mar area where buildings in the residential subdivisions are in closer proximity. Roads in the zone are variable in width, and the zone includes numerous long, dead-end driveways. Resources or developments in this zone include but are not limited to the Arroyo Burro Open Space, Douglas Family Preserve, Arroyo Burro Creek, and Las Positas Road.

Coastal Interior Zone

The Coastal Interior Zone includes portions of the Alta Mesa, hillside areas of the Westside neighborhood, portions of the East and West Mesa and Bel Air residential neighborhoods, and part of Elings Park. Elevation in this zone ranges from approximately 250 to 450 feet AMSL. This zone is defined as areas within the City where the majority of fuel is made up of diverse pockets of vegetation consisting of dense chaparral, oak forests, coastal sage scrub, landscaped vegetation, agricultural lands, and eucalyptus groves. Slopes in this zone range from 10% to 35%. The canyons in this area are dissected and are not in direct alignment to receive hot, dry winds, although these winds are funneled through many of these areas. For the majority of the year, this area is greatly affected by the ocean influence resulting in lower temperatures and increased fuel moistures, which reduce fire hazard; however, when late summer and fall Sundowner winds surface, the risk to this area is significantly increased (SBFD 2004; USGS 2015).

Building density in this zone is typically moderate. A few areas of low structure density are present in the Elings and Honda Valley Park areas. Roads in the zone are variable, with some portions in the south including wider, more heavily traveled roadways (e.g., West Carrillo Street) and other portions including more steep and winding roadways (e.g., Miramonte Drive). Resources or developments in this zone include, but are not limited to, Vic Trace Reservoir, Hilda McIntyre Ray Park, Elings Park, and Honda Valley Park.

Proposed High Fire Hazard Area

As a component of the CWPP, the City proposes to consolidate and re-name the City's High Fire Hazard Area following the California Department of Forestry and Fire Protection's (CAL FIRE's) Very High Fire Hazard Severity Zone (VHFHSZ) update. California law requires CAL FIRE to identify areas based on the severity of fire hazard that is expected to prevail there. These areas, or "zones," are based on factors such as fuel (material that can burn), slope and fire weather. There are three zones based on increasing fire hazard: moderate, high, and very high. The proposed re-naming is in alignment with the National Incident Management System and California Standard Emergency Management System to establish common standards for communication and information management, especially related to common terminology. Common terminology helps by reducing confusion and enhancing interoperability, including organizational functions, resource descriptions, and incident facilities (FEMA 2020). The proposed re-naming would be as follows:

- Merge the Foothill and Extreme Foothill Zones and rename as the City's Very High Fire Hazard Severity Zone (VHFHSZ)
- Merge the Coastal and Coastal Interior Zones and rename as the City's High Fire Hazard Severity Zone (HFHSZ) •

As shown in Table 2a, in addition to the re-naming, certain changes to the boundaries of these high fire hazard zones are proposed. Parcels are proposed to be added to the City's high fire hazard zones due to City incorporation boundaries and reassessment of fire behavior modeling and vegetation data. Additions were based on the City's parcel data (e.g., entire parcels were added, rather than portions of parcels), and the potential additions were extended to logical boundaries (streets, blocks).

Existing				Proposed		
Classification	Acreage	Proposed	Proposed	Classification	Acreage	
	Existing	Addition	Removal			
Coastal	702.18	270.74	1.65	High Fire Hazard Severity Zone	1,657.74	
Interior						
Coastal	523.51	264.44	101.48			
Foothill	2,827.18	118.56	0.0	Very High Fire Hazard Severity Zone	3,666.22	
Extreme	723.91	1.68	5.11			
Foothill						

Areas proposed to be removed from the existing High Fire Hazard Area are outside of City boundaries but were included in the 2004 Wildland Fire Plan (Figure 4). Table 2b provides a more detailed summary of the areas proposed to be modified as part of the CWPP.

Area ID	Status	Area	Change	Comments	Acres
А	Existing	Extreme Foothill	Existing	Existing	723.91
В	Proposed	Extreme Foothill	Add	Parcel added, incorporated into City after 2004 Plan adopted.	1.68
С	Proposed	Extreme Foothill	Remove	Parcel removed, outside of City.	5.11
D	Existing	Foothill	Existing	Existing	2,827.18
E	Proposed	Foothill	Add	Parcels added, as they back to High Fire Hazard Area with modeled extreme fire behavior, brings boundary down to street (Scenic Drive).	6.25
F	Proposed	Foothill	Add	Parcels added; fire behavior modeling indicates extreme fire behavior associated with lower Mission Canyon vegetation.	25.26
G	Proposed	Foothill	Add	Parcel added; area omitted from previous High Fire Hazard Area mapping effort as it was previously outside the City.	5.31
Н	Proposed	Foothill	Add	Parcels added; fire behavior modeling indicates extreme fire behavior associated with San Roque Creek vegetation.	26.84
Ι	Proposed	Foothill	Add	Parcels added; fire behavior modeling indicates extreme fire behavior associated with Cieneguitas Creek vegetation.	
J	Existing	Coastal Interior	Existing	Existing	
K	Proposed	Coastal Interior	Add	Parcels added due to modeled extreme fire behavior in adjacent High Fire Hazard Area.	
L	Proposed	Coastal Interior	Add	Parcels added due to modeled extreme fire behavior in adjacent park land, capacity for defensible space on these lots is significantly reduced due to limited structure setbacks.	
М	Proposed	Coastal Interior	Add	Parcels added due to modeled extreme fire behavior; brings zone boundary to streets.	223.37
Ν	Proposed	Coastal Interior	Add	Parcels added due to modeled extreme fire behavior in adjacent High Fire Hazard Area.	1.41
0	Proposed	Coastal Interior	Add	Parcels added due to modeled extreme fire behavior present in adjacent High Fire Hazard Area; brings zone boundary to streets.	8.89
Р	Proposed	Coastal Interior	Remove	Road parcel removed from existing High Fire Hazard Area.	
Q	Existing	Coastal	Existing	Existing	523.51
R	Proposed	Coastal	Add	Parcels added due to modeled extreme fire behavior present.	62.27
S	Proposed	Coastal	Remove	Parcels removed as they are in County jurisdiction.	101.48
Т	Proposed	Coastal	Add	Parcels added due to modeled extreme fire behavior present. This area is entirely within the state's Coastal Zone Boundary.	202.17

As noted, Area T exists entirely within the state's Coastal Zone Boundary. Vegetation management and defensible space activities conducted in this Area are to be consistent with the City's Local Coastal Program (LCP) and may be subject to additional approvals.

Proposed Vegetation Management Areas

As a component of the CWPP, vegetation management on both private and public land would occur. Vegetation management is often dependent on the location and proximity to structures and vegetation types (fuels) present in the City and their contribution to fire hazard. Hazardous fuels include live and dead ground, surface, or overstory vegetation that exist in a condition that readily ignites; transmits fire to adjacent structures; and/or is capable of supporting extreme fire behavior. Funding for vegetation management is obtained through several sources, including private landowners, grants, City general fund budget, and the City Wildland Fire Suppression Assessment District¹ (Figure 5).

Table 3 summarizes the different potential vegetation types identified and mapped in the City, and Figure 6 presents the distribution of potential vegetation types in the City. The map is used as a screening tool for planners and the public to evaluate the types of site-specific biological resource studies that may be necessary for development projects. The presence or lack of vegetation types depicted on the map would need to be confirmed in the field on a case-by-case basis.

Table 3. Vegetation Types in the City					
Vegetation Type	Acres	Percentage			
Coastal bluff	14.57	0.12%			
Chaparral	237.52	2.01%			
Coastal strand/beach	122.92	1.04%			
California annual grassland	535.03	4.53%			
Coastal perennial grassland	36.42	0.31%			
Orchard	236.54	2.00%			
Riparian woodland	172.5	1.46%			
Coastal sage scrub	1,181.69	10.01%			
Urban	7,686.04	65.11%			
Golf course	218.9	1.85%			
Barren	21.55	0.18%			
Southern oak woodland	1,140.46	9.66%			
Unmapped	200.21	1.70%			
Total	11,804.35	100.00%			

Source: City of Santa Barbara 2008.

¹ In 2006, the City of Santa Barbara adopted the Wildland Fire Suppression Assessment District (WFSAD). The WFSAD was created pursuant to California Government Code Section 50078 and Article XIIID of the California Constitution. The voters of the WFSAD agreed to a levy to fund certain services designed to reduce the severity and damage from wildland fires in the Foothill and Extreme Foothill Zones of the City's High Fire Hazard Area. These areas were included in the WFSAD based on the potential for high-severity wildfire in this portion of the City as presented in the City's 2004 Wildland Fire Plan. WFSAD funds are used to provide services such as defensible space evaluations, chipping, road clearance, and vegetation management.

Types of Vegetation Communities

Grass/Herbaceous

Grass/herbaceous fuels in the City are represented by the California annual grassland and coastal perennial grassland vegetation types and are found primarily in the southern, coastal area of the City, although smaller areas exist in 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. 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 the City with the highest risk 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 fire transition where they exist beneath tree canopies.

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 is found primarily in the foothills along the City's northern boundary, while coastal sage scrub is distributed evenly between the southern, coastal area of the City and the foothills 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 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.

Tree/Woodland

Tree/woodland fuels in the City are represented by the southern oak woodland and riparian woodland vegetation types. Eucalyptus is included in this type of vegetation due to its prevalence in 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. 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 woodlands are found in the City's drainages and canyons and along north-facing slopes throughout the foothills and southern, coastal area. Riparian woodlands are concentrated in narrow corridors primarily along San Roque Creek, Mission Creek, Sycamore Creek, and Arroyo Burro Creek.

Vegetation Management

Vegetation management is categorized into five categories, including the following (See Exhibit 1):

- Defensible Space: area adjacent to buildings or structures managed by landowners
- Roadside Clearance: maintenance of vegetation adjacent to roadways
- City Vegetation Management Units (VMUs): vegetation in areas outside of defensible space where vegetation management occurs in cooperation between the affected landowners and City

- Community Fuels Treatment Network (CFTN): area along the northern portion of the City limits to provide a break between continuous decadent stands of chaparral fuel and a strategic last line to protect more highly populated areas
- Neighboring Jurisdictions Vegetation Management Areas: vegetation management areas adjacent to the City limits and within the Montecito Fire District and Santa Barbara County Fire Department boundaries (The CWPP does not propose treatment within these areas; included for informational purposes.)

Five categories of Vegetation Management

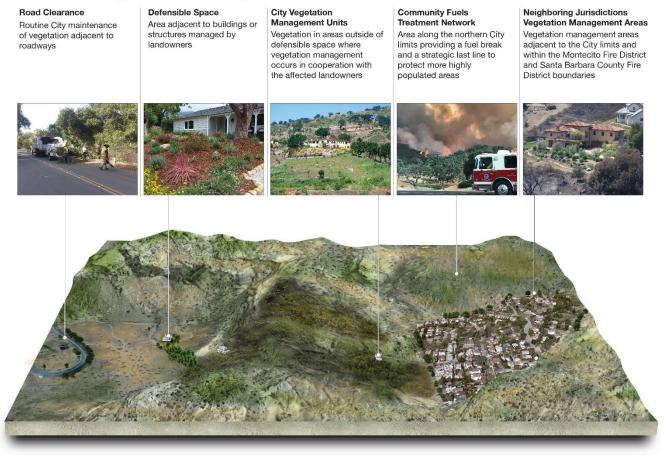


Exhibit 1: Five Categories of Vegetation Management

Defensible Space

Defensible space is an area around a building or structure in which vegetation, debris, and other types of combustible fuels have been treated, cleared, or reduced to slow the spread of fire to and from the building (FEMA 2008). As outlined in Chapter 8.04 of the City of Santa Barbara Municipal Code (adopted by Ordinance No. 5920), all parcels in the City's High Fire Hazard Area are required to meet City-defined defensible space requirements year-round. Vegetation within defensible space zones, native or otherwise, must be maintained to create an effective fuel break by thinning dense vegetation and removing dry brush, flammable vegetation, and combustible growth.

Chapter 8.04 outlines treatment standards and identifies exceptions to identified standards and special considerations for increasing defensible space widths (or distances), minimizing erosion potential, and reducing water quality and habitat impacts. Where required defensible space occurs on an adjoining property (e.g., property line setback is less than required defensible space distance), it is up to the adjoining property owner to provide defensible space for their neighbor. In cases where cooperation is not achievable, SBFD may enforce defensible space management requirements on adjoining properties.

The CWPP does not propose modifications to the defensible space distances from buildings and structures as identified in the 2004 Wildland Fire Plan. The actual vegetation management methods within defensible space areas would also generally remain the same as discussed in the 2004 Wildland Fire Plan and Program EIR. The proposed HFHSZ would require 30 feet to 70 feet from a building or structure and 100 feet to 150 feet for the new VHFHSZ. Within any HFHSZ, additional defensible space may be required on slopes greater than 30% and may require up to 300 feet of defensible space. Defensible space within the state Coastal Zone would need to be consistent with the City's certified Coastal Land Use Plan. A summary of existing and proposed defensible space requirements is provided in Table 4. Based on site-specific circumstances, the Fire Marshal has the authority to determine the appropriate defensible space based on these standards.

Existing		Proposed	Proposed		
Classification	Distance (feet)	Classification	Distance (feet)*		
Coastal Interior	30–50	High Fire Hazard Severity Zone	30-70		
Coastal	50–70				
Foothill	100	Very High Fire Hazard Severity Zone	100-150		
Extreme Foothill	150				
*Within any HFHSZ/VI	IFHSZ, additional defensi	ible space up to 300 feet may be required at the	e discretion of the Fir		
Marshal on slopes great					

Roadside Clearance

The City Municipal Code requires property owners within a high fire hazard area to clear flammable vegetation and combustible growth horizontally and vertically (i.e., overhanging vegetation) on the portions of their property that abut highways and private streets ordinarily used for vehicle traffic as provided in Table 5. As funding is available, the SBFD conducts roadside vegetation management to reduce the amount of vegetation along roadways, enhance evacuation during a wildfire, and allow greater access for fire engines and equipment to respond during a wildfire. Funding is also provided by property owners through the Wildland Fire Suppression Assessment District. Road clearance activities would generally remain the same as considered in the 2004 Wildland Fire Plan and Program EIR.

Table 5. Road Clearance Requirement				
	Existing	Proposed		
Horizontal	10 feet	10 feet		
Vertical	13 feet 6 inches	13 feet 6 inches		

City Vegetation Management Units

The CWPP proposes certain modifications to the 2004 Wildland Fire Plan VMU boundaries (Figure 7). VMUs have unique hazards and include, or are adjacent to, values threatened by wildfire; have the potential for extreme fire behavior; and pose a challenge for fire protection because of dense, flammable vegetation, lack of access due to topography and roads, and firefighter exposure. VMUs encompass land outside defensible space on both City-owned and private property where the City would conduct vegetation management in cooperation with the affected landowners.

Current management is performed in accordance with Mitigation Measure BIO-1 outlined in the 2004 Wildland Fire Plan EIR (City of Santa Barbara 2004). The City consults with a qualified biologist during the preparation of work plans for each VMU. Based on this consultation, site-specific measures to avoid or reduce impacts to biological resources (including Environmentally Sensitive Habitat Areas) known or likely to occur in the VMU are identified. Vegetation management actions are then modified to reduce impacts to special status species. The biological assessments conducted prior to vegetation management work conducted in VMUs also consider the presence of invasive species. Treatment techniques are identified to minimize potential invasive species spread during vegetation management activities. Finally, the City implements a vegetation treatment hierarchy during work plan development at each VMU where vegetation treatment/removal is prioritized in the following order: dead plant material, dving plant material, invasive species, and native species.

The proposed changes to the VMUs are based on geographic information system (GIS) analysis and compared with fire behavior modeling results, fire hazard mapping data sets, fire history data, and the location of other City and non-City Vegetation Management Areas. A priority has also been assigned. Additions were identified where they would close a gap

between existing VMUs, provide additional protection to the community, or where historic fires have burned into the City. Additions were based on the City's parcel data, with the exception of an area identified in Parma Park that follows a ridgeline rather than a parcel boundary. Potential additions were extended to logical boundaries (streets, existing VMUs). No VMUs are proposed for removal. Table 6 provides the estimated acreage. Proposed vegetation management activities within the VMUs would generally remain the same as considered in the 2004 Wildland Fire Plan and Program EIR.

Table 6. Vegetation Management Units				
	HFHSZ VMU (acres)	VHFHSZ VMU (acres)		
Existing	292.95	707.10		
Proposed	356.32	520.22		
Total (Acres)	649.27	1,227.32		

Proposed modifications and area identification information of the City's VMUs are presented in Table 7 and Figure 8.

Area ID	Status	Priority	Change	Comments	Acres
7	Existing	Low	Existing	Mountain/Las Tunas VMU	45.18
8	Existing	Low	Existing	Fire Station 7 VMU	2.42
26	Proposed	Low	Addition	Mountain Drive Extension	5.38
27	Proposed	Low	Addition	Las Alturas/Stanwood Connection	30.86
1	Existing	Medium	Existing	Conejo Road VMU	93.80
2	Existing	Medium	Existing	Jimeno/Garcia Canyon VMU	64.54
3	Existing	Medium	Existing	Las Canoas Road VMU	52.77
5	Existing	Medium	Existing	Coyote Road VMU	11.58
10	Existing	Medium	Existing	Eucalyptus Hill Drive VMU	63.02
11	Existing	Medium	Existing	Camino Viejo VMU	23.78
12	Existing	Medium	Existing	Alston Place VMU	39.10
15	Existing	Medium	Existing	Cleveland School Area VMU	7.91
16	Existing	Medium	Existing	Loma Alta VMU	42.05
17	Existing	Medium	Existing	Hondo Valley VMU	84.25
19	Existing	Medium	Existing	Flora Vista VMU	40.95
20	Existing	Medium	Existing	Garcia/Ferrelo Canyon VMU	5.51
21	Existing	Medium	Existing	Hillcrest Road VMU	69.53
22	Existing	Medium	Existing	Alturas Del Sol VMU	18.15
24	Proposed	Medium	Addition	Jesusita Drive	2.92
30	Proposed	Medium	Addition	Alston/Cleveland Connection	8.29
31	Proposed	Medium	Addition	Owen Road Extension	7.22
32	Proposed	Medium	Addition	Via Alicia	15.48
33	Proposed	Medium	Addition	Hondo Valley Extension	8.90
34	Proposed	Medium	Addition	Miramonte	1.75
35	Proposed	Medium	Addition	W. Carillo 1	6.66
36	Proposed	Medium	Addition	Skyline Way	7.28
37	Proposed	Medium	Addition	Loma Alta Extension	1.41
38	Proposed	Medium	Addition	Flora Vista Extension	25.92
39	Proposed	Medium	Addition	W. Victoria	1.79
41	Proposed	Medium	Addition	W. Carillo 2	1.38
42	Proposed	Medium	Addition	Nirvana Rd.	14.04
44	Proposed	Medium	Addition	Bel Air	38.75
45	Proposed	Medium	Addition	Calle de los Amigos	9.34
4	Existing	High	Existing	Upper Coyote Road VMU	23.36
6	Existing	High	Existing	Coyote Circle VMU	11.36

Table 7. Vegetation Management Unit and Community Fuels Treatment Network Area IDand Modifications

Area ID	Status	Priority	Change	Comments	Acres
9	Existing	High	Existing	Westmont/Las Barrancas VMU	50.22
13	Existing	High	Existing	Cima Linda Lane VMU	16.96
14	Existing	High	Existing	Owen Road VMU	25.20
18	Existing	High	Existing	Las Positas Road VMU	125.70
23	Existing	High	Existing	San Roque Creek VMU	82.73
25	Proposed	High	Addition	Northridge Road	97.30
28	Proposed	High	Addition	Parma Park	105.83
29	Proposed	High	Addition	Lauro Canyon/Arriba Way	45.49
40	Proposed	High	Addition	Elings Park	91.94
43	Proposed	High	Addition	Campanil	124.71
46	Proposed	High	Addition	Senda Verde	22.44
47	Proposed	High	Existing	Community Fuels Treatment Network	15.31
48	Proposed	High	Existing	Community Fuels Treatment Network	47.62
49	Proposed	High	Existing	Community Fuels Treatment Network	120.55
50	Proposed	High	Existing	Community Fuels Treatment Network	17.97

Proposed modifications to the City's VMUs are presented in Figure 8 and Table 7.

Community Fuels Treatment Network

The CWPP proposes to maintain the 2004 Wildland Fire Plan CFTN located along the northern portion of the existing Extreme Foothill Zone/proposed VHFHSZ. The CFTN encompasses 242 acres and provides a break between continuous stands of chaparral fuel outside the City boundary and the City area. The CFTN also provides a strategic last line of defense for fire protection resources to suppress a wildland fire before it enters more highly populated areas of the City. Figure 7 shows the existing and proposed CTFN, and Table 8 provides the estimated acreage. The CFTN is an area where multiple property owners interlink their individual defensible space areas and treat continuous strips of hazardous vegetation to form a vegetation management network (SBFD 2004).

Fuels management treatments in this area are focused outside of 150-foot defensible space areas for structures. The activities include the removal of flammable vegetation (brush and understory) by preferentially removing exotic plants; thinning, pruning, and limbing of vegetation to remove fire ladders; limbing up of oak overstory; pruning out of dead material; and thinning out continuous areas of brush using a mosaic pattern. Eucalyptus trees are thinned to obtain 6 to 12 trees per 1,000 square feet. Proposed vegetation management activities within the CFTN would generally remain the same as considered in the 2004 Wildland Fire Plan and Program EIR.

Table 8. Community Fuels Treatment Network		
	VHFSZ	
Existing	242	
Proposed		
Total (Acres)	242	

Proposed Vegetation Management Methods

The 2004 Wildland Fire Plan outlined a suite of vegetation management methods to reduce wildland fuel hazards. The CWPP proposes to maintain the same general vegetation management methods as described in the 2004 Wildland Fire Plan and Program EIR. Before commencing any work, SBFD develops a work plan that identifies the specific areas to be treated, permits required, the best methods to be used based on site-specific circumstances, and any subsequent monitoring. Treatment area identification and vegetation management methods are also informed by a site-specific biological evaluation conducted prior to operations. VMUs are prioritized based on the level of hazard; however, implementation of fuels reduction work in VMUs has largely been dependent on funding, recent wildfire activity (e.g., recently burned VMUs would

not be prioritized for treatment as fuel loads would be low), and, in the case of private property, landowner permission, as well as dependent on slopes, exposures, vegetation types, and access (City of Santa Barbara 2004). Different vegetation management techniques can be utilized, depending on vegetation type, location, condition, and configuration. Given the dynamic nature of vegetation, a single treatment technique or management prescription may not be appropriate for one site over time. Vegetation management techniques will be identified by SBFD personnel during project development and will be dictated by site-specific conditions and effort needed to meet identified vegetation management standards.

In general, vegetation management techniques can be classified into four categories:

- Manual (e.g., hand pulling, cutting, planting)
- Mechanical (e.g., mowing, masticating, felling, yarding)
- Biological (e.g., grazing)
- Prescribed fire (e.g., burn piles, broadcast burning, air curtain destructors)

Herbicide can also be used to manage vegetation for wildfire hazard mitigation purposes and is typically applied to control re-sprouting of cut vegetation or to control undesirable plant species. Historically, the City has not used herbicide during implementation of vegetation management projects in VMUs or in the CFTN. The City's Integrated Pest Management Strategy also seeks reduce or eliminate the use of chemicals in treating vegetation. Herbicide use is therefore not proposed as a vegetation treatment technique in the CWPP and will not be analyzed in the PEIR.

The following discussion presents each of the vegetation management techniques that may be implemented, including information regarding equipment, application, timing, limiting factors, special considerations, and best management practices (BMPs). Selection of a qualified and trained contractor, appropriate training, scheduling, and supervision to carry out vegetation management treatments and any associated BMPs are also key components of an effective vegetation management program. Preparation of the appropriate plans, obtaining necessary permits, and adherence to these standards is required.

Manual Vegetation Management Methods

Manual or hand labor involves pruning, cutting, or removal of trees or other vegetation by hand or using hand-held equipment. Other hand labor treatments involve removing dead wood, piling material, and spreading chips/mulch. Hand labor is most effective in small treatment areas or areas with difficult access where the use of heavy equipment is infeasible. Hand labor also allows for selective management or removal of targeted vegetation and is typically used in conjunction with other techniques. Manual treatment may also include multi-cutting. Multi-cutting involves cutting vegetation (using hand tools, chainsaws, weed whips, and mowers), and cut vegetation is then reduced in size by cutting into lengths no longer than 6 inches long. The multi-cut vegetation is then left on the ground within the project area no greater than 12 inches in depth. Minimal ground disturbance results using this method since the root structure of vegetation is left intact and biomass generated from vegetation treatment is left on site.

Proper training and supervision of hand labor workers is necessary to reduce the dangers to workers using sharp tools on steep and/or unstable terrain, or where other environmental hazards exist. Hand tools include, but are not limited to, shovels, Pulaski hoes, McLeod fire tools, line trimmers, weed wrenches, chain saws, pruning shears, and loppers. Personal protection equipment typically includes long pants and long-sleeved shirts, gloves, safety goggles, hard hats, chaps, and sturdy boots.

Mechanical Vegetation Management Methods

Mechanical practices include all methods that employ motorized heavy equipment to remove or alter vegetation. Mechanical practices rearrange vegetation structures, compact or chip material, and move material to landings, staging areas, or burn piles. Mechanical equipment is usually equipped with either rubber tires or tracks, although skids and cables are also used. In some instances, two or more pieces of heavy equipment will work in concert to achieve a management standard. Mechanical equipment includes, but is not limited to, masticators, tractors, and chippers. Chippers are moved around as work occurs and placement is dependent on the ability to minimize the distance vegetation must be hauled to the chipper.

Constraints to mechanical equipment use include steep slopes, dense tree cover that prohibits travel, saturated soils, and dry, high-fire-hazard weather conditions where equipment use could result in ignition. Use of mechanical equipment may also result in damage to retained vegetation. Use of mechanical equipment should consider the terrain, access, vegetation type, and treatment recommendation to effectively treat vegetation and minimize impact potential. Supervision and specialized training are also necessary. The use of mechanical equipment is often done in conjunction with other treatment techniques, particularly hand labor (prior to mechanical treatment) and prescribed fire (following mechanical treatment.)

Biological Vegetation Management Methods

Biological management includes using grazing as a method to treat grasses, shrubs, and small trees. Grazing is an effective management tool for maintaining areas previously treated with hand labor or mechanical practices. Livestock each have different grazing habits, and not all livestock are ideally suited for grazing treatments in all areas. Goats are an effective option as they will consume live or dead, tough, woody plant material.

Grazing is typically conducted in the late spring, when growth of annual grasses has slowed, and continues through the summer to reduce fine fuels prior to the onset of peak fire season. Development of site-specific grazing management plans should be completed for proposed grazing treatments. Management plans should identify goals and implementation techniques to ensure that grazing treatments meet vegetation management standards and to minimize impacts to natural resources. Grazing management plans should also identify the optimal stocking rate and grazing duration, typically measured in pounds per acre of residual dry matter. Control of livestock movements and preventing overgrazing is also important for successful implementation.

Prescribed Fire Method

Prescribed fire can be used to burn piles of cut vegetation (pile burns) or over a designated prepared area (broadcast burn). Broadcast and pile burning are often implemented in conjunction with hand labor and mechanical treatment methods as a means of treating residual materials. Prescribed burning also serves to rapidly break down vegetative material and convert it to soil nutrients, reduce brood material for pests and pathogens, control invasive species, and reduce surface fuel buildup and the threat of severe wildfires. SBFD burning activities must adhere to the standards outlined by the Santa Barbara County Air Pollution Control District (SBCAPCD).

Small pile burning is typically conducted at or near the treatment area. Piles should be constructed by hand and should be free of dirt, debris, and stumps. Material should be piled soon after cutting with the butt end of branches and limbs toward the outside of the pile so that branches are overlapping and forming a series of dense layers. Piles typically range in size from 10 feet x 10 feet to 12 feet x 12 feet x 25 feet. The top of the pile should be placed atop the paper to keep it in place. The dry interior portion of the pile should be ignited at the appropriate time using a weed burner or other igniting tool. Alternatively, tractors or hand crews can create piles of material on flat or gently sloping ground that can be burned during wet conditions (pile burn), although the volume of fuel in the piles can produce localized heat, which may impact adjacent retained vegetation.

Broadcast burns are usually done where a maximum amount of fuel treatment can take place and can be used to control invasive species and treat cut material (slash) on the ground surface, or reduce surface and/or ladder fuels beneath tree canopies in shaded fuel breaks. Treatment boundaries are often roads, trails, or other nonburnable features, reducing the number of firebreaks that need to be created. Treatment area is typically less than 1 acre in size. This approach reduces labor costs and preparation time, and minimizes soil disturbance and the potential for soil erosion. Broadcast burns can be used in all forest types, where conditions allow for effective control.

Broadcast burning may occur throughout the year; however, it is usually conducted during the late spring months when the ground is still wet or during fall or winter after plants have completed their yearly growth cycle and their moisture content has declined. Fall burns are more closely aligned with the natural fire cycle found in California. Piles of vegetation may be burned any time after the vegetation has dried. Hand-held tools, such as drip torches, propane torches, and flares, may be used for igniting prescribed fires.

Broadcast burns must be conducted by trained fire protection personnel. Timing is critical to the use of this treatment technique due to variances in weather conditions and the necessity to time treatments to minimize impacts to plant and animal species. Fuel moisture content must be determined to assess if the treatment area is safe to burn. There are typically more appropriate burn days in the spring and early summer months when there is a greater chance of atmospheric conditions conducive to smoke dilution and dispersion.

All prescribed burning would be conducted under safe burning conditions outside of the SBFD's designated fire season and will require a California Air Resources Board-designated burn day and the development of a burn plan that will be approved by the fire chief and SBCAPCD. A pile burn plan will outline weather, topography, and fuel within the project area; the prescribed burn objectives; the required fire organization and resources needed to control the fire; and the weather parameters under which the burn can be conducted safely and with minimal smoke disturbance.

Prescribed burning of cut vegetation would result in minimal ground disturbance. Hand tools (Pulaskis, McLeod's, shovels) would be used to clear a shallow trench or line no more than 2 inches in depth around each pile, group of piles, or broadcast burn area to confine the fire and catch any burned materials that may roll downhill during burning.

Schedule, Staff, and Equipment Estimates

The SBFD has consistently implemented the vegetation management strategies in the 2004 Wildland Fire Plan. Vegetation management work will occur during the period August 1 through April 1. Prescribed burning would only occur outside the designated fire season, which varies from year to year, but is typically June through October. Hence, prescribed burns would typically occur in the period November through May. Table 9 provides a summary of available data related to typical maintenance equipment, estimated noise levels and staff level required to complete the work.

Table 9. Staff and Equip	nent Estimates (Annually)		
Equipment	Noise Level (dB) At 50 feet	Staff Hours	Equipment Hours
Manual (Hand Tools) Veget	tation Management Techniques		
Hand tools		600	40
Shovels			24
Pulaski hoes			24
McLeod fire tools			
Line trimmers	70		
Weed wrenches			
Chainsaws	85		40
Pruning shears			24
Loppers			40
Weed whips	70		40
Mowers	87		40
Pickup truck			225
Small dump truck			50
Mechanical Vegetation Man	nagement Techniques		
Masticators	87	400	_
Tractors	84		
Chippers	75		300
Skip loader			50
Biological Vegetation Mana	gement Techniques		
Grazing livestock	34	100	NA
Prescribed Burn Vegetation	Management Techniques		
Fire engine		100	12
Tractors	84		24

Vegetation Management Best Management Practices

The CWPP proposes to include the BMPs identified in Table 10 to eliminate or reduce potential environmental effects from vegetation maintenance. The BMPs may be applicable to each vegetation management method depending on the site-specific circumstances.

Table 10. Best Management Practices			
Resource Area	Focus	CWPP Proposed Best Management Practices	
Biological	Habitat Evaluation	• The SBFD shall perform a site-specific biological evaluation prior to operations.	
Biological	Removal of Invasive Exotic Plants	• During the site-specific biological evaluation, the SBFD will identify invasive exotic plants (such as pampas grass [<i>Cortaderia</i> sp.]) for removal consistent with the City's Integrated Pest Management Plan and the 2004 Wildland Fire Plan. To the extent feasible, the vegetation management will preferentially remove exotic	

Resource Area	Focus	CWPP Proposed Best Management Practices
		plants that pose a fire hazard, and generally remove exotic plants in the work area as the opportunity arises.
Biological	Nesting Bird Protection	 Vegetation management work should be completed outside of the defined nesting season for birds (typically February 1 to August 31, but dependent on a site-specific assessment). If vegetation management work must occur within the project areas during nesting season, a site survey shall be conducted by a qualified wildlife biologist to determine any presence of nesting birds. Vegetation management activities shall not occur within 200 feet of active nests located during the nesting bird survey.
Biological	Oak Tree Protection	 Vegetation management within 50 feet from the outer edge of the tree canopy shall be the minimum necessary to meet the fire department requirements and shall be designed to minimize erosion and impacts on habitat values. No coast live oak trees (<i>Quercus agrifolia</i>) with one trunk larger than 4 inches in diameter at 4 feet, 6 inches in height above grade shall be removed.
		 Oak saplings less than 4 inches in diameter at 4 feet, 6 inches in height above grade shall be protected from damage or cutting during the work. To the extent feasible, other healthy native understory components such as toyon (<i>Heteromeles arbutifolia</i>), lemonade berry (<i>Rhus integrifolia</i>), and currant (<i>Ribes</i> spp.) shall be retained within oak woodlands, as long as they do not create fire ladders.
		 Lower oak branches (up to 6 feet above grade in height) of oaks shall be thinned to eliminate potential fire ladders. Dried non-native grasses, dead branches, and non-native resinous woody species shall be removed in oak tree understory.
		 Wood chips shall not be spread more than 6 inches in depth, and all chip piles shall be kept at least 5 feet from the outer edge of the tree canopy. Removed oak limbs shall be clean-cut, using the best industry standard practices.
Biological	Sensitive Habitat	• Within the Coastal Zone, vegetation treatment within environmentally sensitive habitat areas (ESHAs), wetlands, creeks, and buffers shall avoid, and where full avoidance is not possible, shall minimize impacts to ESHA to the extent feasible consistent with Policy 4.1-21 of the Coastal Land Use Plan.
		 Vegetation treatment within City-designated creek channels outside of the Coastal Zone shall be limited to the removal of dead brush that is easily accessible and the removal of exotic or invasive species within a 25-foot buffer along the top of banks, as long as the work does not cause damage to the bank structure. As a component of the site-specific work plan, for work within a creek channel (both Coastal Zone and non-Coastal Zone areas), a vegetation management plan shall be prepared by a qualified biologist and peer reviewed by the City Creeks Division.
		 No placement of cut vegetation shall occur within a 25-foot buffer along the top of banks. The top of bank shall be defined by the first bank out from the present, active stream channel (denoted by an incised bank and cobble bed). The 25-foot buffer shall be measured out from the top of bank, marked in the field by an approved biologist and the City project manager prior to any vegetation management work occurring in drainage areas. Equipment will not be placed within sensitive habitat areas. Vehicles and equipment shall arrive at the treatment area clean and weed-free. Trees shall be pruned according to International Society of Arboriculture and

Resource Area	Focus	CWPP Proposed Best Management Practices
		 Retained trees and vegetation shall be protected from tool and equipment damage. Tools shall be serviced and fueled only in areas that will not allow grease, oil,
		 fuel, or other hazardous materials to pass into streams or retained vegetation. Refuse, litter, trash, and non-vegetative debris resulting from vegetation treatment operations, and other activity in connection with vegetation treatment operations, shall be removed from the treatment area and properly disposed of. Do not place or deposit chipped material into any streambeds. Streams and watercourses in potential grazing areas shall be identified and assessed prior to turn-out and exclusionary fencing shall be installed where
		 Grazing activities shall be routinely monitored in riparian areas to minimize the potential for stream bank damage, soil compaction, and soil deposition into streams and watercourses.
		• Prior to grazing in riparian areas, thresholds shall be identified that would trigger a cessation of grazing activity.
		 Grazing in unstable slope areas shall be avoided or measures shall be implemented to minimize impacts to slope stability (e.g., reducing herd size to retain vegetation, avoiding grazing where saturated soil conditions exist). The timing and level of grazing practices shall be considered to promote plant recruitment (e.g., timing prior to seed set of annual grasses to promote perennial species establishment).
		 The spread of invasive plants and pathogens shall be minimized through the use of quarantine periods; holding areas; clean stock water; and personnel, equipment, and vehicle sanitation.
		• Retained trees and vegetation shall be protected from tool and equipment damage.
Hazards/Health & Safety	Worker Training Safety	 Equipment operators and project personnel shall have appropriate personal protective equipment and are properly trained in equipment use. As necessary, tools used between project areas shall be sanitized to prevent the
	5	spread of pathogens.
Noise	Construction Hours	• The hours of work will include weekdays between the hours of 7:00 a.m. to 5:00 p.m. No work will be completed on weekends or designated holidays unless fire conditions (e.g., red flag alert) dictate immediate action.
Water Quality	Litter Removal	 All refuse, litter, trash, and non-vegetative debris resulting from vegetation treatment operations, and other activity in connection with vegetation treatment operations, shall be removed from the treatment area and properly disposed of. Tools shall be serviced and fueled only in areas that will not allow grease, oil, fuel, or other hazardous materials to pass into streams or retained vegetation.
Wildfire	Fire Safety	 Appropriate fire safety measures shall be implemented. For safety purposes, necessary signage alerting the public to active operations shall be provided.

Evacuation Planning

Evacuation during a wildfire in Santa Barbara is not necessarily directed by the fire department, except in specific areas where fire personnel may enact evacuations on-scene. The Santa Barbara County Sheriff's Department, Santa Barbara Police Department, and other cooperating law enforcement agencies have the primary responsibility for evacuations. These agencies work closely within the Unified Incident Command System 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 SBFD, Santa Barbara Police Department, and Santa Barbara Public Works Department have worked with a County Pre-Fire Mitigation Task Force to address wildland fire evacuation planning for Santa Barbara. The task force also received input from the Montecito Fire Protection District, Carpinteria/Summerland Fire Protection District, California Highway Patrol, the California Department of Transportation, and various homeowners' associations throughout the Santa Barbara area (Dudek 2014).

Through supportive measures, the County Pre-Fire Mitigation Task Force resulted in an evacuation preplan that outlines the SBFD response routes, probable public evacuation routes, traffic control points, and staging areas. The interagency plan would be used by law enforcement, fire, and public works agencies during a wildfire evacuation. However, based on actual fire conditions occurring in the field, the preplans may be modified at the time of the incident (Dudek 2014).

The evacuation preplans separated the City's High Fire Hazard Area, including the Extreme Foothill, Foothill, Coastal, and Coastal Interior Zones (proposed VHFHSZ and HFHSZ, respectively), into evacuation areas or "evacuation blocks." The development of the evacuation blocks was determined by landforms, primarily major canyons, and road systems. A total of 26 blocks were identified within the City. The evacuation blocks are based on a variety of features, including watersheds, terrain including ridgelines, population areas, significant landscape transitions including roadways, and vegetation. The 2014 Wildland Fire Evacuation Procedures Analysis Plan (Dudek 2014) recommended maintaining existing preplan evacuation block maps, which are presented in Figure 9. The 2014 Plan also outlined management recommendations for enhancing evacuation capabilities. The proposed CWPP does not include construction or physical impacts to the environment including, but not limited to, road widening for the purposes of revising the City's evacuation plans, and as such, Evacuation Planning is noted as part of the CWPP project description for public awareness purposes only. Future evacuation enhancements that could result in physical impacts to the environment may require additional environmental analysis.

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, Ordinance No. 5920) outline the City's water supply requirements. 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 (Figure 10).

A portion of the Extreme Foothill Zone/proposed VHFHSZ is not connected to the City water system. Most of the water system on West Mountain Drive onto Coyote Road is owned and operated by Montecito Water District. A small section of West Mountain Drive in this area is not serviced by the City or Montecito Water District and does not have fire hydrants. This area has additional requirements included in the City's Municipal Ordinance (No. 5920). Specifically, for buildings, or portions of buildings, constructed within the boundaries of Zone 2, a water tank with a minimum capacity of 10,000 thousand gallons is required to be provided for fire protection purposes only and designated, installed, and maintained in a manner approved by the Fire Code Official. These individual projects would be evaluated on a project-specific level at the time of permitting.

Communications

California is comprised of 58 counties considered Operational Areas (OA). The OA consists of all political subdivisions within a county's geographical area. It provides communication and coordination between local jurisdictions and the California Office of Emergency Services (CalOES) Regions. Coordination between the OA and local government is accomplished through the OA Emergency Operations Center. (City of Santa Barbara Emergency Management Plan 2013).

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. The SBFD currently operates an analog radio system, which will require an upgrade to a digital platform to comply with Project 25, a suite of standards developed to provide digital voice and data communication systems suited to public safety and first responders.

The City's current radio system generally functions well, though there are some interoperability issues between this system and other agency systems that operate on digital platforms. Radio coverage in the City is affected by terrain and the current placement of repeaters, which are devices that allow radio communications to be broadcast over greater distances and variable terrain. There are several "dead spots" in the City where radio communications do not work as radio signals are blocked by steep slopes, narrow canyons, or ridgelines. Additionally, the City's radio communications system components are aging and will require routine maintenance of components over time. Replacement of communication facilities may involve replacement of existing support poles with similar size and material new poles, replacement of analog technology systems to support more advanced Internet Protocol (IP)-based networks ground-mounted or pole-mounted and other installation of conduit. Maintenance activities would be consistent with the practices described in the 2004 Wildland Fire Plan and Program EIR. Funding for communication upgrades is not available at this time however could be secured during the forecasted life of the proposed CWPP. These individual projects would be evaluated on a project-specific level at the time of permitting.

Public Review Process

Required Permits and Approvals

The lead agency, the City of Santa Barbara Fire Department, is responsible for CEQA clearance and plan review. A public agency, other than the lead agency, that has discretionary approval over the project is known as a "responsible agency," as defined by the CEQA Guidelines (14 CCR 15000 et seq.). The responsible agencies and their corresponding approvals for this project include CAL FIRE. Other agencies such as California Department of Fish and Wildlife may have regulatory authority over activities conducted under the CWPP.

COMMUNITY WILDFIRE PROTECTION PLANS AND POLICY DISCUSSION

The City of Santa Barbara General Plan-Seismic Safety-Safety Element, originally adopted by City Council in 1979 and updated in 2013, directed periodic review and revision of the Safety Element and was amended within the City's Fire Master Plan. An update of the City Fire Master Plan was completed in 1986. In 1993, the City completed a Wildland (Vegetation) Fuels Management Plan for City-owned lands. The Plan identified vegetation management projects on 1,600 acres of undeveloped City park and open space lands. The Plan was adopted by the City Council in 1993 and was implemented by the Parks and Water Resource Departments. Maintenance continues under this Plan. However, this Plan only addressed City lands.

In 1993, a City wildland interface specialist was hired to update the Fire Master Plan and provide expertise and direction in developing a comprehensive wildland fire program. In 2000/2001, a hazard and risk assessment was completed to accurately portray existing conditions within the City and the surrounding area. The results of the assessment were compiled, and policies and actions were then developed into a City Wildland Fire Plan, adopted in 2004.

The purpose of the 2004 Wildland Fire Plan was to update the City Fire Master Plan and create a comprehensive, coordinated plan to mitigate the impact of wildland fire. The 2004 Wildland Fire Plan ranks the City's existing High Fire Hazard Areas based on hazard and risk, identifies policies and actions to reduce the community's threat from wildland fire, and provides a process to prioritize and fund implementation of wildland fire projects.

The proposed CWPP is an update to the 2004 Wildland Fire Plan based on new hazard and risk assessment, modeling data, and revised High Fire Hazard Areas. It also takes into account land use policies of the General Plan and the Coastal Land Use Plan.

LAND USE COMPATIBILITY

Certain land uses have the potential to result in incompatibility with existing surrounding land uses or activities. Typically, development applications for General Plan Amendments, Rezones, Conditional Use Permits, Performance Standard Permits, and certain modifications have the greatest potential to result in land use compatibility issues. Incompatibility can result from a proposed project's generation of noise, odor, safety hazards, traffic, visual effects, or other environmental impacts. This Initial Study provides an analysis of environmental impacts, including land use compatibility, within the primary impact sections (i.e., noise, air quality, etc.). However, in instances where an impact does not rise to a level of significance, land use compatibility concerns may still exist due to adverse (less than significant) impacts. Other potentially significant, adverse impacts related to future recommended wildland fire mitigation projects may occur and would be evaluated on a site-specific basis. These potential impacts do not raise any significant land use compatibility issues, however.

MITIGATION MONITORING AND REPORTING PROGRAM

A Mitigation Monitoring and Reporting Program (MMRP) will be prepared for the CWPP in compliance with Public Resources Code Section 21081.6 and will be included in the Program Environmental Impact Report (PEIR) for the CWPP. Monitoring and reporting requirements are adopted as conditions of project approval.

ENVIRONMENTAL CHECKLIST

The following checklist contains questions concerning potential changes to the environment that may result if this project is implemented. The potential level of significance should be indicated as follows:

<u>Significant</u>: Known substantial environmental impacts. Further review is needed to determine whether there are feasible mitigation measures and/or alternatives to reduce the impact.

<u>Potentially Significant</u>: Unknown, potentially significant impacts that need further review to determine significance level and whether any impacts identified as potentially significant are mitigable.

<u>Potentially Significant, Mitigated</u>: Potentially significant impacts that are avoided or reduced to less than significant levels with identified mitigation measures agreed-to by the applicant.

Less Than Significant: Impacts that are not substantial or significant.

Beneficial Impact: Impacts would improve environmental conditions.

No Impact: Project would not cause this type of impact.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

\square	Aesthetics		Agriculture and Forestry Resources	\square	Air Quality/Greenhouse Gas Emissions
\square	Biological Resources	\boxtimes	Cultural Resources		Energy
\square	Geology and Soils	\square	Hazards & Hazardous Materials	\square	Hydrology/ Water Quality
\boxtimes	Land Use/Planning		Mineral Resources	\bowtie	Noise
	Population/Housing	\boxtimes	Public Services	\boxtimes	Recreation
\square	Transportation	\boxtimes	Tribal Cultural Resources	\square	Utilities and Service Systems
\boxtimes	Wildfire	\boxtimes	Mandatory Findings of Significance		

Determination

(To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

By City of Santa Barbara

Allison DeBusk

Signature

Date

07/02/2020

Evaluation of Environmental Impacts

- 1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
- 4. "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-Than-Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

- 5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significance.

1. AE	STHETICS Except as provided in Public Resources Code Section 21099* (<i>CEQA provisions for Transit-Oriented In-Fill Projects</i>), would the project:	Level of Significance	Analyzed in Prior Document
a)	Have a substantial adverse effect on a public scenic vista or a private scenic vista visible to a large portion of the community?	Potentially Significant	
b)	Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	Potentially Significant	
c)	Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Potentially Significant	
d)	Result in substantial grading on steep slopes or permanent substantial changes in topography?	Potentially Significant	
e)	Create a new source of substantial light or glare which would adversely affect surrounding areas or important public day or nighttime views in the area?	Less Than Significant	

* CEQA Excerpt: CA Public Resources Code Section 21099 "(d)(1) Aesthetic and parking impacts of a residential, mixed-use, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment. (2)(A) This subdivision does not affect, change, or modify the authority of a lead agency to consider aesthetic impacts pursuant to local design review ordinances or other discretionary powers provided by other laws or policies. (B) For the purposes of this subdivision, aesthetic impacts do not include impacts on historical or cultural resources."

Aesthetics/Visual Resources - Discussion

Issues: Issues associated with visual resources and aesthetics include the potential blockage of important public scenic views, on-site visual aesthetics and compatibility with the surrounding area, and changes in exterior lighting.

Impact Evaluation Guidelines: Aesthetic quality, whether a project is visually pleasing or unpleasing, may be perceived and valued differently from one person to the next, and depends in part on the context of the environment in which a project is proposed. The significance of visual changes is assessed qualitatively based on consideration of the proposed physical change and project design within the context of the surrounding visual setting. First, the existing visual setting is reviewed to determine whether important existing visual aesthetics are involved, based on consideration of a project's potential impacts to scenic views is focused on views from public (as opposed to private) viewpoints and larger community wide views (those things visible by a larger community, as opposed to select individuals). The importance of existing views is assessed qualitatively based on whether important visual resources such as mountains, skyline trees, or the coastline, can be seen, the extent and scenic quality of the views, whether the views are experienced from public viewpoints, and how many people can see the views. The visual changes associated with the project are then assessed qualitatively to determine whether the project would result in *substantial effects* associated with important public scenic views, on-site visual aesthetics, or lighting.

Significant visual resources impacts may potentially result from:

- Substantial obstruction of important public or community wide scenic views.
- Substantial damage to scenic resources within a state scenic highway (Highway 154). Impacts to local scenic roads should also be considered. These include Highway 101; Cabrillo Boulevard between Highway 101 and Castillo Street; Sycamore Canyon Road (144) / Stanwood Drive (192) / Mission Ridge Road (192) / Mountain Drive to the Old Mission on Los Olivos Street, or Shoreline Drive from Castillo Street to the end of Shoreline Park.
- Substantial negative aesthetic effect or incompatibility with surrounding land uses or structures due to project size, massing, scale, density, architecture, signage, or other design features.
- Substantial degradation of important public or community wide scenic views or the visual quality of the site through extensive grading and changes in topography, removal of substantial amounts of vegetation and trees visible from public areas without adequate landscaping; or substantial loss of important public open space.
- Substantial light and/or glare that substantially affects off-site properties, safe travel, or sensitive wildlife, or substantially affects important public views.

Aesthetics – Existing Conditions and Project Impacts

1.a-d) Scenic Views, Scenic Highways, Visual Character and Quality, and Grading and Topography

Potentially Significant. The CWPP proposes certain vegetation management methods including removal, trimming, installation of fuel breaks, and controlled burns that would occur in the proposed HFHSZ and VHFHSZ (currently referred to as Extreme Foothill, Foothill, Coastal, and Coastal Interior). These areas, especially on the higher foothill areas of the City, would be visible from scenic vistas in the City and from several local scenic roads. Vegetation management may also impact the visual character of an area due to the reduction of vegetation cover necessary to meet defensible space requirements. Grading to establish fuel breaks may also create a temporary alteration in the visual setting and potentially damage trees or rock outcroppings, which could be visible from scenic vistas. Additionally, future communication infrastructure maintenance activities could be visible from a scenic highway or a scenic view. This issue will be analyzed further in the PEIR for the CWPP.

1.e) Lighting and Glare

Less Than Significant. Activities that would be performed under the proposed CWPP could potentially require lighting. However, the CWPP includes proposed BMPs that would limit activities to the hours of 7:00 a.m. to 5:00 p.m. for routine activity. Substantial long-term lighting would not be required for routine activity. Emergency or immediate need activities, such as during a red flag event, that could require lighting would not be subject to the same restriction and may occur rarely. As such, this issue will not be further analyzed in the PEIR.

2.	AGRICULTURE AND FORESTRY RESOURCES Would the project:	Level of Significance	Analyzed in Prior Document
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	No Impact	
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact	
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No Impact	
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	Less Than Significant	
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	Less Than Significant	

2.a) Prime Farmland

No Impact. The proposed CWPP would not convert farmland to nonagricultural use. Wildfire management activities would not impede the agriculture use of any properties. Furthermore, irrigated agricultural land often forms a natural fuel break that may provide some beneficial effects during a wildfire. This issue will not be analyzed further in the PEIR.

2.b-c) Conflict with Zoning or Williamson Act or Forest Land or Timberland Production

Less Than Significant. The CWPP includes the jurisdictional limits of the City, with the exception of the Santa Barbara Airport. The City's General Plan and Coastal Land Use Plan does not include agriculturally designated and zoned property. The Williamson Act, also known as the California Land Conversion Act of 1969 (California Government Code, Section 51200 et seq.), preserves agricultural and open space lands from the conversion to urban land uses by establishing a contract between local governments and private landowners to voluntarily restrict their land holdings to agricultural or open space use. The CWPP does not include lands with Williamson Act contracts. No land within the City is zoned as forest land, timberland, or timberland zoned as timberland production, according to the City's General Plan and Coastal Land Use Plan. Wildfire management activities would not impede or conflict with the agricultural use of any properties. These issues will not be analyzed further in the PEIR.

2.d-e) Loss of Forest Land or Change in the Existing Environment

Less Than Significant. The City is bordered by the Los Padres National Forest to the north of the City limits. Certain wildfire management activities, such as fuel breaks within the CFTN, could require grading and vegetation removal on forest land. The CFTN occupies approximately 242 acres that are maintained based on the priorities of the SBFD and the adjacent fire management agencies. The use of the land for fire management purposes, including communication facility maintenance, would remain consistent with current activities performed under the 2004 Wildland Fire Plan and associated PEIR. The CFTN activities would not remove the land from the forest or preclude the public from accessing the area. As such, there would be not conversion of land to non-forest use. These issues will not be analyzed further in the PEIR.

3. Al	R QUALITY AND GREENHOUSE GAS EMISSIONS Would the project:	Level of Significance	Analyzed in Prior Document
a)	Conflict with or obstruct implementation of the applicable air quality plan?	Potentially Significant	
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is designated in non-attainment under an applicable federal or state ambient air quality standard?	Potentially Significant	
c)	Expose sensitive receptors to substantial pollutants?	Potentially Significant	
d)	Result in other emissions such as those leading to odors adversely affecting a substantial number of people?	Potentially Significant	
e)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Potentially Significant	
f)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?	Potentially Significant	

Air Quality - Discussion

Issues. Air quality issues involve pollutant emissions from vehicle exhaust, stationary sources (e.g. gas stations, boilers, diesel generators, dry cleaners, oil and gas processing facilities, etc.), and minor stationary sources called "area sources" (e.g. residential heating and cooling, fireplaces, etc.) that contribute to smog, particulates, nuisance dust associated with grading and construction processes, and nuisance odors. Stationary sources of air emissions are of particular concern to sensitive receptors, as is construction dust and particulate matter. Sensitive receptors include children, elderly, or ill people that can be more adversely affected by air quality emissions. Land uses typically associated with sensitive receptors include schools, parks, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and clinics.

Smog, or ozone, is formed in the atmosphere through a series of photochemical reactions involving interaction of oxides of nitrogen $[NO_x]$ and reactive organic compounds [ROC] (referred to as ozone precursors) with sunlight over a period of several hours. Primary sources of ozone precursors in the South Coast area are vehicle emissions. Sources of particulate matter (PM₁₀ and PM_{2.5}) include demolition, grading, road dust, agricultural tilling, mineral quarries, and vehicle diesel exhaust.

The City of Santa Barbara is part of the South Coast Air Basin (Santa Barbara County area). The City is subject to the National Ambient Air Quality Standards and the California Ambient Air Quality Standards (CAAQS). The CAAQS apply to six pollutants: photochemical ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, particulate matter (PM), and lead. The Santa Barbara County Air Pollution Control District (APCD) provides oversight on compliance with air quality standards and preparation of the County clean air plan, the Ozone Plan (2019). The APCD uses the term clean air plan to describe the strategic plans that the APCD is required to prepare. The goal of the clean air plan is to reduce air pollution so that the air in the county meets the state and federal health standards. Santa Barbara County is in compliance with all standards as of July 1, 2020 except for PM10, particulate matter less than 10 micrometers or less in diameter (SPCAPCD 2020)

Global climate change refers to accelerated changes occurring in average worldwide weather patterns, measurable by factors such as air and ocean temperatures, wind patterns, storms, and precipitation. Climate changes are forecasted to result in increasingly serious effects to human health and safety and the natural environment now and in coming decades, such as from more extreme weather, sea level rise effects on flooding and coastal erosion, frequency and severity of wildfires, precipitation variability, drought, and impacts on air and water quality, habitats and wildlife, and agriculture.

California is a substantial contributor of greenhouse gas (GHG) emissions; as of the 2017 inventory, transportation and industrial uses (e.g., landfills, manufacturing, oil and gas) represented the largest sources (41% and 24%, respectively) (CARB 2020). In Santa Barbara, direct sources of greenhouse gas emissions are on-road vehicles, natural gas consumption,

and off-road vehicles and equipment. Indirect sources (emissions removed in location or time) are electricity consumption (power generation), landfill decomposition (methane releases), and State Water Project transport (electricity use).

California Assembly Bill 32 (2006 Global Warming Solutions Act) required CARB to create a program to reduce statewide GHG emissions to 1990 levels by the year 2020. Senate Bill 375 (2008 Sustainable Communities and Climate Protection Act) required regional coordination of transportation and land use planning throughout the State to reduce vehicle GHG emissions. CARB established targets for Santa Barbara County to not exceed 2005 per capita vehicle emissions in the years 2020 and 2035. State Senate Bill 97 (enacted in 2007 and amended in 2010) required that project environmental reviews include analysis of greenhouse gas impacts and mitigation, and established that public agencies may provide for a communitywide greenhouse gas emissions mitigation program through an adopted climate action plan.

The City of Santa Barbara Climate Action Plan (CAP) was adopted in September 2012. Past, present, and forecasted future citywide GHG emissions were analyzed in the CAP and associated *Addendum to the 2010 Final Program EIR for the General Plan Update* in comparison to the then State and City GHG emissions targets (2020 total GHG emissions at 1990 level; 2020 and 2035 per capita vehicle emissions at 2005 level). The analysis demonstrated that citywide emissions are decreasing. With continued implementation of State legislation and City programmatic and private sector efforts, citywide GHG emissions associated with growth under the General Plan and Coastal Land Use Plan are expected to meet these State and City emissions reduction targets. Implementation of additional CAP measures would further reduce citywide emissions.

The City CAP constitutes a citywide mitigation program for GHG in accordance with SB 97 for existing and forecasted future growth to the year 2030 under the adopted General Plan. In 2015, new statewide targets of 40 percent below 1990 levels by 2030 were adopted, as well as new regional per capita vehicle reduction targets of 13 percent below 2005 levels in 2020 and 17 percent below in 2035. The City plans to update the CAP to reflect these new State and City targets.

Impact Evaluation Guidelines: A project may create a significant air quality impact associated with criteria air pollutants from the following:

- Exceeding an APCD pollutant threshold; inconsistency with District regulations; or exceeding population forecasts in the adopted County Ozone Plan 2019.
- Exposing sensitive receptors, such as children, elderly or ill, to substantial pollutant concentrations.
- Substantial unmitigated nuisance dust during earthwork or construction operations.
- Creation of nuisance odors inconsistent with APCD regulations.

<u>Long-Term (Operational) Impact Guidelines</u>: The City of Santa Barbara uses the APCD thresholds of significance for evaluating air quality impacts. The APCD has determined that a proposed project will <u>not</u> have a significant air quality impact on the environment if operation of the project will:

- Emit (from all project sources, both stationary and mobile) less than 240 pounds per day for ROC and NO_x , and 80 pounds per day for PM_{10} ;
- Emit less than 25 pounds per day of ROC or NO_x from motor vehicle trips only;
- Not cause a violation of any California or National Ambient Air Quality Standard (except ozone);
- Not exceed the APCD health risks public notification thresholds adopted by the APCD Board; and
- Be consistent with the adopted federal and state air quality plans for Santa Barbara.

Substantial long-term project emissions could potentially stem from stationary sources which may require permits from the APCD and from motor vehicles associated with the project and from mobile sources. Examples of stationary emission sources that require permits from APCD include gas stations, auto body shops, diesel generators, boilers and large water heaters, dry cleaners, oil and gas production and processing facilities, and wastewater treatment facilities.

<u>Short-Term (Construction) Impacts Guidelines</u>: Projects involving grading, paving, construction, and landscaping activities may cause localized nuisance dust impacts and increased particulate matter (PM_{10}). Dust-related impacts are considered mitigable and less than significant with the application of standard dust control mitigation measures pursuant to APCD recommendations and City ordinance provisions (SBMC 22.04.020), such as dampening graded areas and soil stockpiles. Exhaust from construction equipment also contributes to air pollution.

Quantitative thresholds of significance are not currently in place for short-term or construction emissions for non-stationary sources because cumulative basin-wide effects are not identified as significant. However, APCD uses a criterion for stationary sources, which is also considered a guideline for evaluating impacts of construction emissions for non-stationary source projects. The criterion states that a project's combined emissions from all construction equipment not exceed 25 tons of any pollutant except carbon monoxide within a 12-month period. Standard equipment exhaust mitigation measures are recommended by APCD to be applied to projects.

<u>Cumulative Impacts</u>: If the project-specific impact exceeds the ozone precursor significance threshold, it is also considered to have a considerable contribution to cumulative impacts. If a project would exceed the Clean Air Plan growth projections, then the project's impact may also be considered for whether it represents a considerable contribution to cumulative air quality impacts. The Santa Barbara County Association of Governments and Air Resources Board on-road emissions forecasts are used as a basis for vehicle emission forecasting. If a project provides for increased population growth beyond that forecasted in the most recently adopted Clean Air Plan, or if the project does not incorporate appropriate air quality mitigation and control measures, or is inconsistent with APCD rules and regulations, then the project may be found inconsistent with the Clean Air Plan and may constitute a significant impact on air quality.

<u>Global Climate Change</u>: In accordance with Appendix G of the CEQA Guidelines, a project may have a significant impact related to global climate change if it would generate substantial greenhouse gas emissions either directly or indirectly, or would conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases.

Based on the analysis within the City Climate Action Plan and the General Plan Program EIR Addendum, projects within the growth assumptions of the 2030 General Plan and that meet applicable City regulations for greenhouse gas emission reductions:

- (1) Would be consistent with the City Climate Action Plan and associated policies and regulations for reducing greenhouse gas emissions;
- (2) Would be within the citywide greenhouse gas impact assessment in the Climate Action Plan and associated General Plan Program EIR Addendum, which found that total citywide greenhouse gas emissions and per capita vehicle emissions would meet State and City reduction targets and would not constitute a significant environmental impact; and
- (3) Would be within the City Council Climate Action Plan adoption finding that no significant greenhouse gas impacts would result from General Plan build out of the City to 2030.

Air Quality – Existing Conditions and Project Impacts

3.a) Clean Air Plan

Potentially Significant. The SBCAPCD and the Santa Barbara County Association of Governments (SBCAG) are responsible for developing and implementing the Clean Air Plan (SBCAPCD and SBCAG 2015) for attainment and maintenance of the ambient air quality standards in the South Coast Air Basin. Activities contemplated in the CWPP could have the potential to conflict with or obstruct the implementation of the local air quality plan because emissions from controlled burns, operation of mechanized equipment and vehicle transit related to the CWPP could cause an exceedance of a standard. Further analysis is required to assess the proposed CWPP's impact to air quality plans. This issue will be further analyzed in the PEIR.

3.b-d) Air Pollutant Emissions, Sensitive Receptors, and Cumulative Impacts

Potentially Significant. Implementation of the proposed CWPP would involve activities using mechanized equipment (such as vegetation management) and vehicle use that would generate both short-term and long-term criteria pollutants and other emissions. These emissions may occur in proximity to sensitive receptors such as residences or schools. Further air quality analysis is required to determine whether the CWPP could potentially result in any adverse effects to air quality on sensitive receptors related to air pollutant emissions and cumulative impacts. This issue will be further analyzed in the PEIR.

3.e) Odors

Potentially Significant. Although the SBCAPCD has not adopted quantitative thresholds of significance for odor impacts, SBCAPCD recommends the development of an odor abatement plan for development that may generate nuisance odors that may affect a substantial number of people. For example, potential sources that may emit odors during vegetation management include diesel equipment, gasoline fumes, and sawdust. As such, implementation of the proposed CWPP could result in potentially significant impacts. Further analysis is required to determine the proposed CWPP's impact related to odors onto the environment. This issue will be further analyzed in the PEIR.

3.f-g) Greenhouse Gases

Potentially Significant. Sources of direct carbon dioxide and other GHG emissions that could result from CWPP implementation include vegetation management-related traffic, release of emissions through controlled burns, natural gas use, and landscaping/maintenance equipment. Indirect emissions are associated with power generation for electricity consumption; electricity and travel associated with consumer product production, transport, and use; solid waste disposal/decomposition; and potable water delivery. Implementation of the CWPP could therefore result in the potential exceedances of standards within an adopted air quality and GHG plan. As such, the CWPP could result in potentially significant impacts into the environment. Further GHG analysis is required to determine whether implementation of the CWPP could potentially result in any adverse effects related to GHGs. Therefore, these issues will be analyzed in the PEIR.

4. BI	OLOGICAL RESOURCES Would the project:	Level of Significance	Analyzed in Prior Document
a)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Potentially Significant	
b)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Potentially Significant	
c)	Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation plan, or other approved local, regional, or state habitat conservation plan?	Potentially Significant	
d)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Potentially Significant	
e)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Potentially Significant	
f)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Potentially Significant	

Biological Resources - Discussion

Issues: Biological resources issues involve the potential for a project to substantially affect biologically-important natural vegetation and wildlife, particularly species that are protected as rare, threatened, or endangered by federal or state wildlife agencies, and their habitats.

Impact Evaluation Guidelines: Existing native wildlife and vegetation on a project site are assessed to identify whether they constitute important biological resources, based on the types, amounts, and quality of the resources within the context of the larger ecological community. If important or sensitive biological resources exist, project effects on the resources are qualitatively evaluated to determine whether the project would substantially affect these important biological resources. Significant biological resource impacts may potentially result from substantial disturbance to important wildlife and vegetation in the following ways:

- Elimination, substantial reduction or disruption of important natural vegetative communities, wildlife habitat, migration corridors, or habitats supporting sensitive species such as oak woodland, coastal strand, riparian, and wetlands.
- Substantial effect on a protected plant or animal species listed or otherwise identified or protected as endangered, threatened or rare.
- Substantial loss or damage to biologically important native trees such as oak or sycamore trees (note that, if applicable, historic or landmark trees are discussed in Section 5. Cultural Resources, and other trees are discussed in Section 1. Aesthetics/Visual Resources).

Biological Resources – Existing Conditions and Project Impacts

4.a) Riparian Habitats

Potentially Significant. Proposed activities associated with the implementation of the CWPP could have the potential to impact riparian habitat or other sensitive natural communities. For example, vegetation management within the vicinity of a creek could reduce the quality of the riparian habitat by removing vegetation that is essential to providing suitable habitats for existing species. As such, the CWPP could result in a potentially significant impact on riparian habitats or other sensitive natural communities. Certain BMPs have been incorporated into the CWPP to reduce potential effects to biological resources. Further analysis is required to determine the proposed CWPP's impact related to riparian and other sensitive communities. This issue will be discussed further in the PEIR.

4.b) Protected Wetlands

Potentially Significant. Within the City of Santa Barbara, wetlands are found with the City's Coastal Zone as creekside wetlands, ponds, lagoons, and estuaries (City of Santa Barbara 2019). Under the proposed CWPP, vegetation management activities could occur along wetlands, which could adversely impact riparian habitats due to vegetation thinning and vegetation modification activities. As such, the CWPP could have a potentially significant impact related to protected wetlands, and this issue will be discussed further in the PEIR.

4.c) Conservation Plans

No Impact. The CWPP site is not located within the boundaries of a habitat conservation plan or a natural communities conservation plan area (CDFW 2019). The City is not a part of other local, regional, or state habitat conservation plans. As such, there would be no impact. This issue will not be analyzed further in the PEIR.

4.d) Trees and Local Ordinances

Potentially Significant. The City of Santa Barbara's General Plan and Coastal Land Use Plan identifies policies, development standards, and guidelines related to biological resources such as tree preservation. The CWPP's development would include vegetation management practices, which could conflict with local policies and ordinances protecting biological resources, including the protection of certain trees. Additionally, future communication facility maintenance may require trimming tree branches or removal to eliminate risk to or operational constraints of the equipment. As such, the CWPP could have a potentially significant impact related to trees and local ordinances. This issue will be discussed further in the PEIR.

4.e) Endangered, Threatened, or Rare Species

Potentially Significant. The proposed CWPP would include vegetation management as part of its wildfire prevention strategy. Vegetation management would have the potential to impact sensitive habitats. Further analysis is required to determine the potential for direct impacts or indirect impacts from habitat modifications on any species identified as a candidate, sensitive, or special status.

Because of the diversity of biotic communities in the City, many different rare, endangered, and threatened animal species exist. 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 in the City and may be adversely affected by the proposed CWPP:

- American peregrine falcon (*Falco peregrinus anatum*)
- southern bald eagle (*Haliaeetus leucocephalus leucocephalus*)
- California brown pelican (*Pelecanus* occidentalis californicus)
- California least tern (*Sterna albifrons browni*)
- light-footed clapper rail (*Rallus longirostris levipes*)

- Belding's savannah sparrow (*Passerculus* sandwichensis beldingi)
- black rail (Laterallus jamaicensis coturniculus)
- monarch butterfly (*Danaus plexippus*)
- white-tailed kite (*Elanus leucurus*)
- western snowy plover (*Charadrius alexandrinus nivosus*)
- California gnatcatcher (*Polioptila californica*)
- California grunion (*Leuresthes tenuis*)

- southern steelhead trout (*Oncorhynchus mykiss*)
- tidewater goby (*Eucyclogobius newberryi*)
- southwestern pond turtle (*Clemmys marmorata*)
- California least tern and bank swallow (*Riparia riparia*)
- silvery legless lizard (Anniella pulchra pulchra)
- California red-legged frog (Rama draytonii)
- big free-tailed bat (*Nyctinomops macrotis*)

The following rare and endangered plant species are present in the City and may be adversely affected by wildfire:

- saltmarsh bird's beak (*Cordylanthus maritimus* spp. *Maritimus*)
- yellow dicentra (Dicentra ochroleuca)
- pholisma (Pholisma arenarium)
- Hoffman's sanicle (*Sanicula hoffmannii*)
- Contra Costa bueria (*Lasthenia conjugens*)
- purple needlegrass (*Nassella pulchra*)
- cliff aster (*Malacothrix saxatilis*)
- Davidson's saltscale (*Atriplex serenana* var. *davidsonii*)
- black-flowered figwort (*Scrophularia atrata*)
- Coulter's saltbush (*Atriplex coulteri*)
- Davidson's saltscale (*Atriplex serenana* var. *davidsonii*)

- gray whale (*Eschrichtius robustus*)
- ring-tailed cat (*Bassariscus astutus*)
- short-eared owl (Asio flammeus)
- sharp-shinned hawk (Accipiter striatus)
- burrowing owl (Athene cunicularia)
- bank swallow (*Riparia riparia*)
- California black rail (*Laterallus jamaicensis*)
- Nuttall's scrub oak (*Quercus dumosa*)
 - mesa horkelia (*Horkelia cuneata* ssp. *puberula*)
 - Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*)
 - Catalina mariposa lily (*Calochortus catalinae*)
 - Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)
 - Hoffmann's bitter gooseberry (*Ribes amarum* var. *hoffmannii*)
 - island morning glory (*Calystegia macrostegia* ssp. *amplissima*)
 - southern tarplant (*Centromadia parryi* ssp. *australis*)
 - white-flowered sticky phacelia (*Phacelia* viscida var. albiflora)

Additional biological resource analysis in the PEIR may identify other species potentially affected. As such, the proposed CWPP could have a potentially significant impact that will be discussed further in the PEIR.

4.f) Wildlife Dispersal and Migration Corridors

Potentially Significant. Within the City of Santa Barbara, wildlife corridor and habitat linkage, namely linear or patchy habitat connecting adjacent larger patches of habitat, occur in the form of chaparral, oak woodlands, and riparian areas. The CWPP includes fuel reduction activities in undeveloped areas where wildlife corridors may occur, which could potentially adversely affect potential existing wildlife corridors. Further analysis is required to determine the potential impacts associated with the interference with the movement of wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. As such, the implementation of the CWPP could result in potentially significant impacts that will be discussed further in the PEIR.

5. CU	LTURAL RESOURCES Would the project:	Level of Significance	Analyzed in Prior Document
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Section 15064.5?	Potentially Significant	
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5?	Potentially Significant	
c)	Disturb any human remains, including those interred outside of formal cemeteries?	Potentially Significant	

Cultural Resources - Discussion

Issues: <u>Archaeological resources</u> are subsurface deposits dating from Prehistoric or Historical time periods. Native American culture appeared along the channel coast over 10,000 years ago, and numerous villages of the Barbareno Chumash flourished in coastal plains now encompassed by the City. Spanish exploration and eventual settlements in Santa Barbara occurred in the 1500's through 1700's. In the mid-1800's, the City began its transition from Mexican village to American city, and in the late 1800's through early 1900's experienced intensive urbanization. Tribal Cultural Resources are discussed in Section 17 <u>Historic resources</u> are above-ground structures and sites from historical time periods with historic, architectural, or other cultural importance. The City's built environment has a rich cultural heritage with a variety of architectural styles, including the Spanish Colonial Revival style emphasized in the rebuilding of Santa Barbara's downtown following a destructive 1925 earthquake. <u>Paleontological resources</u> refers to the fossilized remains of animal or plant organisms and are discussed in Section 7, Geology and Soils.

Impact Evaluation Guidelines: Archaeological, historical, paleontological, and tribal cultural impacts are evaluated qualitatively by archeologists, historians, paleontologists, and tribal representatives, First, existing conditions on a site are assessed to identify whether important or unique resources exist, based on criteria specified in the CEQA *Guidelines* and City Master Environmental Assessment *Guidelines for Archaeological Resources and Historical Structures and Sites*, summarized as follows:

- Contains information needed to answer important scientific research questions and there exists a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with an important prehistoric or historic event or person.
- Constitutes a tribal cultural resource based on statutory criteria.

If important resources exist on the site, project changes are evaluated to determine whether they would substantially affect these important resources.

Cultural Resources – Existing Conditions and Project Impacts

5.a-b) Historic Resources and Cultural Resources

Potentially Significant. The CWPP would involve the implementation of activities such as vegetation management across various areas throughout the City. Additionally, communication facilities may require maintenance such as replacement of support poles. Typically, a significant impact to historical resources would occur as a result of physical adverse changes to a historic-age structure (i.e., 45 years or older), such as demolition. Archeological resources may be found throughout the project area during CWPP implementation. For example, vegetation management activities associated with the CWPP could indvertently discover unknown archaeological sites and thereby adversely impact the resources. There are known cultural and historic resources within the High Fire Hazard Zones, as shown in Table 11.

Resource	Zone – Existing	Zone - Proposed
Carl Oscar Borg House	Coastal Interior	HFHSZ
Hunt-Stambach House	Coastal Interior	HFHSZ
Bernhard and Irene Hoffman Residence	Foothill	VHFHSZ
Birss-Campbell Residence	Foothill	VHFHSZ
Cobb Residence	Foothill	VHFHSZ
D'Alfonso House	Foothill	VHFHSZ
Ebbets Hall	Foothill	VHFHSZ
El Encanto Hotel Historic District	Foothill	VHFHSZ
Franceschi Residence	Foothill	VHFHSZ
Frederick H, Booth House	Foothill	VHFHSZ
Furse Hall	Foothill	VHFHSZ
Grand Staircase/Quadrangle Building	Foothill	VHFHSZ
ack's Trough (aka Courtney Fountain)	Foothill	VHFHSZ
MacKellar Court	Foothill	VHFHSZ
Iission Historical Park	Foothill	VHFHSZ
Iission Santa Barbara	Foothill	VHFHSZ
Aont Joie Residence	Foothill	VHFHSZ
Dliver-Mistretta Residence	Foothill	VHFHSZ
Peter Grant House	Foothill	VHFHSZ
Riviera Campus Historic District	Foothill	VHFHSZ
Riviera Streetcar Shelter	Foothill	VHFHSZ
anta Barbara Museum of Natural History	Foothill	VHFHSZ
ipress House	Foothill	VHFHSZ
t. Anthony's Seminary and Grounds	Foothill	VHFHSZ
Stark House	Foothill	VHFHSZ

Table 11. Cultural and Historic Resources, by High Fire Hazard Zone

Notes: HFHSZ = High Fire Hazard Severity Zone; VHFHSZ = Very High Fire Hazard Severity Zone

Further analysis is required to determine the potential impacts to historical resources within the CWPP Planning Area. As such, the CWPP could result in a potentially significant impact. These issues will be further analyzed in the PEIR.

5.c) Human Remains

Potentially Significant. Although it is not anticipated that implementation of the CWPP would result in the distribution of intact subsurface human remains, activities associated with the CWPP could result in ground-disturbing activities such that could result in potentially significant impacts. Further analysis is required to determine the potential impacts related to human remains. Potentially significant impacts could occur as a result of implementation of the CWPP, and this issue will be discussed further in the PEIR.

6. En	ergy Would the project:	Level of Significance	Analyzed in Prior Document
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less Than Significant	
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency	Less Than Significant	

Energy - Discussion

Issues: Production and use of energy may cause environmental impacts through extraction practices, land use, biological impacts (e.g., bird strike) and other areas.

Impact Evaluation Guidelines: If analysis of the project's energy use reveals that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources, the EIR shall mitigate that energy use. This analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project. This analysis is subject to the rule of reason and shall focus on energy use that is caused by the project. This analysis may be included in related analyses of air quality, greenhouse gas emissions, transportation or utilities in the discretion of the lead agency.

Energy – Existing Conditions and Project Impacts

6.a) Energy Use

Less Than Significant. The proposed CWPP would implement certain methods to mitigate fire risk within the City. Such methods largely relate to vegetation management. Most vegetation management techniques would require the use of hand tools, requiring little to no consumption of energy resources. For larger tasks, such as establishing fuel breaks, some mechanized equipment may be necessary. However, the overall benefit of the wildland fire management would reduce fuel loads and minimize the risk of wildfire. Wildfires can also contribute to GHG emissions. The state's major study on climate impacts, the Fourth Climate Assessment (Bedsworth et al. 2018), 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. City of Santa Barbara Climate Action Plan (City of Santa Barbara 2012) acknowledges the need to address fire prevention as a component of addressing climate change. Impacts would be less than significant, and this topic will not be analyzed further in the PEIR.

6.b) Conflict with Plan for Renewable Energy or Energy Efficiency

No Impact. As noted above, the proposed CWPP would support the goals and policies of the City's Climate Action Plan. The methods identified within the CWPP would not conflict with the installation of use of renewable energy or impede energy efficiency measures. Home hardening measures contained within the CWPP may in fact benefit property owners by providing greater resiliency and reducing heating and cooling costs through improved roofing materials and windows with greater heat reduction. Impacts would be less than significant, and this topic will not be analyzed further in the PEIR.

7.	GEOLOGY AND SOILS Would the project:	Level of Significance	Analyzed in Prior Document
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	Potentially Significant	
	i) Rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42)		
	ii) Strong seismic ground shaking?		
	iii) Seismic-related ground failure, including liquefaction		
	iv) Landslides		
b)	Result in substantial soil erosion or the loss of topsoil?	Potentially Significant	
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Potentially Significant	
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property	Potentially Significant	
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	No Impact	
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less Than Significant	

Geology and Soils - Discussion

Issues: Geophysical impacts involve geologic and soil conditions, and their potential to create physical hazards affecting persons or property; or substantial changes to the physical condition of the site. Included are earthquake-related conditions such as fault rupture, groundshaking, liquefaction (a condition in which saturated soil loses shear strength during earthquake shaking), or seismic waves; unstable soil or slope conditions, such as landslides, subsidence (the downward shifting of the Earth's surface; can result in sinkholes), expansive or compressible/collapsible soils, or erosion; and extensive grading or topographic changes.

Impact Evaluation Guidelines: Potentially significant geophysical impacts may result from:

- Exposure of people or structures to risk of loss, injury, or death involving unstable earth conditions due to: seismic conditions (such as earthquake faulting, groundshaking, liquefaction, or seismic waves); landslides; sea cliff retreat; or expansive soils.
- Exposure to or creation of unstable earth conditions due to geologic or soil conditions, such as landslides, settlement, or expansive, collapsible/compressible, or expansive soils.

- Substantial erosion of soils.
- Placement of a septic system in an area with soils not capable of adequately supporting disposal of waste water or where waste water could potentially cause unstable conditions or water quality problems.

Geology and Soils – Existing Conditions and Project Impacts

7.a) Seismic Geologic Hazards

Fault Rupture:

No Impact. Surface fault rupture occurs when movement on a fault breaks through the surface. Ground surface fault rupture may also accompany fault creep or natural or man-induced subsidence. Fault rupture can cause structural damage and safety risks on and near the rupture. The City is located within a seismically active area with local faults known to be present, including the Mission Ridge, More Ranch, Mesa, Lagoon, Lavigia, and Rocky Nook Faults (City of Santa Barbara 2013). However, implementation of the CWPP would not result in construction of new structures or buildings. The CWPP would result in implementation of fire prevention measures primarily targeting vegetation management. As such, no impacts would occur with respect to fault rupture, and this issue will not be analyzed further in the PEIR.

Ground Shaking and Liquefaction:

Less Than Significant. Liquefaction is the process by which water-saturated sediment temporarily loses strength and acts as a fluid. Liquefaction potential in the City is largely concentrated in the lower topographic areas in the downtown corridor, Westside, and Lower Eastside, coincident with Laguna Creek, Mission Creek, and drainages from the foothills (City of Santa Barbara 2013, 2020; UCSB 1928). The areas of the City mapped with "moderate" or "high" liquefaction potential are generally not within the High Fire Hazard Area. Furthermore, the CWPP does not propose construction of new buildings or structures that could be affected by ground shaking and liquefaction. The CWPP would result in implementation of fire prevention measures primarily targeting vegetation management. As such, no impacts would occur with respect to ground shaking and liquefaction, and this issue will not be analyzed further in the PEIR.

Landslides/Sea Cliff Failure:

Potentially Significant. Landslides occur on unstable ground when the weight of the material that comprises the slope and the weight of objects placed on the slope exceeds the strength of the slope material. The down-slope movement of earth material is part of the continuous and natural process of erosion; however, the stability of a slope can be adversely affected by a wide variety of factors, including adding water to a slope and the loss of vegetation. Vegetation roots can act as a net along slopes, stabilizing the underlying soils.

The CWPP covers areas within the City of varying slope steepness. The removal of vegetation, although primarily surficial, could potentially compromise the stability of the slope on a vulnerable hillside. The City GIS database denotes certain areas within the City, primarily near Campanil Hill and along Cliff Drive, with documented slope movement (City of Santa Barbara 2020a). As such, vegetation management could result in a potentially significant impact related to landslides, and further analysis is required in the PEIR.

7.b - d) Erosion, Geologic or Soil Instability

The CWPP would result in wildfire management methods that could result in the removal or disturbance of ground cover vegetation that provides soil stability as well as the use of mechanized equipment to establish fuel breaks.

Potentially Significant. The City of Santa Barbara lies on the coastal plain and lower foothills of the Santa Ynez Mountains. The Santa Ynez Mountains, foothills, and alluvial plains are composed of sedimentary rocks that are highly erodible (City of Santa Barbara 2004). Wind and water soil erosion in the foothills of Santa Barbara is a natural process. The natural rate of erosion is moderated by native vegetation due to several characteristics. For example, canopy cover by trees and shrubs intercepts rainfall, reducing the volume and velocity of rainfall reaching the ground surface. Plant roots are also effective in reducing water erosion because roots secure the soil with millions of fine roots, and also create favorable conditions for percolation of low rainfall events. Plant litter and grass or herb cover also reduce erosion by intercepting rainfall. Plant cover and litter also inhibit the formation of gullies that can form during heavy rainfall events, causing localized erosion (City of Santa Barbara 2004).

The CWPP would implement vegetation management actions in which vegetation would be removed or reduced in order to reduce or eliminate the potential for wildfires. Communication facilities may also require maintenance such as pole replacement.

The reduction in vegetation in the vegetation management areas could increase the potential for erosion from rainfall and overland flow because there would be a net decrease in the canopy coverage, plant density, deadwood and heavy plant litter, and overall plant biomass. While individual vegetation management actions on individual units may not cause a significant erosion problem, there is a potential for the cumulative effects of vegetation management on all units to increase the overall erosion rates of these treated areas (City of Santa Barbara 2004). As such, implementation of the CWPP could result in a substantial increase in soil erosion and associated potentially significant impacts. This issue will be further analyzed in the PEIR.

Lateral Spreading, Subsidence, and Collapse:

Less Than Significant. Lateral spreading refers to lateral soil movement on an unsupported slope, due to liquefaction. As previously discussed, areas of the City mapped with "moderate" or "high" liquefaction potential are generally not within the High Fire Hazard Area. Implementation of the CWPP does not include the construction of new structures or buildings that could be susceptible to lateral spreading or soil collapse. The activities proposed in the CWPP would be primarily targeting vegetation management above the ground surface, leaving the soil structure largely intact. As such, no impacts would occur with respect to lateral spreading and collapse, and this issue will not be analyzed further in the PEIR.

Subsidence occurs when a large portion of land is vertically displaced, usually due to the withdrawal of groundwater, oil, or natural gas, or as a result of decomposition of natural organic materials. Soils that are particularly subject to subsidence include those with high silt or clay content and/or high organic content. It is unlikely that implementation of the CWPP would result in withdrawal of large quantities of groundwater beneath the City (i.e., enough to cause ground subsidence). As previously discussed in the Project Description, 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. As indicated in Section 14, Public Services and Utilities, vegetation management practices would indirectly lower the demand for water supply facilities as the amount of water needed to fight wildland fires, and the frequency and intensity of wildfires is anticipated to be reduced.

Expansive Soils:

Less Than Significant. Expansive soil conditions, as defined in Section 1803.5.2 of the 2019 California Building Code (supersedes Table 18-1-B of the Uniform Building Code), occur where alluvial soils such as clay and silt underlie surface soils. Expansive soils tend to swell with seasonal increases in soil moisture in the winter months and subsequently shrink as soils become drier in the summer months. The City of Santa Barbara is underlain by soils that could contain clay minerals susceptible to soil expansion (City of Santa Barbara 2013). Additionally, the City GIS database reflects that a significant portion of the City is susceptible to "moderate" or "high" potential for expansive soil (City of Santa Barbara 2020a). However, the CWPP does not propose any construction that could be subject to damage by soil expansion. In addition, implementation of the CWPP would not increase or exacerbate the potential for soil expansion to occur because activities are primarily targeting surficial vegetation removal. The limited grading activities to establish fuel breaks would be performed using the BMPs included in the CWPP and performed according to industry standards. As such, impacts would be less than significant, and this issue will not be analyzed further in the PEIR.

7.e) Septic Systems

No Impact. The CWPP would not include use of septic tanks or alternative wastewater disposal systems. Portable toilets would be used by vegetation maintenance crews, as necessary. As such, the CWPP would have no impact related to septic systems, and this issue will not be analyzed further in the PEIR.

7.f) Paleontological Resource/Unique Geologic Feature

Less Than Significant. Paleontology is a branch of geology that studies plant and animal fossils to ascertain information about past life forms. Fossils are found in the sedimentary rock layers in which they were originally buried (San Diego Natural History Museum 2020). Sedimentary rock is formed from particles of older rocks that have been broken apart by water or wind. The gravel, sand, and mud settle to the bottom in rivers, lakes, and oceans. These sedimentary particles may bury living and dead animals and plants on the lake or sea bottom. With the passage of time and the accumulation of more particles, and often with chemical changes, the sediments at the bottom of the pile become rock (USGS 2020a). Given that the CWPP proposes methods to manage vegetation and control wildfire risk through establishing fuel breaks at the surface or with limited grading, the likelihood of disturbing a fossil specimen, or unique geological feature is considered less than significant. This issue will not be analyzed further in the PEIR

8. H	AZARDS AND HAZARDOUS MATERIALS Would the project:	Level of Significance	Analyzed in Prior Document
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Potentially Significant	
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Potentially Significant	
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Potentially Significant	
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Less Than Significant	
e)	For a project located within the SBCAG Airport Land Use Plan, Airport Influence Area, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	No Impact	
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Potentially Significant	
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Potentially Significant	

Hazards and Hazardous Materials - Discussion

Issues: Hazardous materials issues involve the potential for public health or safety impacts from exposure of persons or the environment to hazardous materials or risk of accidents involving combustible or toxic substances.

Impact Evaluation Guidelines: Significant impacts may result from the following:

- Siting of incompatible projects in close proximity to existing sources of safety risk, such as pipelines, industrial processes, railroads, airports, etc.
- Exposure of project occupants or construction workers to unremediated soil or groundwater contamination.
- Exposure of persons or the environment to hazardous substances due to improper use, storage, or disposal of hazardous materials.
- Physical interference with an emergency evacuation or response CWPP.
- Siting of development in a high fire hazard areas or beyond adequate emergency response time, with inadequate access or water pressure, or otherwise in a manner that creates a fire hazard.

Emergency access is discussed in Section 16, Transportation. Toxic air contaminants are discussed in Section 3, Air Quality and Greenhouse Gas Emissions.

Hazards and Hazardous Materials – Existing Conditions and Project Impacts

8.a-c) Public Health and Safety

Potentially Significant. Hazardous materials would be used during the wildfire management methods described in the CWPP, potentially including fuels, lubricating fluids, solvents, and cleaning products. If these materials are released, they could prove to be hazardous; therefore, the SBFD would be responsible for implementing programs to prevent any risks involved with handling these materials. The types, amounts, and concentrations of these materials are not known at this time; however, the transport, use, and disposal of hazardous materials will be analyzed further in the PEIR.

There are over 20 schools within the Santa Barbara Unified School District, some of which are located within 0.25 miles of areas that would be affected by the CWPP (SBUSD 2019). Vegetation management and maintenance of communication facilities could occur within 0.25 miles of an existing school and thereby potentially expose students and staff to hazardous materials if a release occurred. This issue will be further analyzed in the PEIR.

8.d) Hazardous Materials Site

Less Than Significant. Based on a review of the Department of Toxic Substances Control EnviroStor database, there is one Hazardous Waste and Substances site within the City. The site is the Southern California Gas Company manufactured gas plant at 630 East Montecito Street and not within an existing or proposed High Fire Hazard Area (DTSC 2020). There are several sites noted in the State Water Control Board's GeoTracker database related to Leaking Underground Storage Tank sites. These sites are either actively managed by the State Water Resources Control Board, or the cases have been closed (SWRCB 2020). There are no solid waste disposal sites with waste constituents above hazardous waste levels outside the waste management unit within the City (CalEPA 2020). Therefore, this issue will not be analyzed further in the PEIR.

8.e) Airport Land Use

No Impact. The nearest airport to the Planning Area is the Santa Barbara Airport, approximately 4 miles to the west of the Planning Area. The CWPP excludes the airport from consideration as it does not exhibit high wildfire hazard conditions, as identified in the 2017 Santa Barbara Airport Master Plan. As a result, this issue will not be analyzed further in the PEIR.

8.f) Emergency Evacuation and Response

Potentially Significant. The CWPP discusses evacuation planning and incorporates the 2014 Wildland Fire Evacuation Procedures Analysis report prepared by Dudek (Dudek 2014). The recommendations from the 2014 report are included as Appendix A in the CWPP. The CWPP provides additional recommendations for enhanced emergency evacuation. However, in light of recent wildfire evacuation challenges in the state, such as in Paradise, California, further analysis will be included in the PEIR.

8.g) Fire Hazard

Potentially Significant. The CWPP is a community-based guidance document intended to mitigate wildfire risk. Although wildfire management methods would have an overall beneficial reduction in wildfire risk, there are certain activities that could create a temporary risk of wildfire. Ground-disturbing activities associated with the CWPP would include vegetation stockpiling, mechanized land clearance, vegetation management and potentially pole replacement activities for communication infrastructure. Ground-disturbing activities would typically employ the use of heavy equipment (e.g., dump truck, chipper, crane truck). Use of maintenance equipment around flammable vegetation and other materials that are potential fire hazards could result in a wildland fire risk. As such, risks associated with incidental sparks from the use of maintenance equipment could result in potentially significant impacts related to fire hazards. This issue will be further analyzed in the PEIR.

9.]	HYDROLOGY AND WATER QUALITY Would the project:	Level of Significance	Analyzed in Prior Document
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Potentially Significant	
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less Than Significant	
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	Potentially Significant	
	i) result in substantial erosion or siltation on- or off-site;		
	ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;		
	iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;		
	iv) impede or redirect flood flows?		
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Potentially Significant	
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Potentially Significant	

Hydrology and Water Quality – Discussion

Issues: Water resources issues include changes in surface drainage, creeks, surface water quality, groundwater quantity and quality, flooding, and inundation.

Impact Evaluation Guidelines: A significant impact would result from:

Water Resources and Drainage

- Substantially changing the amount of surface water in any water body or the quantity of groundwater recharge.
- Substantially changing the drainage pattern or creating a substantially increased amount or rate of surface water runoff that would exceed the capacity of existing or planned drainage and stormwater systems.
- Altering drainage patterns or affecting creeks in a way that would cause substantial erosion, siltation, on- or off-site flooding, or impacts to sensitive biological resources (See Section 4 as well).

Water Quality

• Substantial discharge of sediment or pollutants into surface water or groundwater, or otherwise degrading water quality, including temperature, dissolved oxygen, or turbidity.

Under most existing conditions, stormwater runoff from urban areas picks up pollutants as it flows across roofs, sidewalks, driveways and streets, and then is conveyed by gutters, channels, and storm drains directly to local creeks and the ocean, without any treatment. This runoff carries sediment, nutrients, bacteria, hydrocarbons, metals, pesticides, and trash. Urban stormwater runoff is the single largest source of surface water pollution in Santa Barbara (City of Santa

Barbara 2013). The City of Santa Barbara adopted the Storm Water Management Program (SWMP) in January of 2009, and the SWMP is implemented through City ordinance provisions. The purpose of the SWMP is to implement and enforce a program designed to reduce the discharge of pollutants to the "maximum extent practicable" to protect water quality. The SWMP addresses discharge of pollutants both during construction and after construction. The City of Santa Barbara is in the process of updating the Storm Water BMP Guidance Manual (draft released February 26, 2020) as a part of the SWMP (City of Santa Barbara 2020c).

Flooding and Inundation Hazards

- Locating development within floodway or 100-year flood hazard area; substantially altering the course or flow of flood waters or otherwise exacerbating flood hazard to persons or property.
- Exposing people or structures to substantial unmitigated risk involving inundation by seiche, tsunami, or mudflow.

Hydrology and Water Quality – Existing Conditions and Project Impacts

9.a) Water Quality Standards for Surface and Groundwater

Potentially Significant. Surface water in the City includes creeks and water bodies. The primary watersheds and major water courses flowing within the City include Mission, Sycamore, Arroyo Burro, and Laguna Creek watersheds, and surface water bodies include the Andrée Clark Bird Refuge and Sheffield Reservoir. These sources are mapped in the City's GIS database (City of Santa Barbara 2020a). Groundwater in the City is obtained from two primary groundwater basins: Storage Unit 1 of the Santa Barbara basin and the Foothill basin (City of Santa Barbara 2020b; Santa Barbara County Water Agency 2020). Storage Unit 1 is located in the general vicinity of downtown. The Foothill Basin is located in the upper State Street area. Storage Unit 3 of the Santa Barbara basin, located generally in the Westside, also has the potential for limited production, though water quality is relatively poor (City of Santa Barbara 2020b, Santa Barbara County Water Agency, 2020).

The U.S. Geological Survey has characterized many linkages between water use and water quality and found that the processes affecting water quality vary widely and depend on a complex suite of factors. These factors can include natural geology and local aquifer conditions, human activities related to land use, and well construction and operation. Determining changes in groundwater quality over time involves systematic monitoring of constituents of concern, coupled with an understanding of the dynamics of a groundwater-flow system (USGS 2020b). The CWPP proposes methods that focus on vegetation management and fire risk management, such as fuel breaks and communication infrastructure replacement. Vegetation management activities may include soil disturbance, use of mechanized equipment or vegetation clippings that could potentially impact surface water quality. Although the CWPP includes proposed BMPs, it is possible that both surface and groundwater quality could be affected. As such, this issue will be further analyzed in the PEIR.

9.b) Groundwater Supply

Less Than Significant. Since the 1960s, the majority of the City's water has come from local surface water, and the remainder has come from groundwater, State Water Project, recycled water, increased water conservation, and as needed, seawater desalination. As noted above, Although groundwater from the Santa Barbara and Foothill groundwater basins only accounts for a small percentage of the long-term supply, it is an important source of supplemental water during times of surface-water shortages (Nishikawa 2018). As part of a joint 2018 study between the U.S. Geological Survey and City, the sustainable yield, or volume of groundwater that can be pumped from storage without causing water-level drawdowns and associated seawater intrusion, was evaluated based on five optimization scenarios. The scenarios revealed a maximum pumpage in the basin of around 30,000 acre-feet over a 10-year period (Nishikawa 2018). Perennial yield is the amount of water that can be pumped from the basins on a continual basis without causing overdraft. The portion of the perennial yield used by the City from all Storage Unit 1 and the Foothill Basins is approximately 1,300 acre-feet per year. Storage Unit 3 is not normally used. The City's Water Supply Management report for the 2018–2019 Water Year notes that the City focused on resting its groundwater basins in Water Year 2019 to help them recover to pre-drought levels. The City pumped only two out of nine potable groundwater wells from May to August 2019 during peak summer demands, providing 318 acrefeet of supply in Water Year 2019 (City of Santa Barbara 2020d). Groundwater recharge can be augmented through releases to Mission Creek and through injection capability at various production wells (City of Santa Barbara 2020b). Although cyclical drought will remain a challenge in California, the City's management of water resources provides supplies to address City water needs, including firefighting. Additionally, the activities proposed in the CWPP would not result in a

significant increase in water demand beyond current practices. As such, the impacts would be less than significant, and this issue will not be analyzed further in the PEIR.

9.c) Drainage, Stormwater Runoff, and Water Quality and Creeks

Potentially Significant. The CWPP would implement vegetation management practices in which vegetation would be removed or reduced in order to reduce the potential for wildfire. It would also result in communication equipment maintenance activities, such as pole replacement, that could cause soil disturbance. Water quality impacts could occur during vegetation management and ground-disturbing activities if they result in the release of pollutants, such as spilled or leaked petroleum products, and/or runoff of sediment, herbicides, ash debris, or other vegetation-related materials into receiving waters. The City of Santa Barbara would require the implementation of standard site management practices (e.g., perimeter controls, storm drain inlet protection, maintaining a clean and orderly work area) consistent with the City's existing SWMP. The CWPP is not expected to change groundwater demand. However, further analysis would be required to assess the CWPP's potential to impact changes to drainage, stormwater runoff, and water quality. As such, these issues will be discussed further in the PEIR.

9.d) Flooding

Potentially Significant. The proposed fuel reduction as a result of vegetation management could cause a potential increase in soil erosion from the specified areas because of the reduction in vegetation canopy and plant density. These measures could also result in minor increases of flows from these areas and thus, result in an increase in runoff and pollutant sources. In addition, the Federal Emergency Management Agency maps areas within the CWPP with multiple variations of flood risk zones (FEMA 2008). The CWPP addresses areas located adjacent to the Pacific Ocean, and this area could be susceptible to inundation by a tsunami. Further analysis is required to assess the CWPP's potential for impacts related to flooding. Potentially significant impacts may occur. These issues will be further analyzed in the PEIR.

9.e) Conflict with a Water Quality Control Plan or Groundwater Management Plan

Potentially Significant. As discussed in 9.b) above, the CWPP would not conflict with a groundwater management plan. Best management practices are proposed in the CWPP and would minimize potential water quality impacts. However, as discussed in 9.a) and 9.c), the implementation of vegetation management practices could potentially cause increased sedimentation due to soil disturbance, which could conflict with the City's SWMP. As such, impacts related to conflict with a Water Quality Control Plan may be significant and will be further analyzed in the PEIR.

10. L	AND USE AND PLANNING Would the project:	Level of Significance	Analyzed in Prior Document
a)	Physically divide an established community?	Less than Significant	
b)	Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Potentially Significant	

Land Use and Planning – Discussion

10.a) Physically Divide Community

Less Than Significant. The CWPP provides guidance regarding wildfire mitigation. Methods contained in the CWPP largely address vegetation management. While the CWPP does include evacuation planning, the routes contemplated do not limit or impede access in various areas of the City. The project does not involve a cross-town freeway, storm channel, utility transmission lines or any other improvements that have the potential to physically divide the community. The project would not close any existing bridges or roadways Impacts would be less than significant, and no further analysis is required. This topic will not be analyzed in the PEIR.

9.b) Conflicts with Plans for Avoiding Environmental Effect

Potentially Significant. The proposed project would involve the implementation of the CWPP largely focused on vegetation management. Although it is unlikely that CWPP would result in a conflict with applicable land use plans, policies, or regulations, further analysis is required. Impacts would be potentially significant, and this topic will be discussed within the PEIR.

	MINERAL RESOURCES Id the project:	Level of Significance	Analyzed in Prior Document
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact	
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	No Impact	

Mineral Resources – Discussion

11.a) Mineral Resource of Regional Significance

No Impact. Implementation of the CWPP would not impede access to mineral resources within the City. Therefore, the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. No impact would occur. This issue will not be analyzed further in the PEIR.

11.b) Mineral Resource of Local Significance

No Impact. The Plan Santa Barbara Program EIR notes that the City is largely urbanized with few agricultural and mineral resources present in the City (City of Santa Barbara 2010). Therefore, no impact would occur, and no further analysis is required. This issue will not be analyzed further in the PEIR.

12. N	OISE Would the project result in:	Level of Significance	Analyzed in Prior Document
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Potentially Significant	
b)	Generation of excessive ground borne vibration or ground borne noise levels?	Potentially Significant	
c)	Siting of a land use in an area with noise levels exceeding City General Plan noise policies and land use compatibility guidelines?	No Impact	
d)	For a project located within the vicinity of a private airstrip or the SBCAG Airport Land Use Plan/Airport Influence Area, would the project expose people residing or working in the project area to excessive noise levels?	No Impact.	

Noise - Discussion

Issues: Noise issues are generally associated with placement of a noise-generating land use next to existing noise-sensitive land uses, and/or short-term construction-related noise. Similarly, construction techniques such as major earthmoving activities, pile driving and blasting can present issues of groundborne vibration. If groundborne vibration is excessive, it can impact the integrity of structures and can affect sensitive land uses.

Definitions: Vibrations, traveling as waves through air from a source, exert a force perceived by the human ear as sound. Sound pressure level (referred to as sound level) is measured on a logarithmic scale in decibels (dB) that represent the fluctuation of air pressure above and below atmospheric pressure. Frequency, or pitch, is a physical characteristic of sound and is expressed in units of cycles per second or hertz (Hz). The normal frequency range of hearing for most people extends from about 20 to 20,000 Hz. The human ear is more sensitive to middle and high frequencies, especially when the noise levels are quieter. As noise levels get louder, the human ear starts to hear the frequency spectrum more evenly. To accommodate for this phenomenon, a weighting system to evaluate how loud a noise level is to a human was developed. The frequency weighting called "A" weighting is typically used for quieter noise levels which de-emphasizes the low frequency components of the sound in a manner similar to the response of a human ear. This A-weighted sound level is called the "noise level" and is referenced in units of dB(A).

Ambient noise refers to the existing outdoor sound level resulting from all sources, near and far, including transportation facilities (i.e., freeways, railroads, airports) and stationary land uses such as industrial and commercial establishments. In an urban setting, this ambient noise is often referred to as the community noise level. The primary source of ambient noise in the City of Santa Barbara is vehicle traffic noise along Highway 101 and on major local streets. The City Master Environmental Assessment Noise Contour Map identifies average ambient noise levels within the City.

Ambient noise levels are generally reported as averaged 24-hour weighted levels, using the Day-Night Noise Level (L_{dn}) or Community Noise Equivalence Level (CNEL) measurement scales. The L_{dn} averages the varying sound levels occurring over the 24-hour day and adds a 10 decibel penalty to each of the measured hourly average noise levels occurring between the hours of 10:00 p.m. and 7:00 a.m. to take into account the greater annoyance of intrusive noise levels during nighttime hours. Since L_{dn} is a 24-hour average noise level, an area could have sporadic loud noise levels above 60 dB(A) which average out over the 24-hour period. CNEL is similar to L_{dn} but includes a separate 5 dB(A) addition to the measured hourly average noise levels occurring between of 7:00 p.m. and 10:00 p.m. CNEL and L_{dn} values usually agree with one another within 1 dB(A). The Equivalent Noise Level (L_{eq}) is a single noise level, which, if held constant during the measurement time period, would represent the same total energy as a fluctuating noise. L_{eq} values are commonly expressed for periods of one hour, but longer or shorter time periods may be specified. Since sound is measured on a logarithmic scale, a doubling of sound energy results in a 3 dB(A) increase in the noise level. Changes in a community noise level of less than 3 dB(A) are not typically noticed by the human ear. Changes from 3 to 5 dB(A) may be noticed by some individuals who are extremely sensitive to changes in noise. A 5 dB(A) increase is readily noticeable. The human ear perceives a 10 dB(A) increase in sound level as a doubling of the sound level (i.e., 65 dB(A) sounds twice as loud as 55 dB(A) to a human ear).

Guidance for appropriate long-term background noise levels for various land uses are established in the City General Plan Noise Element Land Use Compatibility Guidelines. Building codes also establish maximum average ambient noise levels for the interiors of structures. This guidance applies to community noise levels that are permanent in nature, rather than to temporary noise sources or activities (such as construction).

High construction noise levels occur with the use of heavy equipment such as scrapers, rollers, graders, trenchers and large trucks for demolition, grading, and construction. Equipment noise levels can vary substantially through a construction period, and depend on the type of equipment, number of pieces operating, and equipment maintenance. Construction equipment generates noise levels of more than 80 or 90 dB(A) at a distance of 50 feet, and the shorter impulsive noises from other construction equipment (such as pile drivers and drills) can be even higher, up to and exceeding 100 dB(A). Noise during construction is generally intermittent and sporadic. For "point sources" such as construction activity, noise outdoors attenuates (or is reduced) by 6 dB each time the distance from the source to a receiver is doubled (80 dB(A) at 50 feet is reduced to 74 dB(A) at 100 feet).

The Noise Ordinance (Chapter 9.16 of the Santa Barbara Municipal Code) governs short-term or periodic noise, such as construction noise, operation of motorized equipment or amplified sound, or other sources of nuisance noise. The ordinance establishes limitations on hours of construction and motorized equipment operations, and provides criteria for defining nuisance noise in general.

Groundborne vibration is an oscillatory motion that can be described in terms of displacement, velocity, or acceleration. Heavy construction equipment that causes percussive action against the ground surface may be experienced by building occupants as perceptible vibration (EPA 1971). It is also common for groundborne vibration to cause windows, pictures on walls, or items on shelves to rattle. Although the perceived vibration from such equipment operation can be intrusive to building occupants, the vibration is seldom of sufficient magnitude to cause even minor cosmetic damage to buildings. Vibration impacts to buildings are generally discussed in terms of peak particle velocity (PPV) that describes particle movement over time (in terms of physical displacement of mass, expressed as inches/second or in/sec). Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities (Caltrans 2002). Next to pile driving and soil compacting, grading activity has the greatest potential for vibration impacts if large buildozers, large trucks, or other heavy equipment are used. The California Department of Transportation employs a vibration significance level of 0.2 in/sec PPV for the prevention of structural damage to typical residential buildings; the City does not have an adopted vibration significance threshold (Caltrans 1980).

Aircraft traffic also creates intermittent higher noise levels and is a major source for noise in the communities surrounding the Santa Barbara Airport. The Airport is located outside of the continuous boundary of the City, and areas affected by aircraft noise include several neighborhoods within the City of Goleta, UCSB [University of California, Santa Barbara], and unincorporated areas of the County. The Santa Barbara Airport's Noise Compatibility Program and the Airport Land Use Plan provide noise abatement procedures and policies for the airport to minimize noise; guidelines for placement of noise sensitive land uses near the airport, and mitigation measures to prevent impacts to residential areas from airport noise.

Impact Evaluation Guidelines: A significant noise impact may result from:

- 1. Project Noise Generation: Substantial noise and/or vibration from project operations or grading and construction activity in close proximity to noise-sensitive receptors for an extensive duration; or
- 2. Ambient Noise Policies: Siting of a project such that persons would be subject to long-term ambient noise levels in excess of the Noise Element land use compatibility guidelines as follows. The guidelines include maximum interior and exterior noise levels.
 - a. Interior noise levels are of primary importance for residences due to the health concerns associated with continued exposure to high interior noises. Projects not meeting interior noise levels would have significant noise impacts.

- b. For exterior noise levels, there are two levels of noise:
 - i. "Clearly unacceptable" exterior levels are those levels above which it would be prohibitive, even with mitigation, to achieve the maximum interior noise levels, and the outdoor environment would be intolerable for the assigned use. Projects exceeding the maximum "clearly unacceptable" noise levels would have significant noise impacts.
 - ii. "Normally unacceptable" noise levels are those levels which it is clear that with standard construction techniques maximum interior noise levels will be met and there will be little interference with the land use. Projects below the maximum "normally unacceptable" noise levels would have less than significant noise impacts.
 - iii. Projects with exterior noise levels exceeding the "normally acceptable" level and below the maximum "clearly unacceptable" level are evaluated on a case by case basis to identify mitigation to achieve the "normally acceptable" exterior levels to the extent feasible and to determine the level of significance of the noise exposure.
 - Commercial (retail, restaurant, etc.) and Office (personal, business, professional): Normally acceptable maximum exterior ambient noise level of 75 dB(A) Ldn; clearly unacceptable maximum exterior noise level of 80 dB(A) Ldn; maximum interior noise level of 50 dB(A) Ldn.
 - Residential: Normally acceptable maximum exterior ambient noise level of 60 dB(A) Ldn in single family zones and 65 dB(A) Ldn in non-residential or multi-family zones); clearly unacceptable maximum exterior noise level of 75 dB(A) Ldn; maximum interior noise level of 45 dB(A) Ldn.
- 3. Aircraft Noise: Project site location near an airport or air strip that would result in excessive noise exposure for project residents or employees.

Noise – Existing Conditions and Project Impacts

12.a) Increased Noise Levels from Project

Potentially Significant. Implementation of the proposed CWPP would result in noise-generating activities through the use of mechanized equipment, such as chainsaws and backhoes. Chainsaws may generate noise up to 85 dB(A) at 50 feet. While impacts would be short term, the project would have the potential to temporarily increase noise levels at existing residences. Further analysis is required to determine the impacts relating to the substantial temporary or permanent increases in ambient noise levels within the CWPP. As such, impacts could be potentially significant. This issue will be further analyzed in the PEIR.

12.b) Increased Vibration Levels from Project

Potentially Significant. Groundborne vibration can cause damage to surrounding structures within areas of grounddisturbing activities. Although short-term, groundborne vibration produced from construction or maintenance activities is anticipated to be less than significant, further analysis is required to determine the potential vibration levels within the CWPP's vicinity and the associated impacts to sensitive receptors. As such, impacts related to groundborne vibration could be potentially significant. This issue will be further analyzed in the PEIR.

12.c) Land Use

No Impact. The CWPP provides community-based guidance to mitigate wildfire risk. The methods contained in the CWPP are generally related to vegetation management and evacuation planning. The CWPP does not include the introduction of any noise-sensitive uses such as residences, nor would it increase the development potential of and existing land use and zoning designations within the City. As a result, this issue will not be analyzed further in the PEIR.

12.d) Aircraft Noise

No Impact. The CWPP encompasses the City limits excluding the Santa Barbara Airport. The closest airport is Santa Barbara Airport, approximately 4 miles west of the City proper. The activities described in the CWPP would not occur on or near the airport. This issue will not be analyzed further in the PEIR.

13. I	POPULATION AND HOUSING Would the project:	Level of Significance	Analyzed in Prior Document
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	Less Than Significant	
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact	

Population and Housing - Discussion

Impact Evaluation Guidelines: Issues of potentially significant population and housing impacts may involve:

- Growth inducement, such as provision of substantial population or employment growth or creation of substantial housing demand; development in an undeveloped area, or extension/expansion of major infrastructure that could support additional future growth.
- Loss of a substantial number of people or housing units, especially loss of lower cost housing.

Population and Housing – Existing Conditions and Project Impacts

13.a) Growth-Inducing Impacts

Less Than Significant. The proposed CWPP would not introduce new development directly through construction of homes or businesses or indirectly through the construction of roads or expansion of infrastructure. The proposed CWPP would expand certain areas of the High Fire Hazard Severity Zone (currently the Coastal and Coastal Interior Zones) and Very High Fire Hazard Severity Zones (currently the Foothill and Extreme Foothill Zones).

State law for Accessory Dwelling Units and Junior Accessory Dwelling Units (ADUs/JADUs)² became effective January 1, 2020. The new state law significantly expanded the types and numbers of ADUs allowed per parcel and voided much of the City's existing ADU and JADU regulations. In response, City Council adopted an Interim Urgency Ordinance to temporarily prohibit ADU/JADU development in the Foothill and Extreme Foothill High Fire Hazard Area Zones until December 2020 to allow staff time to analyze the issues before returning with an amended ordinance for adoption. Prior to expiration of the Urgency Ordinance, the City will adopt Zoning Ordinance amendments for ADUs and JADUs in compliance with new state law. As of February 2020, 185 ADUs/JADUs have been constructed, and an additional 296 are in process or pending building permits citywide. In the event the City maintains the same prohibition on ADU/JADU, the expanded high fire hazards zones would potentially reduce the number of potential ADU/JADU that could be permitted.

The CWPP proposes a series of fire risk reduction methods to address existing development within the City, and especially within the designated High Fire Hazard Areas. As such, growth-inducing impacts would be less than significant, and this issue will not be further analyzed in the PEIR.

13.b) Housing Displacement

No Impact. The CWPP would be limited to fire hazard management activities and would not displace any numbers of existing people or housing necessitating the need to construct replacement housing elsewhere. Methods contained within the CWPP are intended to promote sound fire management practices to protect buildings and structures, including housing, within the High Fire Hazard Areas. No impact would result from the project. This issue will not be further analyzed in the PEIR.

² 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.

14. PUBLIC SERVICES AND UTILITIES		Level of Significance	Analyzed
	Would the project:		in Prior Document
a)	Require or result in the relocation or construction of new or expanded storm water drainage facilities or expansion of water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?	Less Than Significant	
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Less Than Significant	
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less Than Significant	
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Potentially Significant	
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Potentially Significant	
f)	Comply with federal, state, and local statutes and regulations related to solid waste?	Potentially Significant	
g)	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: i) Fire Protection?	Less Than Significant	
	ii) Police Protection?iii) Schools?		
	iv) Parks?		
	v) Other Public Facilities?		

Public Services and Utilities - Discussion

Issues: This section evaluates project effects on fire and police protection services, schools, public facility maintenance and other governmental services, utilities, including electric and natural gas, water and sewer service, and solid waste disposal.

Impact Evaluation Guidelines: The following may be identified as significant public services and facilities impacts:

- Inadequate water, sewage disposal, or utility facilities.
- Substantial increase in solid waste disposal to area sanitary landfills.

- Creation of a substantial need for increased police department, fire department, public facility maintenance, or government services staff or equipment.
- Generation of substantial numbers of students exceeding public school capacity where schools have been designated as overcrowded.

<u>Water</u>: The City of Santa Barbara's water supply comes primarily from the following sources, with the actual share of each determined by availability and level of customer demand: Lake Cachuma and Tecolote Tunnel; Gibraltar Reservoir, Devils Canyon and Mission Tunnel; groundwater; State Water Project Table A allotment; desalination; and recycled water. Conservation and efficiency improvements are projected to contribute to the supply by offsetting demand that would otherwise have to be supplied by additional sources. On June 14, 2011, based on the comprehensive review of the City's water supply, the City Council approved the Long Term Water Supply Program (LTWSP) for the planning period 2011-2030. The LTWSP outlines a strategy to use the above sources to meet the City's estimated system demand (potable plus recycled water) of 14,000 acre-feet per year, plus a 10% safety margin equal to 1,400 acre-feet per year, for a total water supply target of 15,400 acre-feet per year. The LTWSP concludes that the City's water supply is adequate to serve the anticipated demand plus safety margin during the planning period.

<u>Sewer</u>: The maximum capacity of the El Estero Treatment Plant is 11 million gallons per day (MGD), with current average daily flows in 2011 of 8 MGD. In 2010, the City certified a citywide Program Final Environmental Impact Report (FEIR) for the Plan Santa Barbara General Plan Update. This FEIR concluded that the increased wastewater flows to El Estero Wastewater Treatment Plant are enough to accommodate the growth planned through 2030 for the City. The FEIR also concluded that the increased wastewater flows into the City's collection systems would not substantially contribute to current problems of off-site inflow and infiltration of wastewater flows from the City's system.

<u>Solid Waste</u>: Most of the waste generated in the City is transported on a daily basis to seven landfills located around the County. The County of Santa Barbara, which operates the landfills, has developed impact significance thresholds related to the impacts of development on remaining landfill capacity. These thresholds are utilized by the City to analyze solid waste impacts. The County thresholds are based on the projected average solid waste generation for Santa Barbara County from 1990-2005. The County assumes a 1.2% annual increase (approximately 4,000 tons per year) in solid waste generation over the 15-year period. The County's threshold for project specific impacts to the solid waste system is 196 tons per year (this figure represents 5% of the expected average annual increase in solid waste generation [4,000 tons per year]) for project operations. Source reduction, recycling, and composting can reduce a project's waste stream by as much as 50%. If a proposed project generates 196 or more tons per year <u>after</u> reduction and recycling efforts, impacts would be considered significant and unavoidable. Proposed projects with a project specific threshold of significance is based on a cumulative growth scenario. However, as landfill space is already extremely limited, any increase in solid waste of 1% or more of the expected average annual increase in [4,000 tons per year], which equates to 40 tons per year, is considered adverse significant cumulative impact.

The County of Santa Barbara adopted revised solid waste generation thresholds and guidelines in October 2008. According to the County's thresholds of significance, any construction, demolition or remodeling project of a commercial, industrial or residential development that is projected to create more than 350 tons of construction and demolition debris is considered to have a significant impact on solid waste generation. The County's 350 ton threshold has not been formally adopted by the City; however, it provides a useful method for calculating and analyzing construction waste generated by a project.

<u>Facilities and Services</u>: In 2010, the City certified the PEIR for the Plan Santa Barbara General Plan Update. The PEIR concluded that under existing conditions as well as the projected planned development and all studied alternatives, all public services (police, fire, library, public facilities, governmental facilities, electrical power, natural gas and communications) could accommodate the potential additional growth until 2030. The PEIR also determined that growth in the City under the General Plan would not result in a considerable contribution to cumulative impacts on public services on the South Coast.

<u>Schools</u>: None of the school districts in the South Coast have been designated "overcrowded" as defined by California State law. Per California Government Code Section 66000, the City collects development impact fees from new development to offset the cost of providing school services/additional infrastructure to accommodate new students generated by the development.

Public Services and Utilities – Existing Conditions and Project Impacts

14.a-c) Water and Sewer

Less Than Significant. As discussed in Section 8, Hydrology and Water Quality, the City's available water supply accounts for firefighting purposes and is sufficient to address the methods included in the CWPP. There is no impact to wastewater anticipated as there are no measures within the CWPP that would affect sewer availability or capacity. Impacts would be less than significant, and this issue will not be further analyzed in the PEIR.

14.d-f) Solid Waste Generation/ Disposal

Potentially Significant. As part of the effort to divert materials from landfills and comply with state-mandated diversion goals, the County of Santa Barbara has implemented a number of programs designed to reduce the generation of organic waste materials, and recycle those organic materials that end up in the waste stream for beneficial reuse (City of Santa Barbara 2004).

Vegetation management associated with the CWPP is anticipated to generate large volumes of organic waste. The amount of solid waste associated with the implementation of the proposed CWPP could have the potential to significantly exceed the current capacity and goals aimed at reducing organic waste materials and could conflict with regulations related to solid waste. As such, further analysis will be required to determine the CWPP's potentially significant impacts related to solid waste. This issue will be further discussed in the PEIR.

14.g) Fire, Police, Schools, Parks, and Public Facilities

Less Than Significant. The CWPP would be a continuation of ongoing efforts to reduce wildland fire hazards and ideally minimize the need for firefighting response. No new governmental facilities would be constructed as a part of the CWPP. Existing communication infrastructure requires certain maintenance to address outdated technology however these activities would not create a significant environmental impact as they would occur on existing communication equipment with established structural footprints. The proposed CWPP is not anticipated to have any direct impacts on police protection, school facilities, or other government services. Park facility impacts are discussed in Section 15 Recreation. Impacts would be less than significant (with the exception of parks, discussed in Section 15 Recreation) and as such, this issue will not be further analyzed in the PEIR.

15. F	RECREATION	Level of Significance	Analyzed in Prior Document
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Less Than Significant	
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Potentially Significant	
c)	Would the project result in substantial loss or interference with existing park space or other public recreational facilities (such as hiking, cycling or horse trails)?	Potentially Significant	

Recreation - Discussion

Issues: Recreational issues are associated with increased demand for recreational facilities, or, loss of or impacts to existing recreational facilities or parks.

Impact Evaluation Guidelines: Recreation impacts may be significant if they result in:

- Substantial increase in demand for park and recreation facilities in an area under-served by existing public park and recreation facilities.
- Substantial loss or interference with existing park space or other public recreational facilities such as hiking, cycling, or horse trails.

Recreation – Existing Conditions and Project Impacts

15.a) Recreational Demand

According to the certified Final Program EIR (2010) for the General Plan Update, the City's park, waterfront, beach, and recreational facilities are sufficient overall for the projected levels of future population anticipated to the 2030 timeframe.

Less Than Significant. There are several parks within the proposed CWPP area. Several of the larger park facilities within the High Fire Hazard Areas include:

- Extreme Foothill Zone: Parma Park, Skofield Park, and Sheffield Reservoir
- Foothill Zone: Mission Historical Park, Hale Park, Orpet Park, Stevens Park, and Franceschi Park
- Coastal Zone: Douglas Family Preserve/Arroyo Burro Beach
- Coastal Interior Zone: Hilda McIntyre Ray Park, Elings Park, and Honda Valley Park

The proposed CWPP would not increase the demand on park facilities; nor does it include creation of new park facilities. As such, the impacts would be less than significant, and these issues will not be further analyzed in the PEIR.

15.b - c) Recreational Facilities and Interference with Park Space or Recreational Use

Potentially Significant. The CWPP would not require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. However, the proposed vegetation management activities would occur in, and in the immediate vicinity of a number of parks and recreation areas. Communication equipment may also be located within or in proximity to existing park space or recreational uses, such as trails. Methods associated with the CWPP would include the maintenance and stockpiling of vegetation and mechanized land clearance. Ground-disturbing activities would typically involve the use of heavy equipment (e.g., dump truck, chipper, crane truck). In addition, ground-

disturbing activities would involve a temporary influx of workers, vehicles, and equipment into the identified recreation areas, which could result in the temporary physical deterioration of public trail facilities, reducing the availability of recreational opportunities to area residents and recreationists, and could impact species located within local parks. As such, the implementation of the CWPP could potentially result in the physical deterioration of parks and recreation areas. As a result, the CWPP could have potentially significant impacts that will be discussed further in the PEIR.

16. 7	TRANSPORTATION Would the project:	Level of Significance	Analyzed in Prior Document
a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Potentially Significant	
b)	Conflict or be inconsistent with CEQA Guidelines section 15064.3 (Determining the Significance of Transportation Impacts)?	Potentially Significant	
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Potentially Significant	
d)	Result in inadequate emergency access?	Potentially Significant	

Transportation - Discussion

Issues: Transportation issues include traffic, access, circulation and safety. Vehicle, bicycle and pedestrian, and mass transit modes of transportation are all considered, as well as emergency vehicle access. Projects near the City's airport may also be considered for effects to air traffic patterns and safety.

The City General Plan Circulation Element contains policies addressing circulation, vehicle traffic, and alternative mode travel in the City. Vehicle traffic and alternative mode policies are also contained in other adopted City Planning documents, including the Growth Management ordinance, Pedestrian Master Plan, Bicycle Master Plan, Upper State Street Plan, etc., as well as regional transportation plans.

The Program Environmental Impact Report for the 2011 General Plan provides a citywide transportation impact assessment addressing forecasted growth to the year 2030.

Impact Evaluation Guidelines:

On September 27, 2013, Senate Bill (SB) 743 was signed into law, which creates a process to change the way that transportation impacts are analyzed under CEQA. SB 743 required the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to level of service (LOS) for evaluating transportation impacts. Under the new transportation guidelines, LOS, or vehicle delay, will no longer be considered an environmental impact under CEQA. OPR recommended vehicle miles traveled (VMT) as the most appropriate measure of project transportation impacts for land use plans. The updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018.

Under the new guidelines, VMT has been adopted as the most appropriate measure of transportation impacts under CEQA. The OPR's regulatory text indicates that a public agency may immediately commence implementation of the new transportation impact guidelines, and that the guidelines must be implemented statewide by July 1, 2020. The City of Santa Barbara has not yet adopted VMT specific guidelines and is in the process of updating its transportation-specific CEQA thresholds.

Vehicle and Alternate Mode Travel

- Cause an increase in vehicle traffic that is substantial in relation to the existing traffic load and street system capacity inconsistent with adopted City policy (see vehicle traffic thresholds below).
- Result in a substantial increase in future vehicle miles travelled beyond that identified for the City in the General Plan Program Environmental Impact Report transportation analysis (2011).
- Cause insufficiency in the transportation system, taking into account all modes of transportation.
- Conflict with the adopted transportation plan or policy pertaining to vehicle or transit systems.

Circulation and Traffic Safety

- Create potential hazards due to addition of traffic to a roadway that has design features (e.g., narrow width, roadside ditches, sharp curves, poor sight distance, inadequate pavement structure) or that supports uses that would be incompatible with substantial increases in traffic.
- Diminish or reduce effectiveness, adequacy, or safety of pedestrian, bicycle, or public transit circulation.
- Result in inadequate emergency access on-site or to nearby uses.
- Conflict with regional and local plans, policies, or ordinances regarding the circulation system, including all modes of transportation (vehicle, pedestrian, bicycle, and public transportation).

Transportation – Existing Conditions and Project Impacts

16.a) Bicycle/Pedestrian/Public Transit

Potentially Significant. Implementation of the CWPP would involve vegetation management-related traffic in order to meet wildfire risk reduction goals outlined in the proposed CWPP. Vegetation management could have the potential to temporarily obstruct roadways, bicycle paths, walkways, and transit routes. If communication infrastructure is adjacent to public roadways, bicycle paths, or walkways, maintenance activities could impede access. As such, further analysis is required to assess the proposed CWPP's potentially significant impacts. This issue will be further analyzed in the PEIR.

16.b) Vehicle Traffic

Potentially Significant. CEQA Guidelines Section 15064.3, subdivision (b), focuses on specific criteria (VMT), for determining the significance of transportation impacts. It is further organized into four subdivisions: (1) land-use projects, (2) transportation projects, (3) qualitative analysis, and (4) methodology. The proposed CWPP could have the potential to generate temporary vegetation management-related traffic and maintenance traffic. Further analysis is required to determine the CWPP's potentially significant impacts related to vehicle traffic under VMT. As such, this issue will be further analyzed in the PEIR.

16.c-d) Access/Circulation/Safety Hazards

Potentially Significant. The CWPP is not anticipated to involve physical changes to roadways. Vegetation management activities may occur in proximity to roadways, potentially causing short-term roadway closures. The PEIR will further evaluate the potential for the CWPP to substantially increase hazards due to traffic-related design features. Incompatible uses are not anticipated since typical maintenance equipment would be transported on standard City vehicles.

Similarly, implementation of the CWPP may involve activities that would have the potential to impede emergency access, such as temporary closure of travel lanes and generation of construction traffic affecting the capacity of adjacent roadways. As such, potentially significant impacts may occur as a result of CWPP implementation. Further analysis of this issue will be provided in the PEIR.

17. T a)	TRIBAL CULTURAL RESOURCES Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Level of Significance	Analyzed in Prior Document
	i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	Potentially Significant	
	ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Potentially Significant	

Tribal Cultural Resources - Discussion

Issues: <u>Tribal cultural resources</u> are subsurface deposits dating from Prehistoric or Historical time periods. Native American culture appeared along the channel coast over 10,000 years ago, and numerous villages of the Barbareno Chumash flourished in coastal plains now encompassed by the City.

Impact Evaluation Guidelines: Tribal cultural impacts are evaluated qualitatively by archeologists, historians, and tribal representatives, First, existing conditions on a site are assessed to identify whether important or unique resources exist, based on criteria specified in the CEQA *Guidelines* and City Master Environmental Assessment *Guidelines for Archaeological Resources and Historical Structures and Sites*, summarized as follows:

- Contains information needed to answer important scientific research questions and there exists a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with an important prehistoric or historic event or person.
- Constitutes a tribal cultural resource based on statutory criteria.

If important resources exist on the site, project changes are evaluated to determine whether they would substantially affect these important resources.

Tribal Cultural Resources – Existing Conditions and Project Impacts

17.i.– **ii**.) *Potentially Significant*. Implementation of the CWPP would result in ground disturbing activities on parcels identified throughout the project area. Such activities could potentially have an adverse effect on currently unrecorded, unknown historical, archaeological, or tribal cultural resources. Further tribal cultural resources analysis is required to determine whether the CWPP could potentially result in any adverse effects related to tribal cultural resources. These issues will be analyzed further in the PEIR.

18. W	WILDFIRE Would the project:	Level of Significance	Analyzed in Prior Document
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?	Beneficial Impact	
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Beneficial Impact	
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	No Impact	
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Potentially Significant	

Wildfire - Discussion

This section focuses on whether projects located in or near state responsibility areas (where the state has financial responsibility of preventing and suppressing fires), or lands classified as very high fire severity zones by local agencies, would:

- Substantially impair an adopted emergency response plan or emergency evacuation plan;
- Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

CAL FIRE publishes Fire Hazard Severity Zone Maps for all regions in California. The fire hazard measurement used as the basis for these maps includes the speed at which a wildfire moves, the amount of heat the fire produces, and most importantly, the burning fire brands that the fire sends ahead of the flaming front. Lead agencies and project proponents can review the CAL FIRE maps to determine whether a given project site will be subject to the new CEQA wildfire impacts analysis.

Wildfire—Existing Conditions and Project Impacts

18.a) *Beneficial Impact.* The CWPP provides a community-based guidance for mitigating wildfire risk. The CWPP reevaluates wildfire potential throughout the City's jurisdiction in accordance with fire behavior modeling software, all relevant datasets, and field site investigations. These evaluations would be used to improve both the emergency response plans and emergency evacuations plans of the City rather than impair them. As such, no impacts would occur.

18.b) *Beneficial Impact*. As previously discussed, the CWPP evaluates wildfire potential throughout the City's jurisdiction in accordance with fire behavior modeling software, all relevant datasets, and field site investigations. The CWPP would also reevaluate current hazard abatement programs (e.g., defensible space, vegetation management, code enforcement) and where necessary, would present policies and management actions to reduce wildland fire hazards and impacts throughout the City. In addition, the CWPP would account for slope, prevailing winds (e.g., Sundowner winds), and other factors when evaluating the efficiency of current hazard abatement programs. As such, the CWPP would have no impacts.

18.c) *No Impact.* Implementation of the CWPP would not require the installation of roads, fuel breaks, emergency water sources, power lines, or other utilities. In addition, the CWPP would effectively reduce wildfire risk throughout the City of Santa Barbara. As no installation or maintenance is needed, the CWPP would have no impacts.

18.d) *Potentially Significant*. Implementation of the proposed CWPP would involve fuel management practices through the removal of vegetation as well as controlled burns in areas with steep slopes, uphill of residential areas. These measures could result in an increase in surface flows because vegetation in these areas would no longer absorb a portion of the runoff in the area. In addition, slope stability could be compromised as vegetation in these areas would no longer stabilize the hillslopes. As a result, these actions could potentially exacerbate the potential for downslope flooding and landslides. However, implementation of BMPs during vegetation management activities (e.g., use of low-ground pressure equipment, protection of retained vegetation, retention of cut stumps, heavy equipment use restrictions, retention of overstory trees and mulch on the soil surface) will reduce the potential for increased runoff and slope instability. For prescribed burning, similar BMPs would be implemented and the quantity, size, and frequency of prescribed burns would be low. Based on these factors, the increase in runoff and decrease in slope stability would be minimal but may occur. Additional discussion regarding soils, slope stability, and runoff is discussed in Section 7 Geology and Soils and Section 9 Hydrology and Water Quality. As such, CWPP impacts would be considered potentially significant and will be addressed in the PEIR.

MANDATORY FINDINGS OF SIGNIFICANCE		YES	NO
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Х	
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	Х	
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Х	

a) Biological and Cultural Resources

Potentially Significant. As discussed in Section 4 (Biological Resources), implementation of the proposed CWPP could result in the reduction of habitat of a fish or wildlife species, cause a fish or wildfire population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. Further analysis is required to determine the *potentially significant impacts* to biological resources. Similarly, as discussed in Section 5 (Cultural Resources), the proposed CWPP could have the potential to adversely impact important prehistoric or historic resources. Further analysis is required to determine the potential to adversely impact to cultural resources.

b) **Cumulative Impacts**

Potentially Significant. Further analysis is required to determine the proposed CWPP's potential to have a considerable contribution to cumulative impacts. As such, potentially significant cumulative impacts on the environment will be further analyzed in the PEIR.

c) Other Environmental Effects

Potentially Significant. Further analysis on the proposed CWPP's potentially significant effects on humans (direct or indirect) is required. These issues will be further discussed in the PEIR.

LIST OF SOURCES USED IN PREPARATION OF THIS INITIAL STUDY

The following sources used in the preparation of this Initial Study are located at the Community Development Department, Planning Division, 630 Garden Street, Santa Barbara and are available for review upon request.

General Sources

California Building Code as adopted by City

California Emissions Estimator Model (CalEEMod)

California Environmental Quality Act (CEQA) & CEQA Guidelines

City of Santa Barbara Climate Action Plan and EIR Addendum (2012)

Envirostor web site, State Department of Toxic Substances Control

Erosion/Sediment Control Program, City of Santa Barbara (2012)

Farmland of Statewide Importance Map, California Resources Agency

General Plan, City of Santa Barbara, and General Plan Map

General Plan Certified Final Environmental Impact Report (2011) and Addenda

Geology Assessment for the City of Santa Barbara

Geotracker website, State Water Resources Control Board

Institute of Traffic Engineers Trip Generation Manual

Long Term Water Supply Plan (2011)

Local Coastal Plan (Main or Airport)

Master Environmental Assessment, MEA Guidelines, and MEA Maps

Regional Growth Impacts Study (1980)

Santa Barbara County APCD Scope and Content of Air Quality Sections in Environmental Documents (2017)

Santa Barbara Municipal Code & City Charter

Special District Map

Water Demand Factors Update Report (2009)

Zoning Ordinance & Zoning Map

Project-Specific Sources

- 14 CCR 15000–15387 and Appendices A through N. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- Bedsworth, L., D. Cayan, G. Franco, L. Fisher, and S. Ziaja. 2018. 2018. California's Fourth Climate Change Assessment, Statewide Summary Report. California Governor's Office of Planning and Research, Scripps Institution of Oceanography, California Energy Commission, and California Public Utilities Commission, coordinating agencies. Publication number: SUMCCCA4-2018-013. https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_ Reports-SUM-CCCA4-2018-013_Statewide_Summary_Report_ADA.pdf.
- CARB (California Air Resources Board). 2020. GHG Current California Emission Inventory Data. Accessed June 29, 2020. https://ww2.arb.ca.gov/ghg-inventory-data.
- CalEPA (California Environmental Protection Agency). 2020. List of Solid Waste Disposal Sites with Waste Constituents above Hazardous Waste Levels Outside the Waste Management Unit. Accessed June 2, 2020. https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/SiteCleanup-CorteseList-CurrentList.pdf.

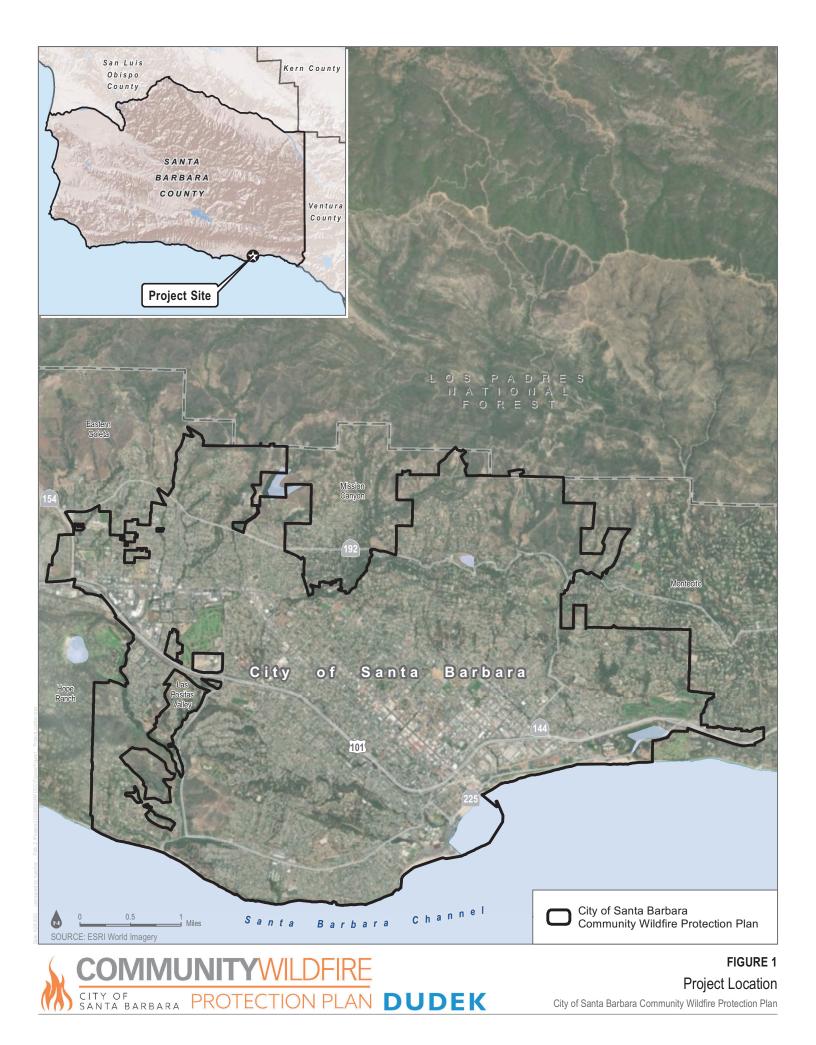
California Public Resources Code, Section 21000–21177. California Environmental Quality Act, as amended.

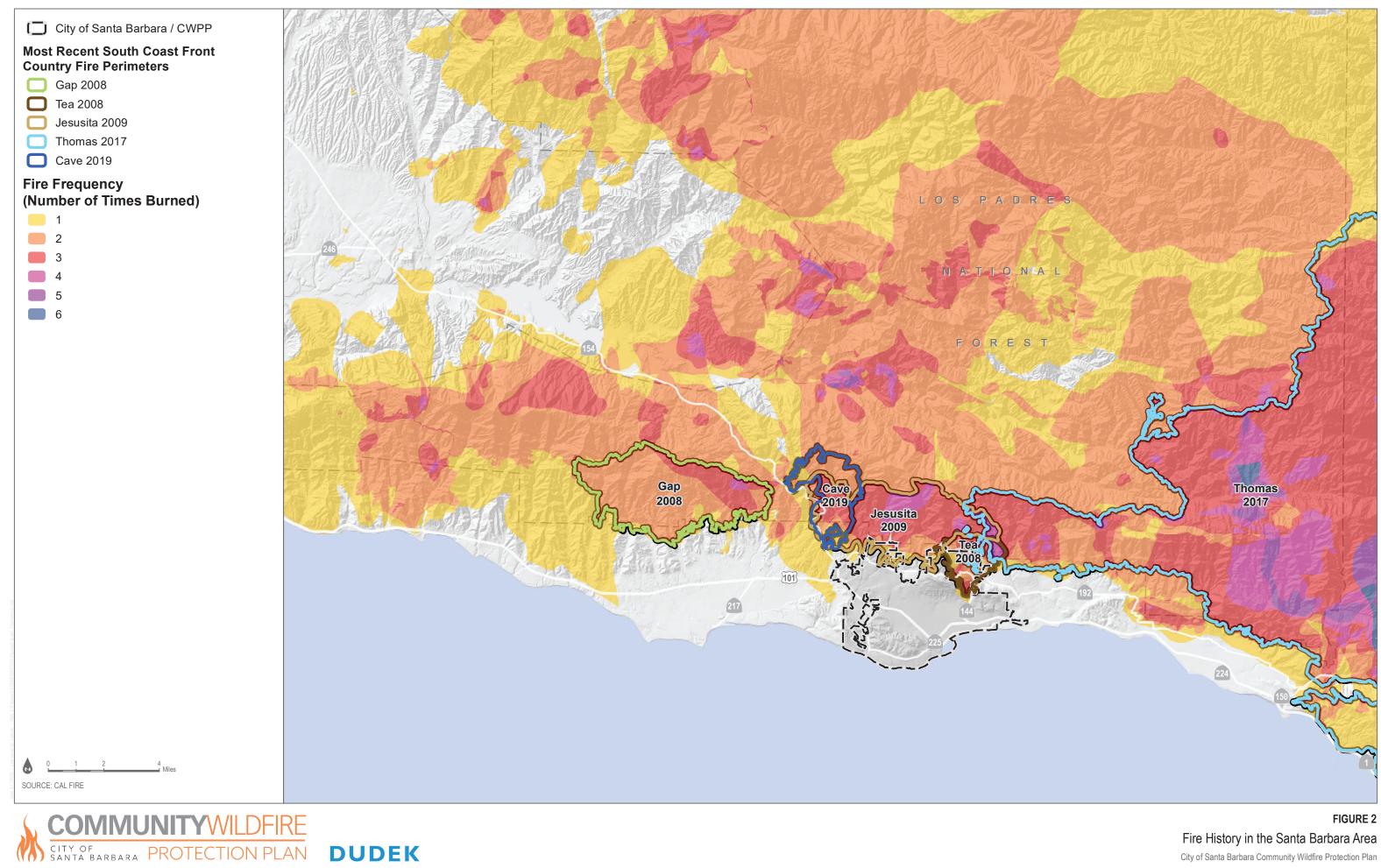
- Caltrans (California Department of Transportation). 1980. Fundamentals and Abatement of Highway Traffic Noise. September 1980.
- Caltrans. 1998. *Technical Noise Supplement A Technical Supplement to the Traffic Noise Analysis Protocol*. California Department of Transportation; Environmental Program; Environmental Engineering; Noise, Air Quality, and Hazardous Waste Management Office. October 1998. http://www.dot.ca.gov/hq/env/noise/pub/Technical% 20Noise%20Supplement.pdf.
- Caltrans. 2002. *Transportation-Related Earthborne Vibrations*. Report No. TAV-02-01-R9201. California Department of Transportation; Environmental Program; Environmental Engineering; Noise, Air Quality, and Hazardous Waste Management Office. February 20, 2002. http://www.dot.ca.gov/hq/env/noise/pub/TRANSPORTATION% 20RELATED%20EARTHBORNE%20VIBRATIONS.pdf.
- CDFW (California Department of Fish and Wildlife). 2019. "California Natural Community Conservation Plans" [map]. April 2019. Accessed October 3, 2019. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline
- City of Santa Barbara. 2004 EIR. *Final Program Environmental Impact Report Wildland Fire Plan*. City of Santa Barbara, Community Development Department and Fire Department. February 2004. Accessed September 30, 2019. https://www.santabarbaraca.gov/civicax/filebank/blobdload.aspx?BlobID=18330.

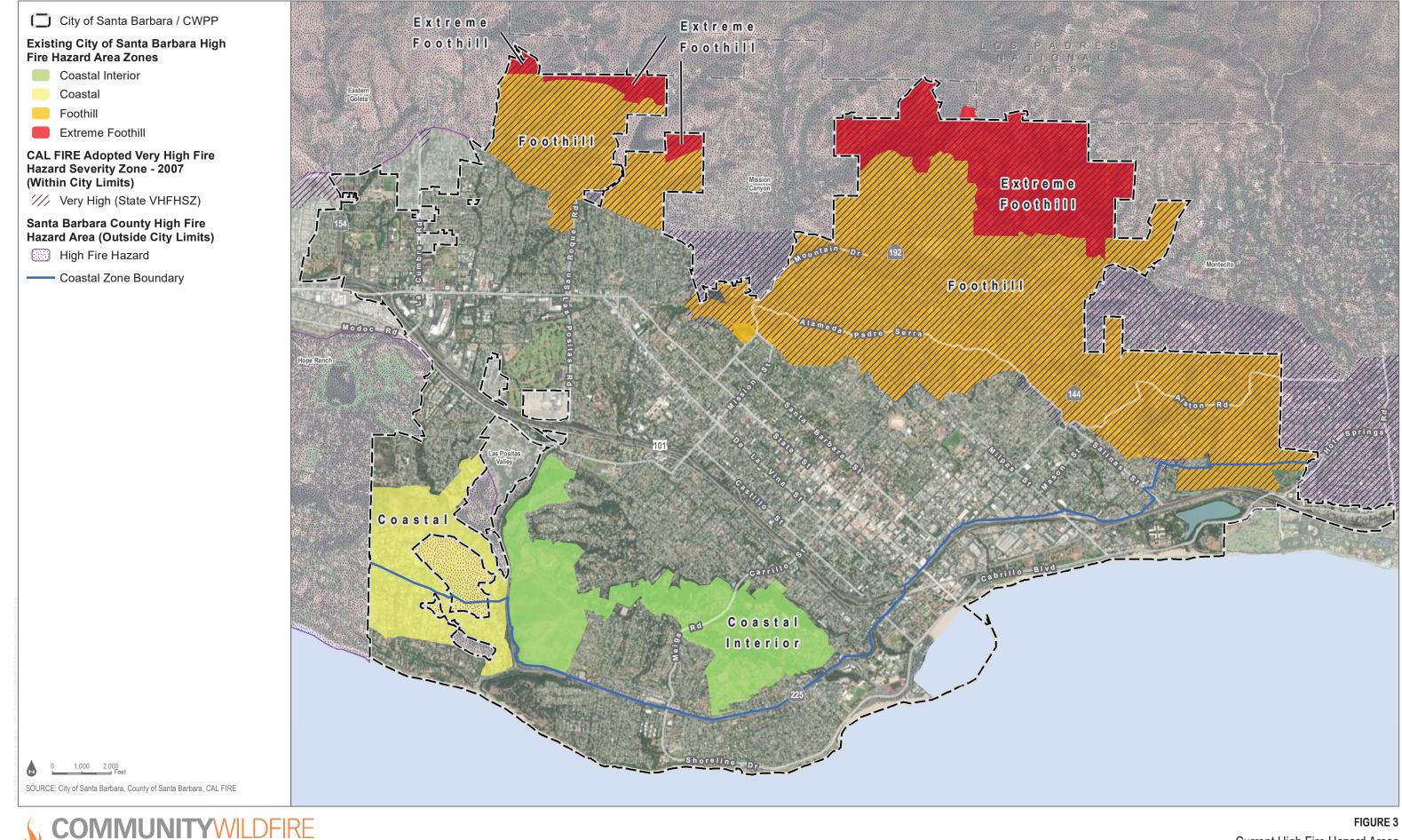
City of Santa Barbara. 2008. Vegetation (GIS Data).

- City of Santa Barbara. 2010. *Certified Final Program Environmental Impact Report for the Plan Santa Barbara General Plan Update*. SCH No. 2009011031. September 2010. Accessed on September 30, 2019. https://www.santabarbaraca.gov/civicax/filebank/blobdload.aspx?BlobID=16926.
- City of Santa Barbara. 2012. *City of Santa Barbara Climate Action Plan*. September 2012. Accessed June 2020. https://www.santabarbaraca.gov/civicax/filebank/blobdload.aspx?BlobID=17720.
- City of Santa Barbara. 2013. Santa Barbara General Plan, Safety Element. Accessed on September 30, 2019. https://www.santabarbaraca.gov/civicax/filebank/blobdload.aspx?BlobID=38671.
- City of Santa Barbara. 2013. 2013 Emergency Management Plan. Accessed on June 17, 2020. https://www.santabarbaraca.gov/civicax/filebank/blobdload.aspx?BlobID=39294.
- City of Santa Barbara. 2013. *Storm Water BMP Guidance Manual*. Accessed on June 28, 2020. https://www.santabarbaraca.gov/civicax/filebank/blobdload.aspx?BlobID=16665_
- City of Santa Barbara. 2019. Coastal Land Use Plan, 4.1 Biological Resources. Accessed on September 30, 2019. https://civicaweb.santabarbaraca.gov/civicax/filebank/blobdload.aspx?BlobID=202917
- City of Santa Barbara. 2020a. Map Analysis and Printing System. http://maps.santabarbaraca.gov/ Html5Viewer/Index.html?configBase=/Geocortex/Essentials/REST/sites/City_of_Santa_Barbara_Public/ viewers/SantaBarbaraPublic/virtualdirectory/Resources/Config/Default.
- City of Santa Barbara. 2020b. "Groundwater." Accessed June 4, 2020. https://www.santabarbaraca.gov/gov/depts/pw/resources/system/sources/groundwater.asp.
- City of Santa Barbara. 2020c. *Storm Water BMP Guidance Manual*. Accessed on June 28, 2020. https://www.santabarbaraca.gov/civicax/filebank/blobdload.aspx?BlobID=226227.
- City of Santa Barbara. 2020d. *Water Supply Management Report 2018-2019 Water Year*. City of Santa Barbara, Water Resources Division, Public Works Department. January 28, 2020.
- Dudek. 2014. *Wildland Fire Evacuation Procedures Analysis*. July 2014. Accessed April 30, 2020. https://www.santabarbaraca.gov/civicax/filebank/blobdload.aspx?BlobID=226239.
- DTSC (California Department of Toxic Substance Control). 2020. EnvirStor Database. Accessed June 2, 2020. https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES, FUDS&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+% 28CORTESE%29.
- EPA (U.S. Environmental Protection Agency). 1971. Noise from Construction Equipment and Operations, Building Equipment and Home Appliances. Prepared by Bolt, Beranek & Newman, Boston, Massachusetts. Washington, D.C.: EPA.
- FEMA (Federal Emergency Management Agency). 2008. FEMA Flood Map Service Center: Search By Address, Map #: 06083C1387J, effective 09/28/2018; 06083C1386H, effective on 11/04/2015; 06083C1391J, effective on 09/28/2018; 06083C1379H, effective on 11/04/2015; 06083C1378H, effective on 11/04/2015; and 06083C1383H, effective on 11/04/2015. Accessed on September 30, 2019. https://msc.fema.gov/portal/search?AddressQuery= march%20airforce%20base#searchresultsanchor.
- FEMA. 2020. ICS -100C: Introduction to the Incident Command System, ICS 100. Accessed on June 3, 2020. https://training.fema.gov/is/courseoverview.aspx?code=IS-100.c.
- McCreary D. 2004. *Fire in California's Oak Woodlands*. University of California Cooperative Extension. June 2004. https://ucanr.edu/sites/fire/files/288191.pdf.
- Nishikawa, T., ed. 2018. Santa Barbara and Foothill Groundwater Basins Geohydrology and Optimal Water Resources Management—Developed using Density Dependent Solute Transport and Optimization Models. U.S. Geological Survey, Scientific Investigations Report 2018-5059. Accessed May 2020. https://doi.org/10.3133/sir20185059.
- San Diego Natural History Museum. 2020. "Frequently Asked Questions." Accessed June 4, 2020. https://www.sdnhm.org/ science/paleontology/resources/frequent/.

- Santa Barbara County Water Agency. 2020. Foothill Groundwater Basin. January. Accessed June 9, 2020. http://www.countyofsb.org/uploadedImages/pwd/Content/Water/WaterAgency/Foothill%20Web.jpg.
- SBCAPCD (Santa Barbara County Air Pollution Control District). 2016. 2016 Ozone Plan. Accessed on September 30, 2019. https://www.ourair.org/wp-content/uploads/Final-2016-Ozone-PLan -Approved-October-20-2016.pdf.
- SBAPCD and SBCAG (Santa Barbara County Air Pollution Control District and Santa Barbara County Association of Governments). 2015. 2013 Clean Air Plan. Draft. March 2015. Accessed June 9, 2020. https://www.ourair.org/wp-content/uploads/2015-03bd-2013cap-att4.pdf.
- SBCAPCD. 2020. *Meeting Air Quality Standards*. 2016 Ozone Plan. Accessed on June 19, 2020. https://www.ourair.org/air-quality-standards/.
- SBCFD (Santa Barbara County Fire Department). 2018. "Major Wildfires in Santa Barbara County 1955-2018." Accessed March 12, 2020. https://www.sbcfire.com/wp-content/uploads/2018/08/Major-Wildfires-in-Santa-Barbara-County-1955-2016.pdf.
- SBFD (Santa Barbara Fire Department). 2004. *City of Santa Barbara Fire Department Wildland Fire Plan*. Accessed on September 30, 2019. https://www.santabarbaraca.gov/civicax/filebank/blobdload.aspx?BlobID=14539.
- SBUSD (Santa Barbara Unified School District). 2019. "Schools." Accessed on October 1, 2019. https://www.sbunified.org/schools/.
- SWRCB (State Water Resources Control Board). 2020. GeoTracker. Accessed June 2, 2020. https://geotracker.waterboards.ca.gov/.
- UCSB (University of California, Santa Barbara). 1928. Aerial Photography Information. Flight C_311C, Frame B-13. January 1, 1928.
- USGS (U.S. Geological Survey). 1998. Geohydrology of Storage Unit III and a Combined Flow Model of the Santa Barbara and Foothill Ground-water Basins, Santa Barbara County. California Water-Resources Investigations Report 97-412 by J.R. Freckleton, P. Martin, and T. Nishikawa. Accessed June 9, 2020. https://pubs.er.usgs.gov/publication/wri974121.
- USGS. 2015. "Santa Barbara, CA" [map]. 1:24,000. 7.5-Minute Series (Topographic). Reston, Virginia: USGS. Accessed March 10, 2020. https://www.sciencebase.gov/catalog/item/58260099e4b01fad86e705ec.
- USGS. 2020a. "Rocks and Layers." Accessed June 4, 2020. https://pubs.usgs.gov/gip/fossils/rocks-layers.html.
- USGS. 2020b. "Sustainable Groundwater." Accessed June 28, 2020. https://ca.water.usgs.gov/sustainable-groundwatermanagement/water-quality-california.html.
- VCFD (Ventura County Fire Department. 2020. "VCFD Determines Cause of the Thomas Fire." Accessed March 12, 2020. https://vcfd.org/news/335-vcfd-determines-cause-of-the-thomas-fire.



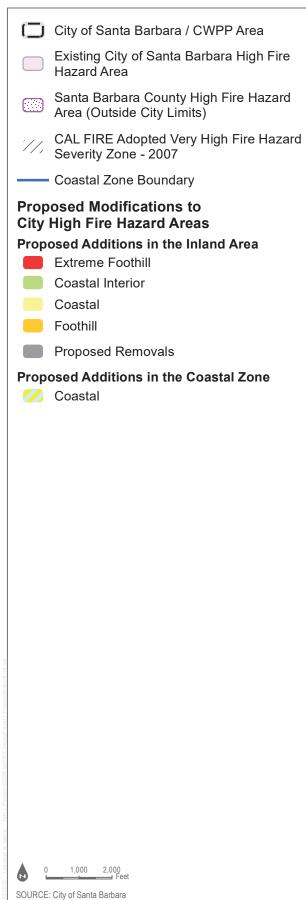


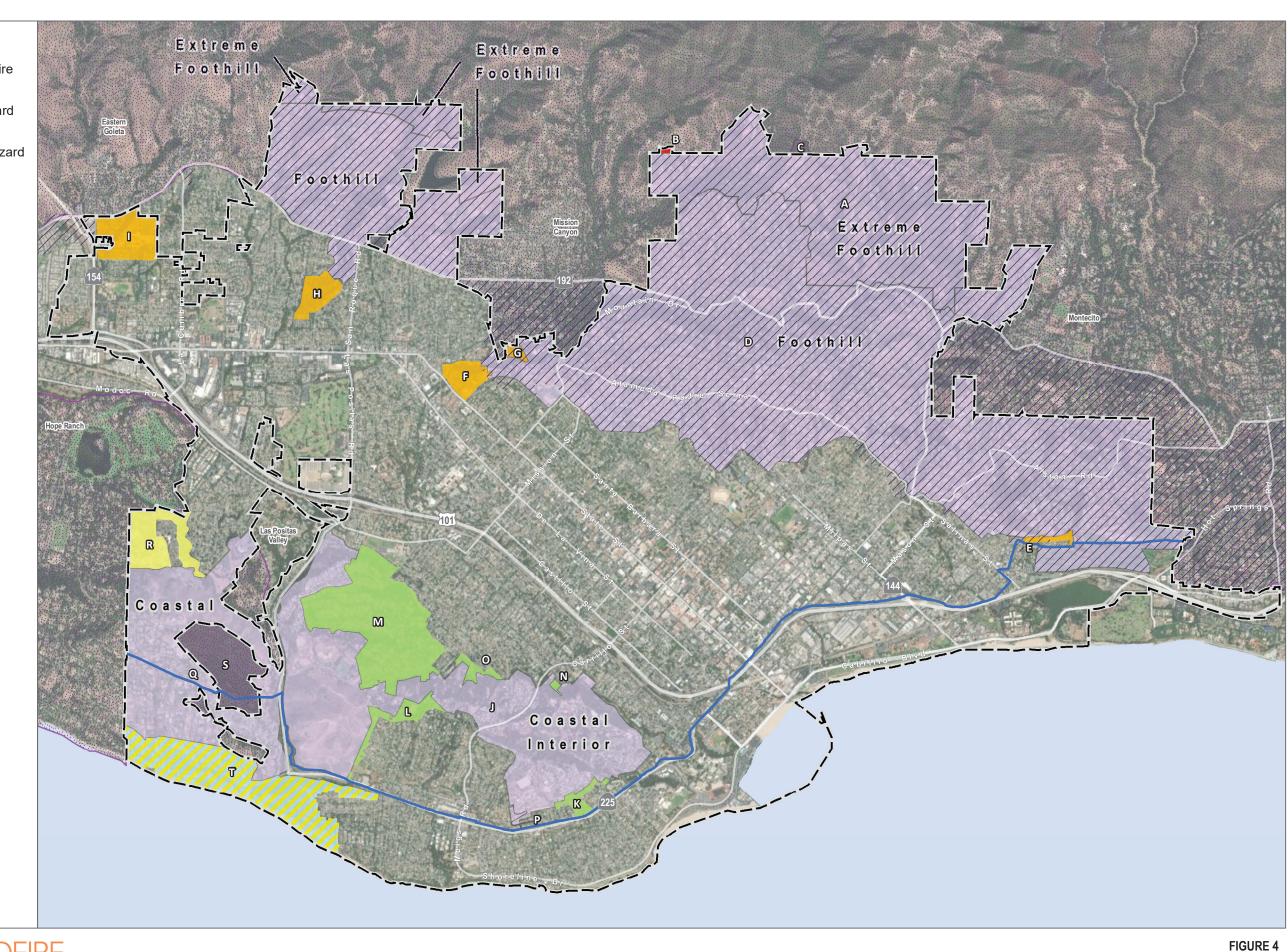


CITY OF SANTA BARBARA PROTECTION PLAN

DUDEK

Current High Fire Hazard Areas





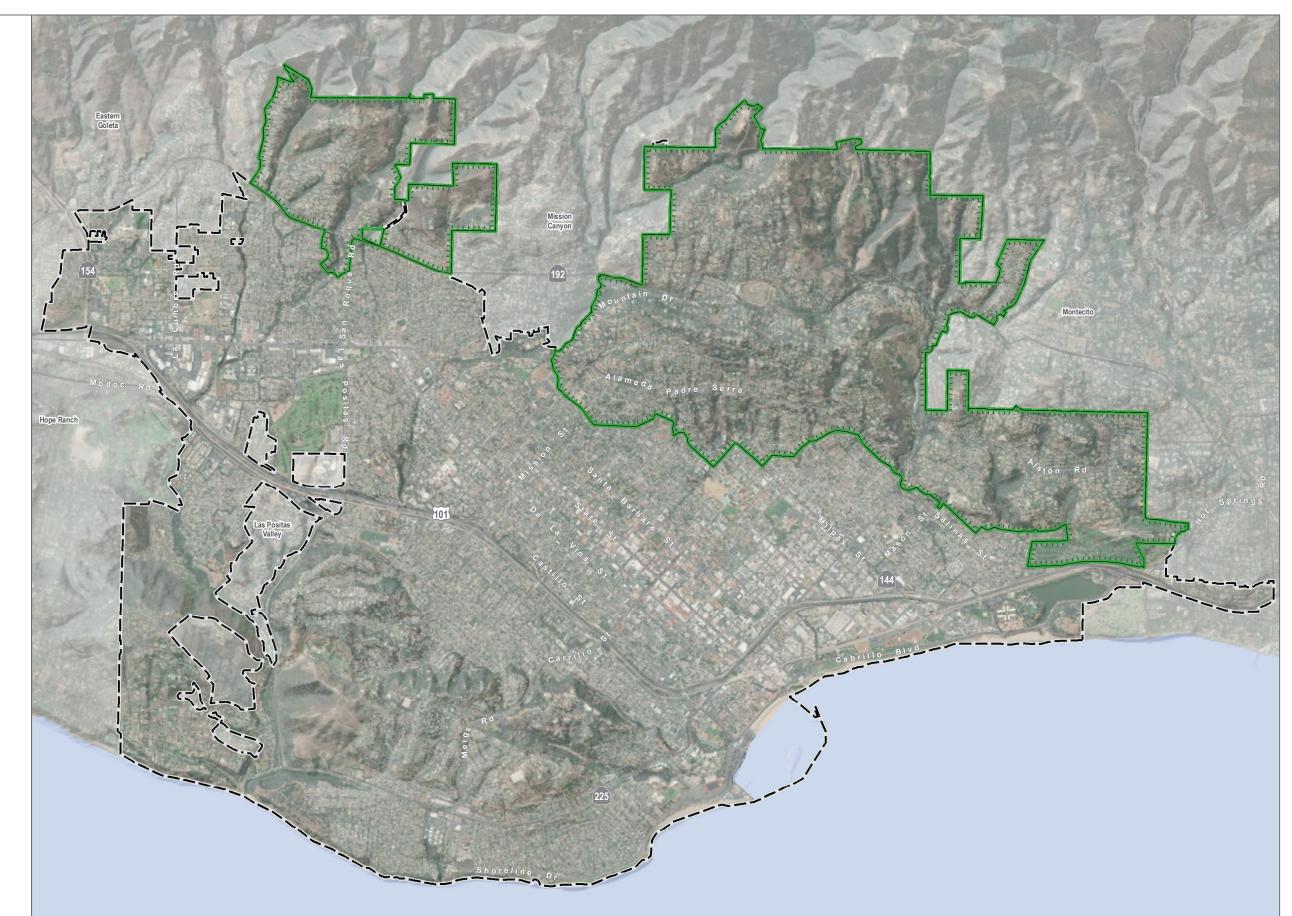
COMMUNITYWILDFIRE CITY OF SANTA BARBARA PROTECTION PLAN DUDEK

Proposed Modifications to City's High Fire Hazard Areas



City of Santa Barbara / CWPP Area

Wildland Fire Supression Assessment District (WFSAD) Boundary

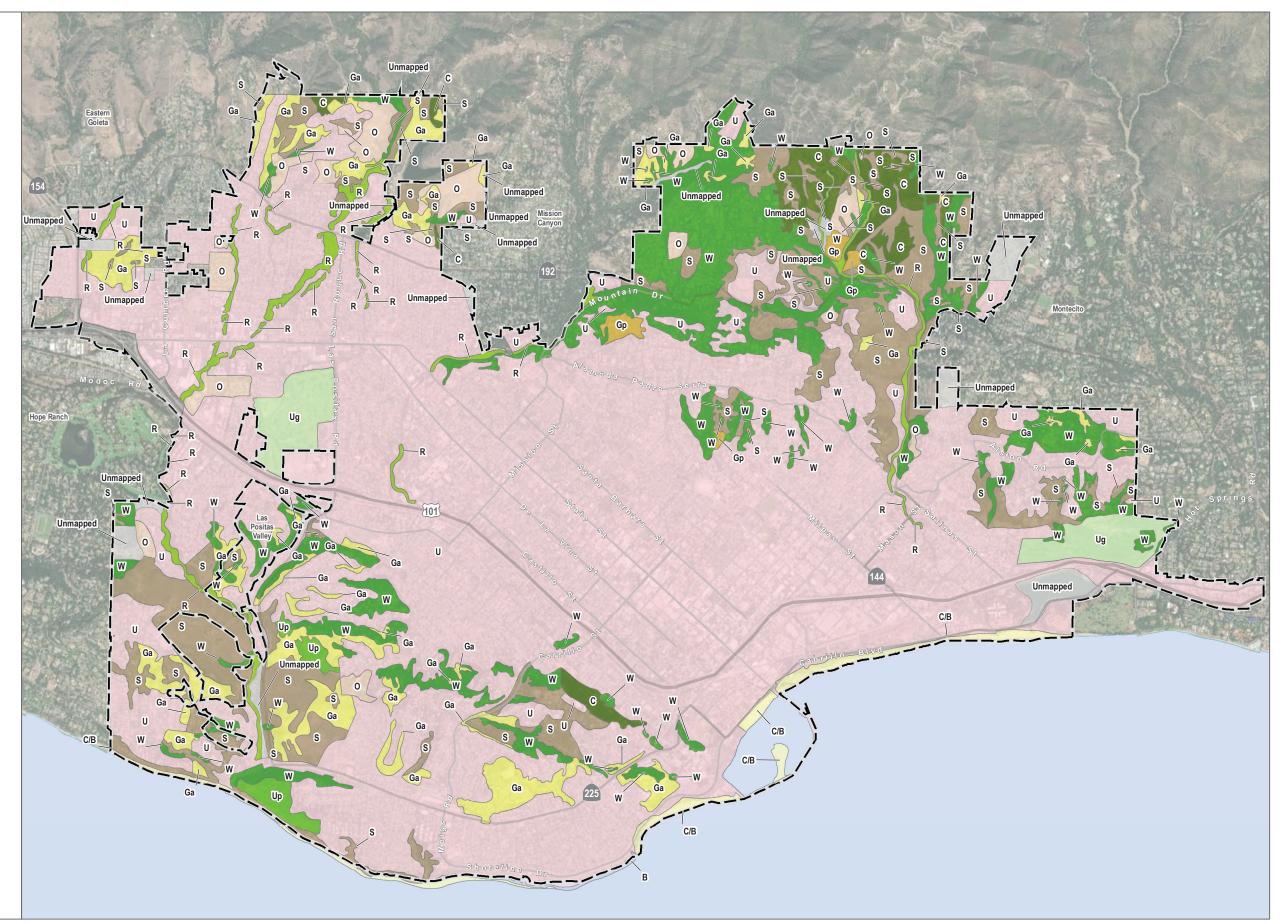


0 1,000 2,000 Feet SOURCE: City of Santa Barbara



FIGURE 5 City Wildland Fire Suppression Assessment District





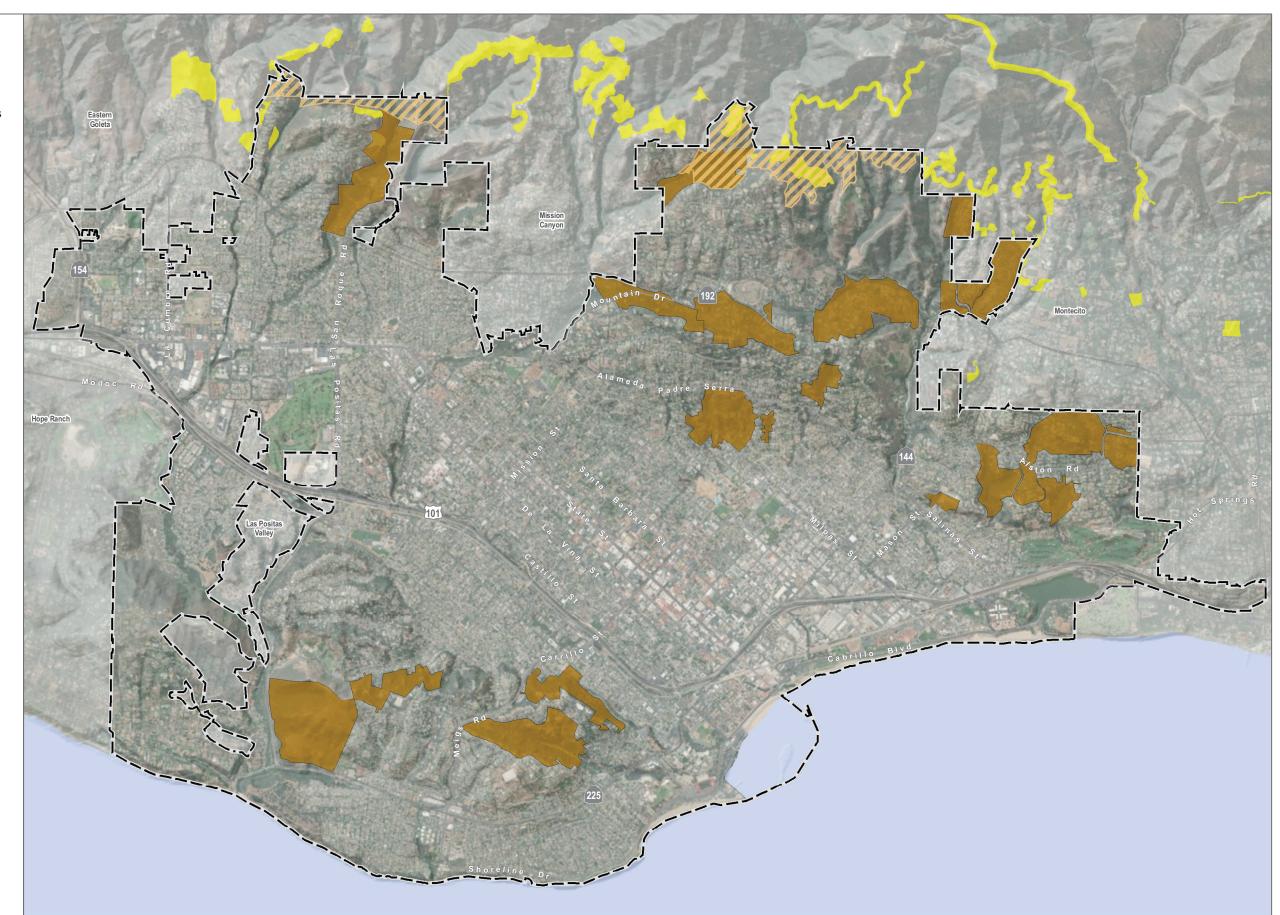
B 1,000 2,000 Feet



FIGURE 6

Santa Barbara City Vegetation Types

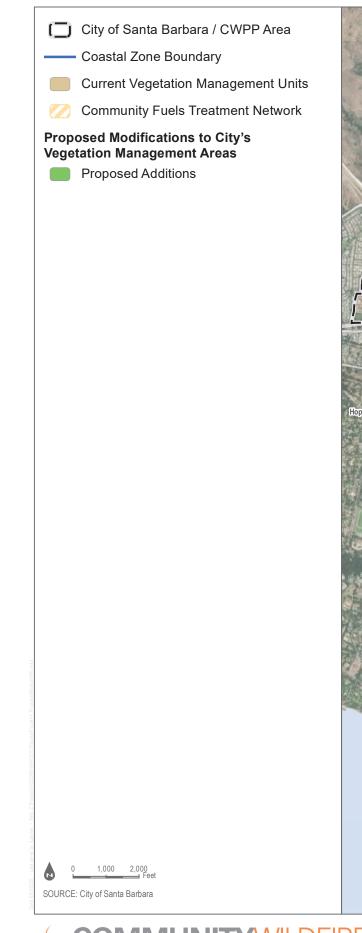
- City of Santa Barbara / CWPP
- Current Vegetation Management Units
- Community Fuels Treatment Network
- Adjacent Vegetation Management Areas

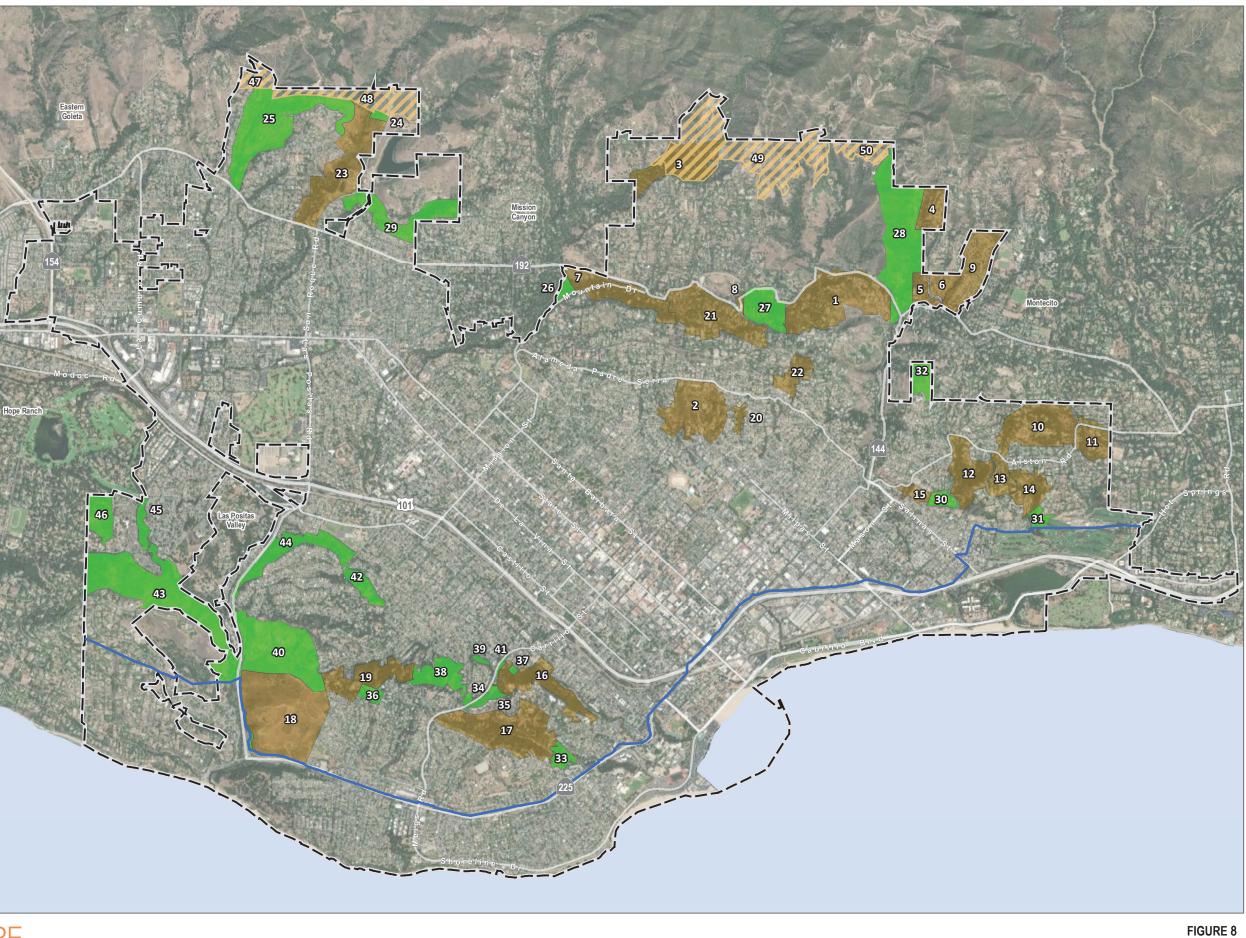


0 1,000 2,000 Feet SOURCE: City of Santa Barbara



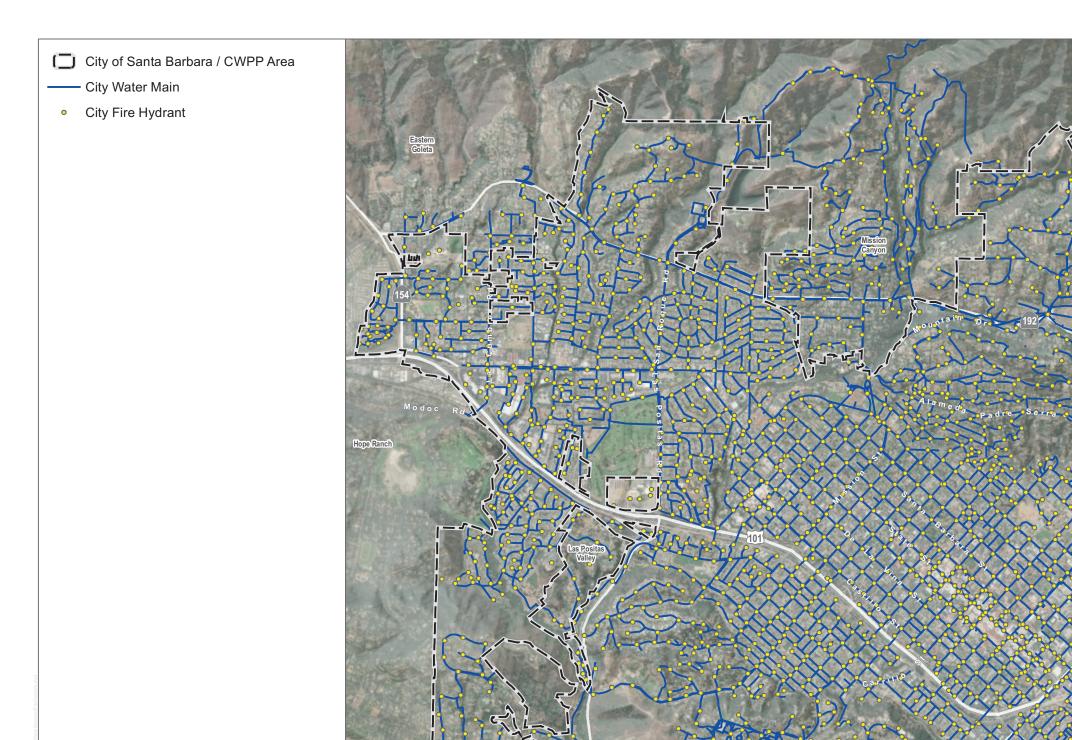
FIGURE 7 Current Vegetation Management Units, Community Fuels Treatment Network, and Adjacent Vegetation Management Areas





COMMUNITYWILDFIRE CITY OF SANTA BARBARA PROTECTION PLAN DUDEK

Proposed Modifications to City's Vegetation Management Areas



C 1,000 2,000 Feet SOURCE: City of Santa Barbara



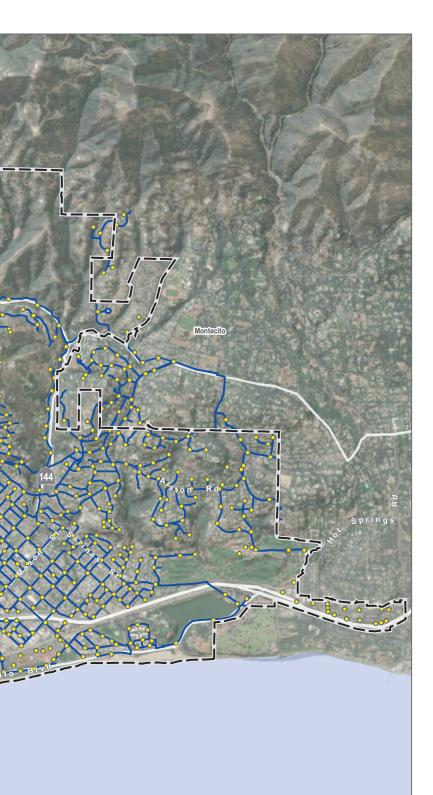


FIGURE 9 City Water Mains and Fire Hydrants