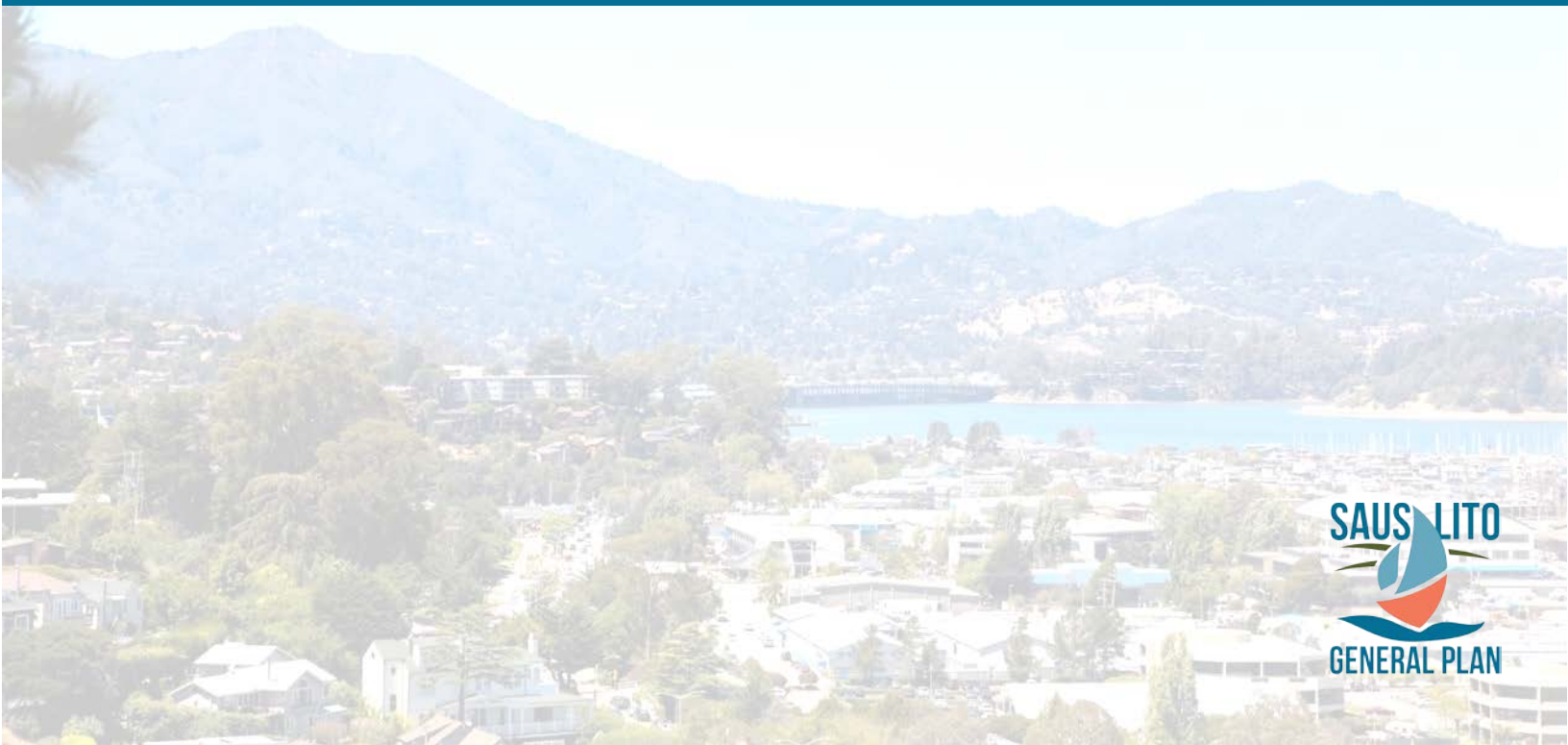
FIRSTCARBON SOLUTIONS™

City of Sausalito
2040 General Plan EIR

June 4, 2020 | DRAFT REPORT (SCH # 2019100322)



SAUSALITO GENERAL PLAN

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius (Centigrade)
°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
A	Arks
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing material
ACP	Alternative Compliance Plan
AD	*anno domini*
ADA	Americans with Disabilities Act
ADT	average daily traffic
ADU	Accessory Dwelling Unit
AFY	acre-feet per year
AIA	Airport Influence Area
AIC	Archaeological Information Center
AIRFA	American Indian Religious Freedom Act
ALUC	Airport Land Use Commission
APCD	Air Pollution Control District
APE	Area of Potential Effect
APN	Assessor's Parcel Number
AQMD	Air Quality Management District
ARB	California Air Resources Board
ARPA	Archaeological Resources Protection Act
AST	aboveground storage tank
ASTM	American Society of Testing and Materials
ATC	ATC Group Services, LLC
ATCM	Airborne Toxic Control Measures
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
BAU	Business as Usual
BC	before Christ

BCDC	San Francisco Bay Conservation and Development Commission
BCE	before Common Era
BCF	billion cubic feet
BCF/year	billion cubic feet per year
BMP	Best Management Practice
BMR	below-market rate
BVOC	biogenic volatile organic compound
C^2ES	Center for Climate and Energy Solution
CA FID	California Facility Inventory Database
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Occupational Health and Safety Administration
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CASQA	California Stormwater Quality Association
CBC	California Building Standards Code
CC	Central Commercial
CCCC	California Climate Change Center
CCR	California Code of Regulations
CCTS	Central California Taxonomic System
CDCP	California Drought Contingency Plan
CDFW	California Department of Fish and Wildlife
CE	Common Era
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations
CH_4	methane
CHL	California Historical Landmarks
CHRIS	California Historical Resources Information System
CMP	Congestion Management Plan

CN	Neighborhood Commercial
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNPSEI	California Native Plant Society Electronic Inventory
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
CPHI	California Points of Historical Interest
CPUC	California Public Utilities Code
CR	Mixed Residential and Commercial
CRA	Cultural Resources Assessment
CRHR	California Register of Historical Resources
CS	Shopping Center
CUPA	Certified Unified Program Agency
CW	Commercial Waterfront
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DBH	diameter at breast height
DHS	Department of Homeland Security
DMP	Drought Management Program
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
DWR	Department of Water Resources
du	dwelling unit
du/acre	dwelling unit per acre
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act
EMF	electromagnetic field
EMS	Emergency Medical Services
EPA	United States Environmental Protection Agency
EOP	Emergency Operations Plan
ESL	Environmental Screening Level
FAA	Federal Aviation Administration
FAR	floor area ratio

FCS	FirstCarbon Solutions
FEMA	Federal Emergency Management Agency
FESA	Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FAR	Floor Area Ratio
FRAP	Fire and Resource Assessment Program
GGNRA	Golden Gate National Recreation Area
GHAD	Geologic Hazard Abatement District
GHG	greenhouse gas
GPAC	General Plan Advisory Committee
gpm	gallons per minute
GPS	Global Positioning System
GWh	gigawatt-hours
GWh/y	gigawatt-hours per year
GWP	global warming potential
H	Houseboats
HAP	Hazardous Air Pollutants
HazMat	Hazardous Materials
HAZNET	Hazardous Waste Information System
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HCP/NCCP	Habitat Conservation Plan/Natural Community Conservation Plan
HFC	hydrofluorocarbon
HOV/HOT	High Occupancy Vehicle/High Occupancy Toll
HR	High Density Residential
HRA	Health Risk Assessment
HRI	California Historic Resources Inventory
HVAC	heating, ventilation, and air conditioning
I	Industrial
IPCC	United Nations Intergovernmental Panel on Climate Change
ISO	Insurance Services Office
ISTEA	Intermodal Surface Transportation Efficiency Act
kV	kilovolt
kW	kilowatts

LAFCo	Local Agency Formation Commission
LCFS	Low Carbon Fuel Standard
L_{dn}	day/night average sound level
LED	light emitting diode
L_{eq}	equivalent sound level
LEV	low-emission vehicle
LID	Low Impact Development
LOS	Level of Service
LR	Low Density Residential
LRA	Local Responsibility Area
LSE	load-serving entities
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MCE	Marin Clean Energy
MCSTOPPP	Marin County Stormwater Pollution Prevention Program
mgd	million gallons per day
MHR	Medium High Density Residential
MLD	Most Likely Descendant
MLR	Medium Low Density Residential
MM	Mitigation Measure
MMI	Modified Mercalli Intensity
MMRP	Mitigation Monitoring and Reporting Program
MMWD	Marin Municipal Water District
mph	miles per hour
MPO	Metropolitan Planning Organization
MR	Medium Density Residential
MTC	Metropolitan Transportation Commission
MTS	Metropolitan Transportation System
M_W	Maximum Moment Magnitude
MW	megawatt
MWD	Metropolitan Water District of Southern California
MWELO	Model Water Efficient Landscape Ordinance
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEHRP	National Earthquake Hazards Reduction Program

NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NHM	Natural History Museum of Los Angeles County
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
NOAA Fisheries	National Marine Fisheries Service
NOC	Notice of Completion
NOI	Notice of Intent
NOP	Notice of Preparation
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
O_3	ozone
OA	Open Area
OAL	Office of Administrative Law
OEHHA	California Office of Environmental Health Hazard Assessment
OHWM	ordinary high water mark
ONAC	Federal Office of Noise Abatement and Control
OS	Open Space
OSHA	Occupational Safety and Health Administration
PCB	polychlorinated biphenyl
pCi/L	picocuries per liter
PDA	Priority Development Area
PFC	perfluorocarbon
PG&E	Pacific Gas and Electric Company
Phase I ESA	Phase I Environmental Site Assessment
PI	Public Institutional
PM_{10}	particulate matter, including dust, 10 micrometers or less in diameter
$PM_{2.5}$	particulate matter, including dust, 2.5 micrometers or less in diameter
PM_x	particulate matter

PP	Public Parks
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PR	Planned Development-High Density Residential
PRC	Public Resources Code
PVC	polyvinyl chloride
RBRA	Richardson's Bay Regional Agency
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
Recology	Integrated Resource Recovery Company
RecycleSmart	Central Contra Costa County Solid Waste Authority
REL	Reference Exposure Level
RMH	Medium-High Density Residential
RMP	Risk Management Plan
rms	root mean square
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RS-10	Single-Family Residential
RWQCB	Regional Water Quality Control Board
SF_6	sulfur hexafluoride
SO_2	sulfur dioxide
SFBAAB	San Francisco Bay Area Air Basin
SR	State Route
State Water Board	California State Water Resources Control Board
SUSMP	Standard Urban Storm Water Mitigation Plan
SWEEP	State Water Efficiency and Enhancement Program
SWIS	Solid Waste Information System
SWPPP	Storm Water Pollution Prevention Plan
SWQMP	Storm Water Quality Management Plan
TAC	toxic air contaminants
TAM	Transportation Authority of Marin
TAMDM	Transportation Authority of Marin Demand Model
TCM	transportation control measures
TDM	Transportation Demand Management
TDS	total dissolved solids

TDV	Time Dependent Valuation
TEA-21	Transportation Equity Act for the 21st Century
Tg	teragram
therms/y	therms per year
TIA	Traffic Impact Analysis
TIS	Traffic Impact Study
TMA	Transportation Management Association
TMDL	Total Maximum Daily Load
TOD	Transit Oriented Development
UBC	Uniform Building Code
URM	Unreinforced Masonry
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
V/C	volume to capacity ratio
VDECS	Verified Diesel Emission Control Strategies
VHFHSZ	Very High Fire Hazard Severity Zone
VLR	Very Low Density Residential
VMT	vehicle miles traveled
VOC	volatile organic compounds
W	Waterfront
WDR	Waste Discharge Requirements
WQMP	Water Quality Management Plan
WSA	Water Supply Assessment
WWTP	Wastewater Treatment Plant
ZEV	Zero Emission Vehicle

EXECUTIVE SUMMARY

PURPOSE

This Draft Environmental Impact Report (Draft EIR) was prepared in accordance with and in fulfillment of the California Environmental Quality Act (CEQA) and the State CEQA Guidelines. As described in CEQA Guidelines Section 15121(a), an EIR is a public information document that assesses the potentially significant environmental impacts of a project. CEQA requires that an EIR be prepared by the agency with primary responsibility over the approval of a project (the lead agency). The City of Sausalito (city) is the lead agency for the proposed City of Sausalito 2040 General Plan (proposed 2040 General Plan). Public agencies are charged with the duty to consider and minimize environmental impacts of proposed development where feasible and have the obligation to balance economic, environmental, and social factors.

This Draft EIR has been prepared according to CEQA requirements to evaluate the potential environmental impacts associated with the implementation of the proposed 2040 General Plan. This Draft EIR also discusses alternatives to the proposed 2040 General Plan and proposes mitigation measures that would offset, minimize, or otherwise avoid potentially significant environmental impacts. This Draft EIR is intended to provide decision-makers and the public with information that enables consideration of the environmental consequences of the proposed 2040 General Plan, and has been prepared in accordance with CEQA (California Public Resources Code [PRC] § 21000 *et seq.*) and the CEQA Guidelines (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3).

PROJECT SUMMARY

PROJECT LOCATION

The City of Sausalito is in southern Marin County, California. The 2.1-square mile city is located on the shores of the San Francisco Bay with a population of 7,416 people.[1] The city is bound by San Francisco Bay and Richardson's Bay to the east, Golden Gate National Recreation Area to the west and south, and Marin City to the northwest. Regional access to the City of Sausalito is provided via Highway 101, as well as by passenger ferry service to and from San Francisco.

The Sausalito General Plan Planning Area (Planning Area) consists of all properties located within the incorporated boundary of the city, as well as lands within the city's Sphere of Influence (SOI). The Planning Area is comprised of approximately 1,730 acres. Approximately 981 acres are located within the city limits, 143 acres of which encompass water areas. Approximately 749 acres are

[1] California Department of Finance. 2019. Population Estimate for Cities, Counties, and the State January 1, 2018 and 2019. Website: http://dof.ca.gov/Forecasting/Demographics/Estimates/E-1/. Accessed March 20, 2020.

located within the SOI, 645 acres of which encompass water areas. The SOI, established by the Marin County Local Agency Formation Committee, contains land that may ultimately be annexed into the city.

PROJECT DESCRIPTION

The City of Sausalito's comprehensive General Plan was initially prepared in 1995. Since 1995, the Circulation and Parking Element was updated in 1999, the Housing Element was updated in 2012 and 2015, and the Health and Safety Element was updated in 2019. The Sausalito 2040 General Plan Update is a focused effort to refine the objectives, policies, and programs within the existing General Plan to reflect current regulations and help guide and shape the community over the next 20 years. As part of the update process, the objectives, policies, and programs of the Marinship Specific Plan have been incorporated into the Land Use and Growth Management, Waterfront, Community Design, Historic and Cultural Preservation, Circulation and Parking, Health, Safety, and Community Resilience, Sustainability, and Economic Elements.

Refer to Section 2, Project Description, for a complete description of the proposed 2040 General Plan.

PROJECT OBJECTIVES

For the purpose of this Draft EIR analysis, the following objectives have been identified for the proposed 2040 General Plan:

- Reflect the current goals and vision expressed by Sausalito residents, businesses, decision-makers, and other stakeholders.
- Address issues and concerns identified by Sausalito residents, businesses, decision-makers, and other stakeholders.
- Maintain Sausalito's small-scale residential neighborhoods, recognizing their geographical, architectural, and cultural diversity, while supporting a range of housing options.
- Recognize and perpetuate the defining characteristics of Sausalito, including its scenic features, natural and built environment, its history, and its diverse culture.
- Recognize the importance of Sausalito's economic vitality, encourage businesses and activities that have high municipal revenue generation potential and low environmental impact.
- Adopt policies in all of the elements of the General Plan that guide the direction of the physical and economic development of the city in a way that is economically sustainable.
- Preserve Sausalito's waterfront as a natural resource while carefully balancing the needs and desires of water-dependent businesses, water-related activities, and amenities for the public, including access to and from the water.
- Recognize the Marinship's role and importance to the San Francisco Bay Area and the city's cultural, historic, and economic diversity, and quality of life; encourage industrial, arts and water-dependent or water-related activities in the Marinship and support these activities

through the inclusion of compatible businesses and uses that can adapt to changing economic conditions.

- Ensure fiscal sustainability to provide an appropriate level of public services including upgrading, modernizing, and maintaining Sausalito's infrastructure.
- Safeguard the natural environment and ensure community health, safety, and resilience, including addressing the inherent risks of climate change, sea level rise, and subsidence.
- Provide a variety of circulation options through and within Sausalito.
- Manage tourism to minimize impacts on the community while supporting a quality visitor experience.
- Engage proactively with regional and State-level policy efforts to ensure that Sausalito's vision, goals, and quality of life are sustained in the long term.
- Seek innovative and sustainable solutions to sea level rise in collaboration with County and regional agencies and innovators, to sustain the quality of life in Sausalito and its active waterfront uses.
- Address new requirements of State law.

SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

The proposed 2040 General Plan would not result in any significant unavoidable impacts.

SUMMARY OF ALTERNATIVES TO THE PROPOSED 2040 GENERAL PLAN

Below is a summary of the alternatives to the proposed 2040 General Plan considered in Section 4, Alternatives to the Proposed 2040 General Plan.

NO PROJECT ALTERNATIVE/1995 GENERAL PLAN

Under this alternative, the 1995 General Plan would remain as the comprehensive planning document, including focused updates in the Circulation and Parking Element (amended in 1999), the Housing Element (2015), and the Health and Safety Element (2019). Development would occur as allowed under the 1995 General Plan and the Marinship Specific Plan (revised 1989). It is reasonable to expect that the city would develop the Sausalito Planning Area under the 1995 General Plan under existing land uses if the proposed 2040 General plan is not approved.

INCREASED MIXED-USE HOUSING ALTERNATIVE

Under this alternative, the potential for increased residential development would occur by assuming greater residential mixed-use development in specific Central Commercial (CC), Mixed Residential & Commercial (CR), and Neighborhood Commercial (CN) land use designation areas throughout the Planning Area. This could occur through rezoning to increase the allowable density and/or through other development incentives. Development under the Increased Mixed-Use Housing Alternative could result in up to 375 new residential units. The overall effect would be an increase of 71 housing units at buildout as compared to the proposed 2040 General Plan.

Commercial and industrial development would be the same to that of the proposed 2040 General Plan (587,961 new square feet of commercial uses and 146,124 new square feet of industrial uses; total of 734,085 square feet).

DECREASED COMMERCIAL AND INDUSTRIAL DEVELOPMENT ALTERNATIVE

Under this alternative, commercial and industrial development would see an increase from existing conditions, but to a lesser degree than the buildout projected in General Plan 2040. The land use designation areas throughout the Planning Area associated this alternative include: Central Commercial (CC), Mixed Residential & Commercial (CR), Neighborhood Commercial (CN), Waterfront (W), and Industrial (I). This alternative would be more reflective of the city's recent development activity, particularly in industrial areas of the Marinship and commercial areas in the downtown.

Under this alternative, residential buildout would be consistent with that projected in General Plan 2040 and could result in up to 304 new residential units. Under this alternative, a total of 529,133 new square feet of commercial uses and 116,899 new square feet of industrial uses could be developed. This alternative would result in a net decrease of 58,798 square feet of commercial development and a net decrease of 29,225 square feet of industrial development (88,023 square feet in total) at buildout as compared to the proposed 2040 General Plan.

AREAS OF CONTROVERSY

Pursuant to CEQA Guidelines Section 15123(b), a summary section must address areas of controversy known to the lead agency, including issues raised by agencies and the public, and it must also address issues to be resolved, including the choice among alternatives and whether or how to mitigate significant effects.

In accordance with CEQA Guidelines Section 15082, the City of Sausalito circulated a Notice of Preparation (NOP) of an EIR for the proposed 2040 General Plan on October 17, 2019, to trustee and responsible agencies, the State Clearinghouse (SCH), and the public. The 30-day public review period for the NOP was extended by the city and ended on December 9, 2019. A scoping meeting was held on November 4, 2019, which was attended by 12 members of the public.

The NOP identified potential for significant impacts on the environment related to the following topical areas:

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Energy
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Utilities and Service Systems

The NOP also identified certain topical areas where impacts were found to be less than significant because the proposed 2040 General Plan's characteristics would not create such impacts. These topical areas include agriculture and forestry resources and mineral resources, and are evaluated in Section 6, Effects Found not to be Significant in this Draft EIR.

DISAGREEMENT AMONG EXPERTS

This Draft EIR contains substantial evidence to support all conclusions presented herein. It is possible that there will be disagreement among various parties regarding these conclusions, although the City of Sausalito is not aware of any disputed conclusions at the time of this writing. Both the CEQA Guidelines and case law clearly provide standards for treating disagreement among experts. Where evidence and opinions conflict on an issue concerning the environment, and the lead agency knows of these controversies in advance, the EIR must acknowledge the controversies, summarize conflicting opinions of the experts, and include sufficient information to allow the public and decision makers to make an informed judgment about environmental consequences of the proposed 2040 General Plan.

POTENTIALLY CONTROVERSIAL ISSUES

It is also possible that evidence will be presented during the 45-day statutory Draft EIR public review period that may create disagreement. Decision makers would consider this evidence during the public hearing process.

In rendering a decision on a project where there is disagreement among experts, decision makers are not obligated to select the most environmentally preferable viewpoint. Decision makers are vested with the ability to choose whatever viewpoint is preferable and need not resolve a dispute among experts. In their proceedings, decision makers must consider comments received concerning adequacy of the Draft EIR and address any objections raised in these comments. However, decision makers are not obligated to follow any directives, recommendations, or suggestions presented in comments on the Draft EIR, and can certify the Final EIR without needing to resolve disagreements among experts.

PUBLIC REVIEW OF THE DRAFT EIR

Upon completion of the Draft EIR, the City of Sausalito filed a Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (PRC § 21161). Concurrent with the NOC, this Draft EIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft EIR in accordance with Public Resources Code 21092(b)(3). During the public review period, the Draft EIR, including the technical appendices, is available for review on the city's website (https://www.sausalitogeneralplan.org/). Due to the COVID-19 crisis, city facilities are currently closed to the public. Once public access to city facilities resumes, a hard copy of the EIR can be viewed at the following location (please check with the facility for hours of operation):

City of Sausalito
Community Development Department
420 Litho Street
Sausalito, CA 94965

Agencies, organizations, and interested parties have the opportunity to comment on the Draft EIR during the 45-day public review period. Written comments on this Draft EIR should be addressed to:

City of Sausalito
Community Development Department
Lilly Whalen, Community Development Director
420 Litho Street
Sausalito, CA 94965
Email: lwhalen@sausalito.gov

Submittal of electronic comments in Microsoft Word or Adobe PDF format is encouraged. Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review by the commenting agencies at least 10 days prior to the public hearing before the Sausalito Planning Commission on the proposed 2040 General Plan, at which the certification of the Final EIR will be considered. Comments received and the responses to comments will be included as part of the record for consideration by decision makers for the proposed 2040 General Plan.

EXECUTIVE SUMMARY MATRIX

Table ES-1 below summarizes impacts, mitigation measures, and resulting level of significance after mitigation for the relevant environmental issue areas evaluated for the proposed 2040 General Plan. The table is intended to provide an overview; narrative discussions for issue areas are included in the corresponding section of this Draft EIR. Table ES-1 is included in the Draft EIR as required by CEQA Guidelines Section 15123(b)(1).

TABLE ES-1: EXECUTIVE SUMMARY MATRIX

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
SECTION 3.1—AESTHETICS, LIGHT, AND GLARE		
Impact AES-1: Development facilitated by the proposed 2040 General Plan would not have a substantial adverse effect on a scenic vista.	No mitigation is necessary.	Less Than Significant
Impact AES-2: Implementation of the proposed 2040 General Plan would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State scenic highway.	No mitigation is necessary.	Less Than Significant
Impact AES-3: Development facilitated by the proposed 2040 General Plan would not substantially degrade the existing visual character or quality of public views in non-urbanized areas.	No mitigation is necessary.	Less Than Significant
Impact AES-4: Implementation of the proposed 2040 General Plan would not substantially conflict with applicable zoning and other regulations governing scenic quality in urbanized areas.	No mitigation is necessary.	Less Than Significant
Impact AES-5: Development facilitated by the proposed 2040 General Plan would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	No mitigation is necessary.	Less Than Significant
Impact AES-6: Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to aesthetics.	No mitigation is necessary.	Less Than Significant
SECTION 3.2—AIR QUALITY		
Impact AIR-1: Implementation of the proposed 2040 General Plan would not conflict with or obstruct implementation of the applicable air quality plan.	No mitigation is necessary.	Less Than Significant
Impact AIR-2: Implementation of the proposed 2040 General Plan would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard.	No mitigation is necessary.	Less Than Significant
Impact AIR-3: Development facilitated by the proposed 2040 General Plan would not expose sensitive receptors to substantial pollutant concentrations.	No mitigation is necessary.	Less Than Significant
Impact AIR-4: Development facilitated by the proposed 2040 General Plan would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	No mitigation is necessary.	Less Than Significant

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Impact AIR-5: Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would result in significant cumulative impacts with respect to air quality.	No mitigation is necessary.	Less Than Significant
SECTION 3.3—BIOLOGICAL RESOURCES		
Impact BIO-1: Development facilitated by the proposed 2040 General Plan would not have a substantial adverse effect, either directly or through habitat modifications, on candidate, sensitive, or special-status species.	No mitigation is necessary.	Less Than Significant
Impact BIO-2: Development facilitated by the proposed 2040 General Plan would not have a substantial adverse effect on riparian habitats, other sensitive natural communities, federally protected wetlands, or Waters of the United States and/or State, through direct removal, filling, or hydrological interruption.	No mitigation is necessary.	Less Than Significant
Impact BIO-3: Development facilitated by the proposed 2040 General Plan would not 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.	No mitigation is necessary.	Less Than Significant
Impact BIO-4: Development facilitated by the proposed 2040 General Plan would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	No mitigation is necessary.	Less Than Significant
Impact BIO-5: Development facilitated by the proposed 2040 General Plan would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.	No mitigation is necessary.	Less Than Significant
Impact BIO-6: Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to biological resources.	No mitigation is necessary.	Less Than Significant
SECTION 3.4—CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES		
Impact CUL-1: Development facilitated by the proposed 2040 General Plan would not result in a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.	No mitigation is necessary.	Less Than Significant
Impact CUL-2: Development facilitated by the proposed 2040 General Plan would not result in a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	No mitigation is necessary.	Less Than Significant
Impact CUL-3: Implementation of the proposed 2040 General Plan has the potential to result in disturbance of human remains, including those interred outside of formal cemeteries.	No mitigation is necessary.	Less Than Significant

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Impact CUL-4: Implementation of the proposed 2040 General Plan has the potential to cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code Section 5020.1(k).	No mitigation is necessary.	Less Than Significant
Impact CUL-5: Implementation of the proposed 2040 General Plan has the potential to cause a substantial adverse change in the significance of a tribal cultural 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.	No mitigation is necessary.	Less Than Significant
Impact CUL-6: Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to cultural or tribal cultural resources.	No mitigation is necessary.	Less Than Significant
SECTION 3.5—ENERGY		
Impact ENER-1: Development facilitated by the proposed 2040 General Plan would not result in the wasteful, inefficient, or unnecessary consumption of energy during project construction or operation, including transportation energy.	No mitigation is necessary.	Less Than Significant
Impact ENER-2: Implementation of the proposed 2040 General Plan would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.	No mitigation is necessary.	Less Than Significant
Impact ENER-3: Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to energy resources.	No mitigation is necessary.	Less Than Significant
SECTION 3.6—GEOLOGY, SOILS, AND SEISMICITY		
Impact GEO-1: Development facilitated by the proposed 2040 General Plan would not directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death from seismic events.	No mitigation is necessary.	Less Than Significant
Impact GEO-2: Development facilitated by the proposed 2040 General Plan would not result in a significant impact related to development on unstable geologic units or soil, or result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse.	No mitigation is necessary.	Less Than Significant
Impact GEO-3: Development facilitated by the proposed 2040 General Plan would not result in the construction of structures on expansive soils (soils with shrink-swell potential), creating substantial direct or indirect risks to life or property.	No mitigation is necessary.	Less Than Significant

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Impact GEO-4: Development facilitated by the proposed 2040 General Plan would not result in substantial soil erosion or the loss of topsoil.	No mitigation is necessary.	Less Than Significant
Impact GEO-5: Development facilitated by the proposed 2040 General Plan would not place septic tanks or alternative wastewater disposal systems in areas where soils are not capable of supporting such uses.	No mitigation is necessary.	Less Than Significant
Impact GEO-6: Development facilitated by the proposed 2040 General Plan would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	No mitigation is necessary.	Less Than Significant
Impact GEO-7: Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to geology, soils, seismicity, or paleontological resources.	No mitigation is necessary.	Less Than Significant
SECTION 3.7—GREENHOUSE GAS EMISSIONS		
Impact GHG-1: Development facilitated by the proposed 2040 General Plan would not directly or indirectly generate GHG emissions that may have a significant impact on the environment.	No mitigation is necessary.	Less Than Significant
Impact GHG-2: Development facilitated by the proposed 2040 General Plan would not conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions.	No mitigation is necessary.	Less Than Significant
Impact GHG-3: Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to GHG emissions.	No mitigation is necessary.	Less Than Significant
SECTION 3.8—HAZARDS AND HAZARDOUS MATERIALS		
Impact HAZ-1: Development facilitated by the proposed 2040 General Plan would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	No mitigation is necessary.	Less Than Significant
Impact HAZ-2: Development facilitated by the proposed 2040 General Plan would not 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.	No mitigation is necessary.	Less Than Significant
Impact HAZ-3: Development facilitated by the proposed 2040 General Plan may result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within ¼-mile of an existing or proposed school.	No mitigation is necessary.	Less Than Significant

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Impact HAZ-4: Implementation of the proposed 2040 General Plan could result in development on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.58 and, as a result, create a significant hazard to the public or environment.	No mitigation is necessary.	Less Than Significant
Impact HAZ-5: Development facilitated by the proposed 2040 General Plan would not impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	No mitigation is necessary.	Less Than Significant
Impact HAZ-6: Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to hazards and hazardous materials.	No mitigation is necessary.	Less Than Significant
SECTION 3.9—HYDROLOGY AND WATER QUALITY		
Impact HYD-1: Development facilitated by the proposed 2040 General Plan would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	No mitigation is necessary.	Less Than Significant
Impact HYD-2: Development facilitated by the proposed 2040 General Plan would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	No mitigation is necessary.	Less Than Significant
Impact HYD-3: Development facilitated by the proposed 2040 General Plan would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site.	No mitigation is necessary.	Less Than Significant
Impact HYD-4: Development facilitated by the proposed 2040 General Plan would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.	No mitigation is necessary.	Less Than Significant
Impact HYD-5: Development facilitated by the proposed 2040 General Plan would not 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.	No mitigation is necessary.	Less Than Significant
Impact HYD-6: Development facilitated by the proposed 2040 General Plan would not impede or redirect flood flows.	No mitigation is necessary.	Less Than Significant
Impact HYD-7: Development facilitated by the proposed 2040 General Plan may be located in flood hazard or tsunami zones and may result in a release of pollutants due to project site inundation.	No mitigation is necessary.	Less Than Significant

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Impact HYD-8: Development facilitated by the proposed 2040 General Plan would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	No mitigation is necessary.	Less Than Significant
Impact HYD-9: Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to hydrology and water quality.	No mitigation is necessary.	Less Than Significant
SECTION 3.10—LAND USE		
Impact LUP-1: Development facilitated by the proposed 2040 General Plan would not physically divide an established community.	No mitigation is necessary.	Less Than Significant
Impact LUP-2: Implementation of the proposed 2040 General Plan would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	No mitigation is necessary.	Less Than Significant
Impact LUP-3: Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to land use.	No mitigation is necessary.	Less Than Significant
SECTION 3.11—NOISE		
Impact NOI-1: Implementation of the proposed 2040 General Plan would not generate a substantial temporary or permanent increase in ambient noise levels in excess of standards established by the local general plan, noise ordinance, or applicable standards of other agencies.	No mitigation is necessary.	Less Than Significant
Impact NOI-2: Development facilitated by the proposed 2040 General Plan would not generate excessive groundborne vibration or groundborne noise levels.	No mitigation is necessary.	Less Than Significant
Impact NOI-3: Implementation of the proposed 2040 General Plan would not result in cumulatively substantial increases in ambient noise levels and vibration in excess of standards established by the local general plan, noise ordinance, or applicable standards of other agencies.	No mitigation is necessary.	Less Than Significant
SECTION 3.12—POPULATION AND HOUSING		
Impact POP-1: Development facilitated by the proposed 2040 General Plan would not induce substantial unplanned population growth either directly or indirectly (for example, through extension of roads or other infrastructure) and would not displace a substantial number of people requiring the construction of new housing. This impact is less than significant.	No mitigation is necessary.	Less Than Significant

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Impact POP-2: Development facilitated by the proposed 2040 General Plan would not cumulatively induce substantial unplanned population growth either directly or indirectly and would not cumulatively displace a substantial number of people requiring the construction of new housing. This impact is less than significant.	No mitigation is necessary.	Less Than Significant
SECTION 3.13—PUBLIC SERVICES AND RECREATION		
Impact PSR-1: Development facilitated by the proposed 2040 General Plan would not result in the provision of or need for new or physically altered fire protection facilities, police protection facilities, school facilities, and library facilities, the construction or operation of which could cause significant environmental impacts.	No mitigation is necessary.	Less Than Significant
Impact PSR-2: Implementation of the proposed 2040 General Plan would not 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.	No mitigation is necessary.	Less Than Significant
Impact PSR-3: Implementation of the proposed 2040 General Plan would include or require the construction or expansion of parks and other recreational facilities, which might have an adverse physical effect on the environment.	No mitigation is necessary.	Less Than Significant
Impact PSR-4: Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to fire protection facilities, police protection facilities, school facilities, library facilities, parks, and recreational facilities.	No mitigation is necessary.	Less Than Significant
SECTION 3.14—TRANSPORTATION		
Impact TRANS-1: Implementation of proposed 2040 General Plan would not conflict with a program, plan, ordinance, or policy of the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	No mitigation is necessary.	Less Than Significant
Impact TRANS-2: Development facilitated by the proposed 2040 General Plan would not conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b).	No mitigation is necessary.	Less Than Significant
Impact TRANS-3: Development facilitated by the 2040 General Plan would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	No mitigation is necessary.	Less Than Significant
Impact TRANS-4: Implementation of the proposed 2040 General Plan would not result in inadequate emergency access.	No mitigation is necessary.	Less Than Significant

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Impact TRANS-5: Development facilitated by the 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to transportation.	No mitigation is necessary.	Less Than Significant
SECTION 3.15—UTILITIES AND SERVICE SYSTEMS		
Impact UTIL-1: The proposed 2040 General Plan would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	No mitigation is necessary.	Less Than Significant
Impact UTIL-2: Sufficient water supplies available to serve development facilitated by the proposed 2040 General Plan and reasonably foreseeable future development during normal, dry and multiple dry years.	No mitigation is necessary.	Less Than Significant
Impact UTIL-3: The wastewater treatment would have adequate capacity to serve the proposed 2040 General Plan's projected demand in addition to the provider's existing commitments.	No mitigation is necessary.	Less Than Significant
Impact UTIL-4: Development facilitated by the proposed 2040 General Plan would not 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.	No mitigation is necessary.	Less Than Significant
Impact UTIL-5: Implementation of the proposed 2040 General Plan would comply with federal, State and local statutes and regulations related to solid waste.	No mitigation is necessary.	Less Than Significant
Impact UTIL-6: Development facilitated by the proposed 2040 General Plan in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to water supply, wastewater, solid waste, and storm drain facilities.	No mitigation is necessary.	Less Than Significant
SECTION 3.16—WILDFIRE		
Impact WILD-1: Implementation of the proposed 2040 General Plan would not result in the exposure of people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.	No mitigation is necessary.	Less Than Significant
Impact WILD-2: Development facilitated by the proposed 2040 General Plan in or near State responsibility areas or lands classified as very high fire hazard severity zones would not substantially impair an adopted emergency response plan or emergency evacuation plan.	No mitigation is necessary.	Less Than Significant
Impact WILD-3: Development facilitated by the proposed 2040 General Plan in areas located in or near State responsibility areas or lands classified as very high fire hazard severity zones would not substantially expose	No mitigation is necessary.	Less Than Significant

IMPACTS	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
future occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire, due to slope, prevailing winds, and other factors.		
Impact WILD-4: Implementation of the proposed 2040 General Plan in areas located in or near State responsibility areas or lands classified as very high fire hazard severity zones may require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities); however, the installation and maintenance of such infrastructure would not substantially exacerbate fire risk or result in significant temporary or ongoing impacts to the environment.	No mitigation is necessary.	Less Than Significant
Impact WILD-5: Development facilitated by the proposed 2040 General Plan in areas located in or near State responsibility areas or lands classified as very high fire hazard severity zones would not substantially 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.	No mitigation is necessary.	Less Than Significant
Impact WILD-6: Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to wildfire.	No mitigation is necessary.	Less Than Significant

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1.0 INTRODUCTION

This Draft Environmental Impact Report (Draft EIR) was prepared in accordance with and in fulfillment of the California Environmental Quality Act (CEQA) and the State CEQA Guidelines. As described in CEQA Guidelines Section 15121(a), an EIR is a public information document that assesses the potentially significant environmental impacts of a project. CEQA requires that an EIR be prepared by the agency with primary responsibility over the approval of a project (the lead agency). The City of Sausalito (city) is the lead agency for the proposed City of Sausalito 2040 General Plan (proposed 2040 General Plan). Public agencies are charged with the duty to consider and minimize environmental impacts of proposed development where feasible and have the obligation to balance economic, environmental, and social factors.

1.1 PURPOSE OF THE EIR

The City of Sausalito, as lead agency, determined that the proposed 2040 General Plan is a "project" under CEQA. CEQA requires the preparation of an EIR prior to approving any project that may have a significant impact on the environment. For the purposes of CEQA, the term "project" refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines § 15378[a]).

This Draft EIR has been prepared according to CEQA requirements to evaluate the potential environmental impacts associated with the implementation of the proposed 2040 General Plan. This Draft EIR also discusses alternatives to the proposed 2040 General Plan and proposes mitigation measures that would offset, minimize, or otherwise avoid potentially significant environmental impacts. This Draft EIR is intended to provide decision-makers and the public with information that enables consideration of the environmental consequences of the proposed 2040 General Plan, and has been prepared in accordance with CEQA (California Public Resources Code [PRC] § 21000 *et seq.*) and the CEQA Guidelines (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3).

1.2 TYPE OF EIR

The State CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This Draft EIR has been prepared as a Program EIR pursuant to CEQA Guidelines Section 15168. Section 15168 states:

> A Program EIR is an EIR that may be prepared on a series of actions that can be characterized as one large project and are related either:
>
> 1. Geographically,
> 2. As 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."

A program-level analysis considers the broad environmental effects of the proposed project. This Draft EIR will be used to evaluate subsequent projects and activities under the proposed 2040 General Plan. This Draft EIR is intended to provide the information and environmental analysis necessary to assist public agency decision-makers in considering approval of the proposed 2040 General Plan, but not to the level of detail to consider approval of subsequent development projects that may occur after adoption of the proposed 2040 General Plan.

Additional environmental review under CEQA may be required for subsequent projects and would be generally based on the subsequent project's consistency with the proposed 2040 General Plan and the analysis in this Draft EIR, as required under CEQA. It may also be determined that some future projects or infrastructure improvements may be exempt from environmental review. When individual subsequent projects or activities are proposed under the proposed 2040 General Plan, the lead agency that would approve and/or implement the individual project would examine the projects or activities to determine whether their effects were adequately analyzed in this Program EIR (CEQA Guidelines § 15168). If the projects or activities would have no effects beyond those disclosed in this Draft EIR, no further CEQA compliance would be required.

1.3 INTENDED USES OF THE EIR

This Draft EIR is intended to evaluate the environmental impacts of the adoption and implementation of the proposed 2040 General Plan. The document will serve as a source of information in the review of subsequent planning and development proposals, including subsequent environmental review of development projects, for infrastructure provision and individual development proposals, and for public facilities to serve new development.

1.4 AGENCIES AND APPROVALS

The term "Responsible Agency" includes all public agencies other than the lead agency that have discretionary approval power over the project or an aspect of the project (CEQA Guidelines § 15381). For the purpose of CEQA, a "Trustee" agency has jurisdiction by law over natural resources that are held in trust for the people of the State of California (CEQA Guidelines § 15386). While no Responsible Agencies or Trustee Agencies are responsible for approvals associated with adoption of the proposed 2040 General Plan, implementation of future projects within the Sausalito Planning Area may require permits or approvals from Trustee and Responsible Agencies, which may include, but are not limited to, the following:

- California Department of Fish and Wildlife (CDFW)
- California Department of Transportation (Caltrans) District 4
- Golden Gate Bridge, Highway, and Transportation District
- San Francisco Bay Conservation and Development Commission (BCDC)
- San Francisco Bay Regional Water Quality Control Board (RWQCB)
- Marin Local Agency Formation Commission (LAFCo)
- U.S. Army Corps of Engineers (USACE)
- U.S. Fish and Wildlife Service (USFWS)

1.5 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for this Draft EIR has involved, or will involve, the general procedural steps described below.

1.5.1 NOTICE OF PREPARATION

In accordance with CEQA Guidelines Section 15082, the City of Sausalito circulated a Notice of Preparation (NOP) of an EIR for the proposed 2040 General Plan on October 17, 2019, to trustee and responsible agencies, the State Clearinghouse (SCH), and the public. The 30-day public review period for the NOP was extended by the city and ended on December 9, 2019. A scoping meeting was held on November 4, 2019, which was attended by 12 members of the public. The NOP and all comment letters received on the NOP are presented in Appendix A.

The city received 15 comment letters on the NOP and 11 public comments at the Scoping Meeting. Copies of these letters are provided in Appendix A of this Draft EIR. The comments are summarized below.

- Marinship land use should be reevaluated and regulated
- Senior care and housing facilities are lacking in the city
- General Plan Update should be finished/drafted before EIR preparation
- The Marinship/Marinship Specific Plan should be included in the General Plan Update
- Concern regarding toxicity/soil contamination
- Concern regarding sea level rise and subsidence
- Concern regarding environmental review process and timeline
- Concern regarding zoning violations throughout the city
- Request that additional public agencies be notified of the EIR

1.5.2 DRAFT EIR

This Draft EIR contains a description of the proposed 2040 General Plan, a description of the environmental setting, an identification of the proposed 2040 General Plan's direct and indirect impacts on the environment, the proposed 2040 General Plan policies and programs that reduce potential impacts, as well as an analysis of project alternatives, identification of significant

irreversible environmental changes, growth-inducing impacts, and cumulative impacts. Comments received in response to the NOP were considered in preparing the Draft EIR.

1.5.3 PUBLIC NOTICE/PUBLIC REVIEW

Upon completion of the Draft EIR for the proposed 2040 General Plan, the City of Sausalito will file a Notice of Completion (NOC) with the SCH of the Governor's Office of Planning and Research to begin the public review period (PRC § 21161).

Concurrent with the NOC, the city will provide a public notice of availability for the Draft EIR, and invite comment from the general public, agencies, organizations, and other interested parties. Consistent with CEQA requirements, the review period for this Draft EIR will be no less than 45 days. Public comment on the Draft EIR will be accepted in written form. All comments or questions regarding the Draft EIR should be addressed to:

City of Sausalito
Community Development Department
Lilly Whalen, Community Development Director
420 Litho Street
Sausalito, CA 94965
Email: lwhalen@sausalito.gov

In addition, the city will consider the Draft EIR at one or more public hearings before the Planning Commission and/or City Council. The public will have an opportunity to provide verbal comments on the Draft EIR during public hearings. Notice of public hearings will be posted on the city's website, in the local newspaper, and through direct mailing to interested parties that have requested notification.

1.5.4 RESPONSE TO COMMENTS/FINAL EIR

Following the public review period on the Draft EIR, a Final EIR will be prepared. The Final EIR will respond to written comments received during the public review period and to oral comments made at public hearings. The Final EIR may also include corrections, clarification, and additional explanatory information that is being added to the Draft EIR.

1.5.5 CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The City Council is the decision-making body on the proposed 2040 General Plan and Draft EIR. If the City Council finds that the Final EIR is "adequate and complete," they may certify the Final EIR in accordance with CEQA Guidelines. As set forth by CEQA Guidelines Section 15151, the standards of adequacy require an EIR to provide a sufficient degree of analysis to allow decisions to be made regarding the proposed project that take account of environmental consequences.

Upon review and consideration of the Final EIR, the City Council may take action to approve, revise, or reject the proposed 2040 General Plan. A decision to approve the proposed 2040 General Plan, for which this Draft EIR identifies significant environmental effects, must be accompanied by written findings in accordance with CEQA Guidelines Sections 15091 and 15093. A Mitigation Monitoring and Reporting Program (MMRP) would also need to be adopted in accordance with Public Resources Code Section 21081.6(a) and CEQA Guidelines Section 15097. The MMRP will list all mitigation measures that have been incorporated into or imposed upon the project to reduce or avoid significant effects on the environment. The MMRP will be designed to ensure that these measures are carried out during project implementation, in a manner that is consistent with the Draft EIR.

1.6 ORGANIZATION AND SCOPE

CEQA Guidelines Sections 15122 through 15132 identify the content requirements for Draft and Final EIRs. An EIR must include a description of the environmental setting, an environmental impact analysis, mitigation measures, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The environmental issues addressed in the Draft EIR were established through review of environmental and planning documentation developed for the proposed 2040 General Plan, environmental and planning documentation prepared for recent projects located within the City of Sausalito, and responses to the NOP and public scoping meeting comments.

This Draft EIR is organized in the following manner:

EXECUTIVE SUMMARY

The Executive Summary summarizes the characteristics of the proposed 2040 General Plan, known areas of controversy and issues to be resolved, and provides a concise summary matrix of the proposed 2040 General Plan's environmental impacts and mitigation measures consistent with CEQA Guidelines Section 15123.

CHAPTER 1.0—INTRODUCTION

This chapter briefly describes the proposed 2040 General Plan, the purpose of the environmental evaluation, identifies the lead, trustee, and responsible agencies, summarizes the process associated with preparation and certification of an EIR, identifies the scope and organization of the Draft EIR, and summarizes comments received on the NOP.

CHAPTER 2.0—PROJECT DESCRIPTION

This chapter provides a detailed description of the proposed 2040 General Plan, including the location, intended objectives, background information, the physical and technical characteristics,

including the decisions subject to CEQA Guidelines, subsequent projects and activities, and a list of related agency action requirements.

CHAPTER 3.0—ENVIRONMENTAL IMPACT ANALYSIS

This chapter contains the analysis of environmental topic areas as identified below. Each section contains a description of the existing environment as it pertains to the topical area as well as a description of the regulatory environment that may be applicable to the proposed 2040 General Plan. Each section also identifies thresholds of significance by which impacts are determined, a description of project-related impacts associated with the environmental topic, identification of appropriate mitigation measures, and a conclusion as to the significance of each impact.

The following environmental topics are addressed in this chapter:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural and Tribal Cultural Resources
- Energy
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population, Housing, and Employment
- Public Services and Recreation
- Transportation
- Utilities and Service Systems
- Wildfire

CHAPTER 4.0—ALTERNATIVES TO THE PROPOSED 2040 GENERAL PLAN

This chapter provides a comparative analysis of the proposed 2040 General Plan and the selected alternatives, including the mandatory "No Project" alternative. CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the proposed 2040 General Plan, which could feasibly attain the basic objectives of the project and avoid and/or lessen any significant environmental effects of the project.

CHAPTER 5.0—OTHER CEQA CONSIDERATIONS

This chapter evaluates and describes the following CEQA required topics: impacts considered less-than-significant, significant and irreversible impacts, growth-inducing effects, cumulative impacts, and significant and unavoidable environmental effects.

CHAPTER 6.0—EFFECTS FOUND NOT TO BE SIGNIFICANT

This chapter would analyze potential impacts resulting from conversion of agriculture and forest lands to non-agriculture and non-forest uses, and loss of any known significant mineral occurrences. Given the location of the City of Sausalito in the urbanized context of the San Francisco Bay Area and the lack of mineral resources in the area, these resources are anticipated to not be major considerations for the proposed 2040 General Plan. Existing conditions and regulations will be summarized.

CHAPTER 7.0—PERSONS AND ORGANIZATIONS CONSULTED—LIST OF PREPARERS

This chapter lists all authors and agencies that assisted in the preparation of the Draft EIR, by name, title, and company or agency affiliation.

APPENDICES

This chapter includes the NOP and other procedural documents pertinent to the Draft EIR, as well as technical material prepared to support the analysis.

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2.0 PROJECT DESCRIPTION

The project analyzed in this Draft Environmental Impact Report (Draft EIR) is the proposed Sausalito 2040 General Plan. This section of the Draft EIR describes the key characteristics of the proposed 2040 General Plan, including the project proponent, geographic limits of the proposed 2040 General Plan, project objectives, types, and extent of development forecasted under the proposed 2040 General Plan, and required approvals.

2.1 GENERAL PLAN LAW

California Government Code Section 65300 *et seq*. requires all counties and cities in the State to prepare and maintain a General Plan for the long-term growth, development, and management of the land within the jurisdiction's planning boundaries. The General Plan acts as a "constitution" for development and is the City of Sausalito's lead legal document in relation to growth, development, and resource management issues. Development regulations (e.g., zoning and subdivision standards and public improvement plans and projects, such as a Capital Improvement Program), as well as private development projects, are required by law to be consistent with the General Plan.

A General Plan must address a broad range of topics, including, at a minimum, the following mandatory elements: land use, circulation, housing, conservation, open space, noise, and safety. At the discretion of each jurisdiction, the General Plan may combine these elements and may add optional elements relevant to the physical features the jurisdiction.

The California Government Code also requires that a General Plan be comprehensive, internally consistent, and plan for the long term. The General Plan should be clearly written, easy to administer, and available to all those concerned with the community's development.

2.2 GENERAL PLAN UPDATE PROCESS

The City of Sausalito's comprehensive General Plan was initially prepared in 1995. Since 1995, the Circulation and Parking Element was updated in 1999, the Housing Element was updated in 2012 and 2015, and the Health and Safety Element was updated in 2019. The Sausalito 2040 General Plan Update is a focused effort to refine the objectives, policies, and programs within the existing General Plan to reflect current regulations and help guide and shape the community over the next 20 years. As part of the update process, the objectives, policies, and programs of the Marinship Specific Plan have been incorporated into the Land Use and Growth Management, Waterfront, Community Design, Historic and Cultural Preservation, Circulation and Parking, Health, Safety, and Community Resilience, Sustainability, and Economic Elements.

The proposed 2040 General Plan includes the following elements and meets State requirements:

- Land Use and Growth Management
- Housing

- Waterfront
- Community Design, Historic and Cultural Preservation
- Circulation and Parking
- Environmental Quality (includes the mandatory conservation, open space, and air quality elements)
- Health, Safety, and Community Resilience (includes the mandatory noise and safety elements)
- Sustainability
- Economic

The proposed 2040 General Plan was developed with community input and reflects the community's vision for the City of Sausalito. A summary of the community outreach and public participation process is provided below.

2.2.1 PUBLIC SCOPING MEETING

On November 4, 2019, the city held a Public Scoping Meeting at the City Hall Council Chambers to share information about the proposed 2040 General Plan and receive input on the scope of the environmental issues to be addressed in the Draft EIR. The meeting was attended by 12 members of the public.

2.2.2 PUBLIC OUTREACH

The General Plan Advisory Committee (GPAC), that consisted of 13 members and represented a broad spectrum of community interests, assisted the City of Sausalito in the preparation of the proposed 2040 General Plan. The GPAC met approximately 43 times from 2017–2020 to update the General Plan, providing their input and contributing to the crafting of the General Plan.

In addition to the GPAC meetings, public outreach for the proposed 2040 General Plan consisted of the following:

- Stakeholder Group Meetings (7)
- General Plan Working Group Meetings (6)
- Community Workshops (4)
- City Council/Planning Commission Joint Study Sessions (2)
- Planning Commission Study Session (2)
- City Council Study Session (1)
- Pop-up Workshops (2)
- Walking Tours (2)

The city has maintained a webpage devoted to informing the public about, and encouraging participation in, the Sausalito General Plan Update process. The website includes public notices, meeting materials, presentations given to the Planning Commission and City Council, the

Comprehensive Existing Conditions Report, and other background materials. The webpage is located at: www.sausalitogeneralplan.org.

2.3 PROJECT PROPONENT

The City of Sausalito is both the project proponent and the lead agency for the proposed 2040 General Plan. The City's Community Development Department, which is located at 420 Litho Street, Sausalito, California, 94965, prepared this Draft EIR with the assistance of M-Group and FirstCarbon Solutions (FCS).

2.4 REGIONAL LOCATION AND PLANNING AREA

2.4.1 REGIONAL LOCATION

The City of Sausalito is in southern Marin County, California (Exhibit 2-1). The 2.1-square mile city is located on the shores of the San Francisco Bay with a population of 7,416 people.[1] The city is bound by San Francisco Bay and Richardson's Bay to the east, Golden Gate National Recreation Area to the west and south, and Marin City to the northwest. Regional access to the City of Sausalito is provided via Highway 101, as well as by passenger ferry service to and from San Francisco.

2.4.2 PLANNING AREA

The Sausalito General Plan Planning Area (Planning Area) consists of all properties located within the incorporated boundary of the city, as well as lands within the city's Sphere of Influence (SOI). The Planning Area is comprised of approximately 1,730 acres. Approximately 981 acres are located within the city limits, 143 acres of which encompass water areas. Approximately 749 acres are located within the SOI, 645 acres of which encompass water areas. The SOI, established by the Marin County Local Agency Formation Committee, contains land that may ultimately be annexed into the city. The Planning Area boundaries for the proposed 2040 General Plan are depicted in Exhibit 2-2.

2.5 OBJECTIVES OF THE PROPOSED 2040 GENERAL PLAN

CEQA Guidelines Section 15124(b) requires a statement of objectives sought by a proposed project, including the underlying purpose of the project. The proposed 2040 General Plan is intended to guide growth and land development of the community, while conserving resources in a manner consistent with the quality of life desired by Sausalito residents. For the purpose of this Draft EIR analysis, the following objectives have been identified for the proposed 2040 General Plan:

[1] California Department of Finance. 2019. Population Estimate for Cities, Counties, and the State January 1, 2018 and 2019. Website: http://dof.ca.gov/Forecasting/Demographics/Estimates/E-1/. Accessed March 20, 2020.

- Reflect the current goals and vision expressed by Sausalito residents, businesses, decision-makers, and other stakeholders.
- Address issues and concerns identified by Sausalito residents, businesses, decision-makers, and other stakeholders.
- Maintain Sausalito's small-scale residential neighborhoods, recognizing their geographical, architectural, and cultural diversity, while supporting a range of housing options.
- Recognize and perpetuate the defining characteristics of Sausalito, including its scenic features, natural and built environment, its history, and its diverse culture.
- Recognize the importance of Sausalito's economic vitality, encourage businesses and activities that have high municipal revenue generation potential and low environmental impact.
- Adopt policies in all of the elements of the General Plan that guide the direction of the physical and economic development of the city in a way that is economically sustainable.
- Preserve Sausalito's waterfront as a natural resource while carefully balancing the needs and desires of water-dependent businesses, water-related activities, and amenities for the public, including access to and from the water.
- Recognize the Marinship's role and importance to the San Francisco Bay Area and the city's cultural, historic, and economic diversity, and quality of life; encourage industrial, arts and water-dependent or water-related activities in the Marinship and support these activities through the inclusion of compatible businesses and uses that can adapt to changing economic conditions.
- Ensure fiscal sustainability to provide an appropriate level of public services including upgrading, modernizing, and maintaining Sausalito's infrastructure.
- Safeguard the natural environment and ensure community health, safety, and resilience, including addressing the inherent risks of climate change, sea level rise, and subsidence.
- Provide a variety of circulation options through and within Sausalito.
- Manage tourism to minimize impacts on the community while supporting a quality visitor experience.
- Engage proactively with regional and State-level policy efforts to ensure that Sausalito's vision, goals, and quality of life are sustained in the long term.
- Seek innovative and sustainable solutions to sea level rise in collaboration with County and regional agencies and innovators, to sustain the quality of life in Sausalito and its active waterfront uses.
- Address new requirements of State law.

2.6 CHARACTERISTICS OF THE PROPOSED 2040 GENERAL PLAN

This section describes the land use map for the Planning Area and associated land use categories under the proposed 2040 General Plan.

2.6.1 GENERAL PLAN LAND USE MAP

The General Plan Land Use Map identifies land use designations for each parcel with the city of Sausalito and within the city's SOI (Exhibit 2-3). The Land Use Map designates the general location, distribution, and extent of land uses within the Sausalito Planning Area.

The proposed land use categories for the proposed 2040 General Plan and the approximate acreage for each land use designation are identified in Table 2-1. The maximum development densities and maximum intensities of building development are also identified in the table.

TABLE 2-1: GENERAL PLAN LAND USE CATEGORIES

LAND USE DESIGNATION	MAXIMUM DENSITY	MAXIMUM FLOOR AREA RATIO (FAR)	TOTAL ACRES
Very Low Density Residential (VLR)	2.2 du/ac	0.35 FAR	23.57
Low Density Residential (LR)	5.4 du/ac	0.40 FAR	34.41
Medium Low Density Residential (MLR)	7.3 du/ac	0.45 FAR	135.92
Medium Density Residential (MR)	8.7 du/ac	0.40 FAR	5.89
Medium High Density Residential (MHR)	17.4 du/ac	0.65 FAR	85.46
Planned Development – High Density Residential (PR)	22.3 du/ac	0.65 FAR	3.79
High Density Residential (HR)	29.0 du/ac	0.80 FAR	48.94
Arks (A)	0.35 du/ac	----	0.34
Houseboats (H)	4.35 du/ac	----	57.90
Mixed Residential and Commercial (CR)	29.0 du/ac	1.00 FAR	7.29
Central Commercial (CC)	----	1.30 FAR	6.33
Neighborhood Commercial (CN)	----	0.50 FAR	5.56
Commercial Waterfront (CW)	----	0.30 FAR	9.43
Shopping Center (CS)	----	0.20 FAR	1.56
Industrial (I)	----	0.40 FAR	65.43
Waterfront (W)	----	0.30 FAR	107.94
Public Institutional (PI)	----	FAR will be based on use and the FAR of surrounding land use designations	64.45
Public Parks (PP)	----	----	15.19
Open Space (OS)	----	----	211.78
Open Area (OA)	----	0.10 FAR	788.06

LAND USE DESIGNATION	MAXIMUM DENSITY	MAXIMUM FLOOR AREA RATIO (FAR)	TOTAL ACRES
General Commercial (SOI)	----	0.35 FAR	1.01
Conservation Overlay (SOI)	----	----	49.73
Total			**1729.99**

Note:
du/acre = dwelling units per acre
Source: Sausalito 2040 General Plan Land Use and Growth Management Element.

2.6.2 POTENTIAL BUILDOUT UNDER THE PROPOSED 2040 GENERAL PLAN

Full development under the proposed 2040 General Plan is referred to as "buildout." Although the proposed 2040 General Plan applies a 20-year planning horizon, the proposed 2040 General Plan is not intended to specify or anticipate when buildout will actually occur; nor does the category of a site for a certain use necessarily mean the site will be built/redeveloped with that use within the next 20 years.

The table below illustrates existing land use conditions ("Existing"), projected net new development during the Proposed General Plan Update ("Projected"), and maximum total buildout of the Proposed General Plan Update ("Buildout" equal to "Existing" plus "Projected"). Existing land use conditions represent on-the-ground uses in 2017 as reported in the Marin County Assessor's data. Existing Accessory Dwelling Unit (ADU) counts are based on the city's 2018 Annual Housing Element Progress Report. This Draft EIR uses the existing land use conditions data as a baseline from which to determine environmental impacts of the proposed 2040 General Plan and its alternatives.

This Draft EIR estimates the density and intensity of the estimated buildout of the proposed 2040 General Plan based on the following assumptions:

- Maximum residential buildout is captured by the 2015-2023 Housing Element capacity analysis, except for ADUs.
- ADUs will continue to be built at the rate of five units per year, as assumed by the 2015-2023 Housing Element analysis.
- All developable non-residential properties will be developed by 2040.

Considering the pace and intensity of past development practices, the third scenario is unlikely but is included to ensure that this Draft EIR considers the full range of potential impacts associated with the project.

This section describes the implications of the proposed 2040 General Plan buildout in terms of future new housing units, commercial uses, population, and jobs based on land use categories on

the Land Use Map. Please refer to the Land Use and Growth Management Element of the proposed 2040 General Plan regarding assumptions and methodology.

Residential Growth

Residential growth under the proposed 2040 General Plan is anticipated for a variety of housing sizes and types, such as single-family homes, ADUs, and multi-family housing. Table 2-2 shows the number of residential units under the existing and General Plan Buildout conditions. As shown in Table 2-2, buildout of the proposed 2040 General Plan could yield up to 304 new residential units within the Sausalito Planning Area.

TABLE 2-2: PROJECTED RESIDENTIAL GROWTH AT GENERAL PLAN BUILDOUT

LAND USE DESIGNATION	EXISTING (NUMBER OF UNITS)	PROJECTED (NUMBER OF UNITS)	GENERAL PLAN BUILDOUT (NUMBER OF UNITS)
Very Low Density Residential (VLR)	40	16	56
Low Density Residential (LR)	124	3	127
Medium Low Density Residential (MLR)	913	19	932
Medium Density Residential (MR)	90	2	92
Medium High Density Residential (MHR)	1,366	29	1,395
Planned Development – High Density Residential (PR)	281	0	281
High Density Residential (HR)	1,171	59	1,230
Arks (A)	6	0	6
Houseboats (H)	386	0	386
Mixed Residential and Commercial (CR)	117	45	162
Central Commercial (CC)	114	0	114
Neighborhood Commercial (CN)	16	6	22
Industrial (I)	9	0	9
Waterfront (W)	146	31	177
Public Institutional (PI)	7	0	7
Open Space (OS)	5	0	5
Conservation Overlay (SOI)	3	0	3
Accessory Dwelling Units (ADUs)	36	94	130
Totals	**4,830**	**304**	**5,134**

Sources: Marin County Assessor's GIS Data 2017; Sausalito 2018 Annual Housing Element Progress Report; M-Group 2020; FCS 2020.

Non-Residential Growth

Non-residential growth under the proposed 2040 General Plan is anticipated for commercial and industrial uses. Table 2-3 shows the amount of non-residential uses under the existing and General Plan Buildout conditions. As shown in Table 2-3, buildout of the proposed 2040 General Plan could yield up to 587,961 new square feet of commercial uses and 146,124 new square feet of industrial uses within the Sausalito Planning Area.

TABLE 2-3: PROJECTED NON-RESIDENTIAL GROWTH AT GENERAL PLAN BUILDOUT

LAND USE DESIGNATION	EXISTING (SQUARE FEET)	PROJECTED (SQUARE FEET)	GENERAL PLAN BUILDOUT (SQUARE FEET)
Mixed Residential and Commercial (CR)	129,832	69,582	199,414
Central Commercial (CC)	190,330	79,199	269,529
Neighborhood Commercial (CN)	110,248	33,762	144,010
Commercial Waterfront (CW)	50,029	56,823	106,852
Shopping Center (CS)	22,751	0	22,751
Industrial (I)	1,119,836	146,124	1,265,960
Waterfront (W)	271,869	340,061	611,930
Public Institutional (PI)	213,871	0	213,871
General Commercial (SOI)	18,593	8,534	27,127
Total	**2,127,359**	**734,085**	**2,861,444**

Sources: 2017 Marin County Assessor's GIS Data; Sausalito 2018 Annual Housing Element Progress Report; M-Group 2020; FCS 2020.

Population Growth

The city's population has remained constant since 1990, when it had a population of 7,193. In 2019, the city's population was 7,416, which represents a 3 percent increase over 27 years. Sausalito households averaged 1.53 persons per household in 2019, approximately 38.3 percent smaller than the Marin County average of 2.48 persons per household.

As shown in Table 2-2, buildout of the proposed 2040 General Plan could yield up to 304 new residential units, 94 of which would be new accessory dwelling units within the Sausalito Planning Area. Assuming a household size of 1.53 for residential units, a total of 467 new persons would be accommodated under the proposed 2040 General Plan. At buildout of the proposed 2040 General Plan the Sausalito population is projected to be approximately 7,883.

Employment Growth

The city's employment base is dominated by two sectors:

- Accommodation and Food Services (1,061 jobs in 2014)
- Professional, Scientific, and Technical Services (974 jobs in 2014)

These two sectors supply almost 40 percent of employment in Sausalito. There has been substantial growth in professional, scientific, and technical services over the previous decade (a 20 percent growth from 879).[2]

As shown in Table 2-3, buildout of the proposed 2040 General Plan could yield up to 587,961 new square feet of commercial uses and 146,124 new square feet of industrial uses within the Sausalito Planning Area. Assuming one employee per 400 square feet of commercial and one employee per 500 square feet of industrial uses, approximately 1,762 new employees would be introduced into the Planning Area from full buildout of the proposed 2040 General Plan.

2.6.3 POLICY UPDATES TO THE PROPOSED 2040 GENERAL PLAN

The Marinship Specific Plan was adopted in 1988 to preserve the Marinship primarily as a marine industrial area. As part of the General Plan Update process, relevant components of the Marinship Specific Plan have been incorporated into various parts of the proposed 2040 General Plan, primarily the Land Use and Growth Management Element and the Waterfront Element. To a lesser degree, policies and programs are also included in other Elements: Community Design, Historic, and Cultural Preservation; Circulation and Parking; Health, Safety, and Community Resilience; and Sustainability. Upon completion of programs in the Land Use and Growth Management Element that require an update of the zoning ordinance, the Marinship Specific Plan would be rescinded as a city policy document.

2.6.4 OVERVIEW OF PROPOSED 2040 GENERAL PLAN ELEMENTS

The proposed 2040 General Plan includes a comprehensive set of objectives, policies, and programs to guide decisions on future development and resource conservation in a manner consistent with the quality of life desired by Sausalito residents. The following section describes the key characteristics of each element of the proposed 2040 General Plan.

Land Use and Growth Management Element

The Land Use and Growth Management Element describes the physical, economic, and population growth and development of the City of Sausalito. It establishes the objectives, policies, and programs for development and growth regulation within the city's SOI. It includes standards and

[2] Sausalito General Plan Update Comprehensive Existing Conditions Report. 2018. Economic Development Chapter. May.

guidelines for land use development and controls to maintain the historic character and diversity of the community while allowing development that promotes an economically sustainable future.

Housing Element

The Housing Element identifies and analyzes existing and projected housing needs for safe and affordable housing in all economic segments of the community. It contains the plan and policies for the preservation, conservation, rehabilitation, and production of housing in the city of Sausalito. This element provides a detailed analysis of the city's demographic, economic, and housing characteristics as required by State law. The proposed 2040 General Plan includes, but does not update, the 2015-2023 Housing Element. The Housing Element is expected to be updated by December 2022.

Waterfront Element

The Waterfront Element provides a series of objectives to promote safe access and use of the water and sustain the local ecosystem. It also promotes the maintenance of Sausalito's working waterfront in the Marinship and the protection of historic resources. As a waterfront community, Sausalito has a strong cultural and historical relationship with the water and the maritime industry. The Marinship is an expression of this relationship and contains key cultural and historical features that should be acknowledged in future planning decisions and communicated to the public through educational programs.

Community Design, Historic, and Cultural Preservation Element

The Community Design, Historic, and Cultural Preservation Element contains objectives, policies, and programs to reinforce the identity and beauty of Sausalito. The policies contained in this element ensure that future design and development are well-integrated into Sausalito's existing design style, the city's history is preserved and honored, the distinct culture of Sausalito is supported, and the iconic views of the natural landscape are maintained.

Circulation and Parking Element

The Circulation and Parking Element addresses all transit styles and includes the objectives, policies, and programs that guide the development and maintenance for a safe and efficient transportation system. This element emphasizes public transit, pedestrian and bicycle facilities, and parking and transportation management programs.

Environmental Quality Element

The Environmental Quality Element provides the framework to conserve existing natural resources, preserve open space, and maintain and grow the recreation systems of the City of Sausalito. This element addresses protection of Sausalito's native vegetation, wildlife habitat, and conservation of open space, improvement to water and air quality, as well as conservation of water, energy, and

reduction of solid waste. Recreation policies are included in this element to preserve and enhance current and future recreation opportunities.

Health, Safety, and Community Resilience Element

The Health, Safety, and Community Resilience Element describes the natural and man-made hazards that exist in the City of Sausalito and presents guiding policies to protect people and property from these hazards, prepare disaster plans, and prevent exposure to unacceptable noise levels. This element addresses geologic, seismic, flood, and fire hazards, as well as hazards created by human activity such as hazardous materials and waste and incidents that call for emergency response. In addition, this element provides measures to control and abate noise and to protect citizens from excessive noise exposure.

Sustainability Element

The Sustainability Element includes objectives to adapt to sea level rise and mitigate its effects locally, as well as promote sustainable development and resource conservation that will have broader effects throughout the region and globally.

Economic Element

The Economic Element is intended to assist the City of Sausalito and its business community in establishing and maintaining an environment that encourages and facilitates business activity in the commercial and industrial areas of Sausalito. This element describes the objectives, policies, and programs to regulate commercial development to desired rates and encourage healthy business relationships and activities in the city that are economically sustainable.

2.6.5 REQUIRED DISCRETIONARY APPROVALS

The City of Sausalito is the lead agency for the proposed 2040 General Plan. The proposed 2040 General Plan will be presented to the Planning Commission for review and recommendation to the City Council for comment, review, and consideration for adoption. The City Council has the sole discretionary authority to approve and adopt the proposed 2040 General Plan. In order to approve the proposed 2040 General Plan, the City Council would consider the following actions:

- Certification of the 2040 General Plan Final EIR.
- Adoption of required CEQA findings.
- Adoption of a Mitigation Monitoring and Reporting Program.
- Adoption of the proposed 2040 General Plan.

2.6.6 SUBSEQUENT USE OF THE DRAFT EIR

This Draft EIR provides a review of environmental effects associated with implementation of the proposed 2040 General Plan. When considering subsequent activities under the proposed 2040 General Plan, the City of Sausalito would utilize this Draft EIR as the basis in determining potential

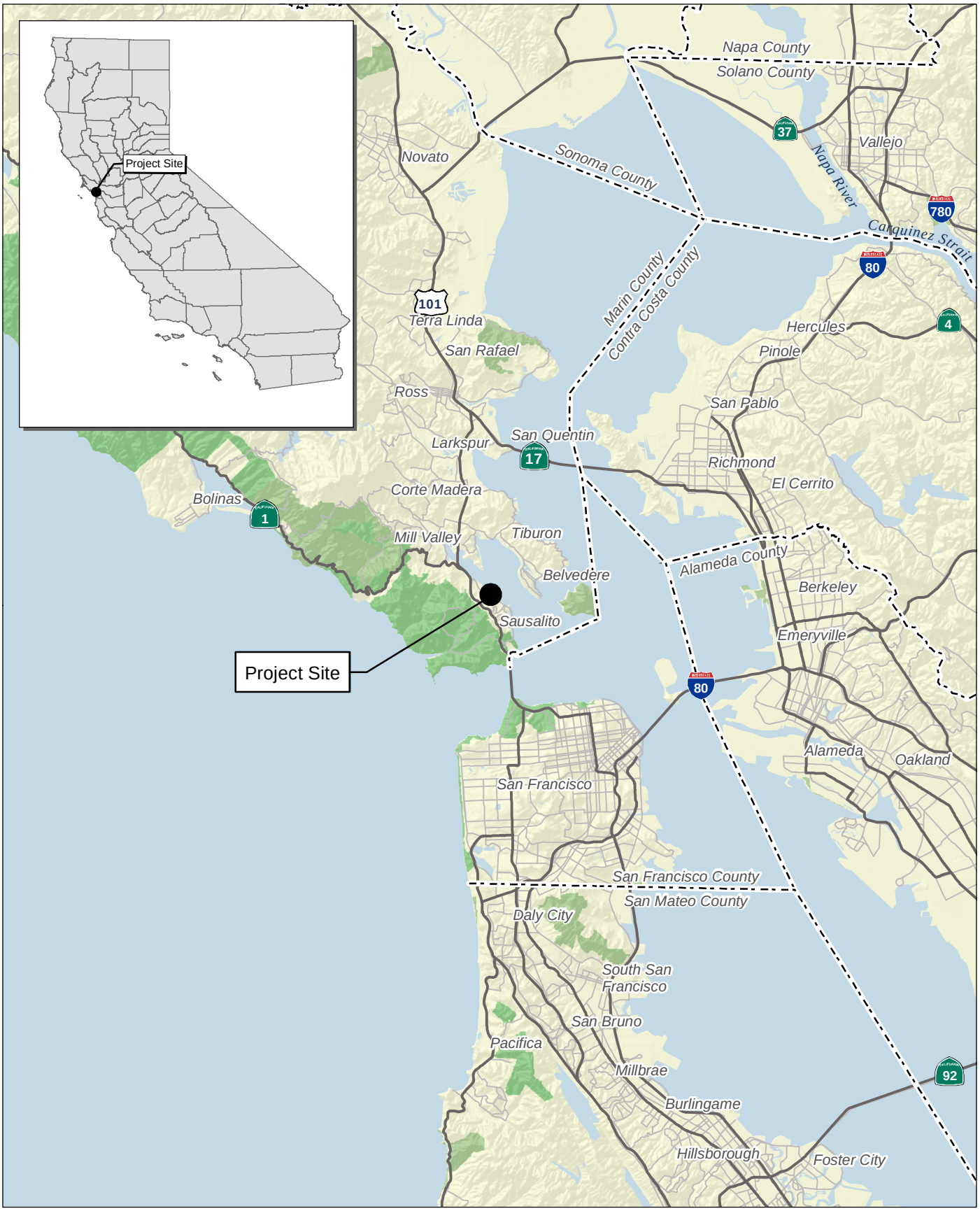
environmental effects and the appropriate level of environmental review, if any, of a later activity. Projects or activities successive to this EIR may include, but are not limited to, the following:

- Approval and funding of major projects and capital improvements.
- Future Planned Unit Development approvals.
- Revisions to the Sausalito Zoning Ordinance.
- Development Plan approvals, such as tentative subdivision maps, variances, conditional use permits, and other land use permits.
- Development Agreements.
- Property rezoning consistent with the proposed 2040 General Plan.
- Permit issuances and other approvals necessary for public and private development projects.
- Issuance of permits and other approvals necessary for implementation of the proposed 2040 General Plan.
- Housing Element Update in 2022.

2.6.7 OTHER GOVERNMENTAL AGENCY APPROVALS

City approval of the proposed 2040 General Plan would not require any actions or approvals by other public agencies. Subsequent projects and other actions to support implementation of the proposed 2040 General Plan would require actions, including permits and approvals, by other public agencies that may include, but are not necessarily limited to:

- California Department of Fish and Wildlife (CDFW) approval of potential future streambed alteration agreements, pursuant to Fish and Game Code. Approval of any future potential take of State-listed wildlife and plant species covered under the California Endangered Species Act (CESA).
- California Department of Transportation (Caltrans) approval of projects and encroachment permits for projects affecting State highway facilities.
- Regional Water Quality Control Board (RWQCB) approval for National Pollutant Discharge Elimination System (NPDES) compliance, including permits pursuant to the Clean Water Act and Storm Water Pollution Prevention Plan (SWPPP) approval and monitoring.
- Marin County Local Agency Formation Commission (LAFCo) approvals for annexation of land within the SOI to the City of Sausalito.
- U.S. Army Corps of Engineers (USACE) approval of any future wetland fill activities or dredging permits pursuant to the Clean Water Act.
- U.S. Fish and Wildlife Service (USFWS) approvals involving any future potential take of federally listed wildlife and plant species and their habitats, pursuant to the Federal Endangered Species Act (FESA).
- San Francisco Bay Conservation and Development Commission (BCDC) approval for any proposed fill (earth of any other substance or material, including pilings or structures placed on pilings, and floating structures moored for extended periods of time); extraction of materials; or change in use of any water, land or structure within the BCDC's jurisdiction.



Source: Census 2000 Data, The CaSIL

FIRSTCARBON SOLUTIONS™ GROUP

5 2.5 0 5 Miles

Exhibit 2-1
Regional Location Map

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CITY OF SAUSALITO
GENERAL PLAN UPDATE EIR

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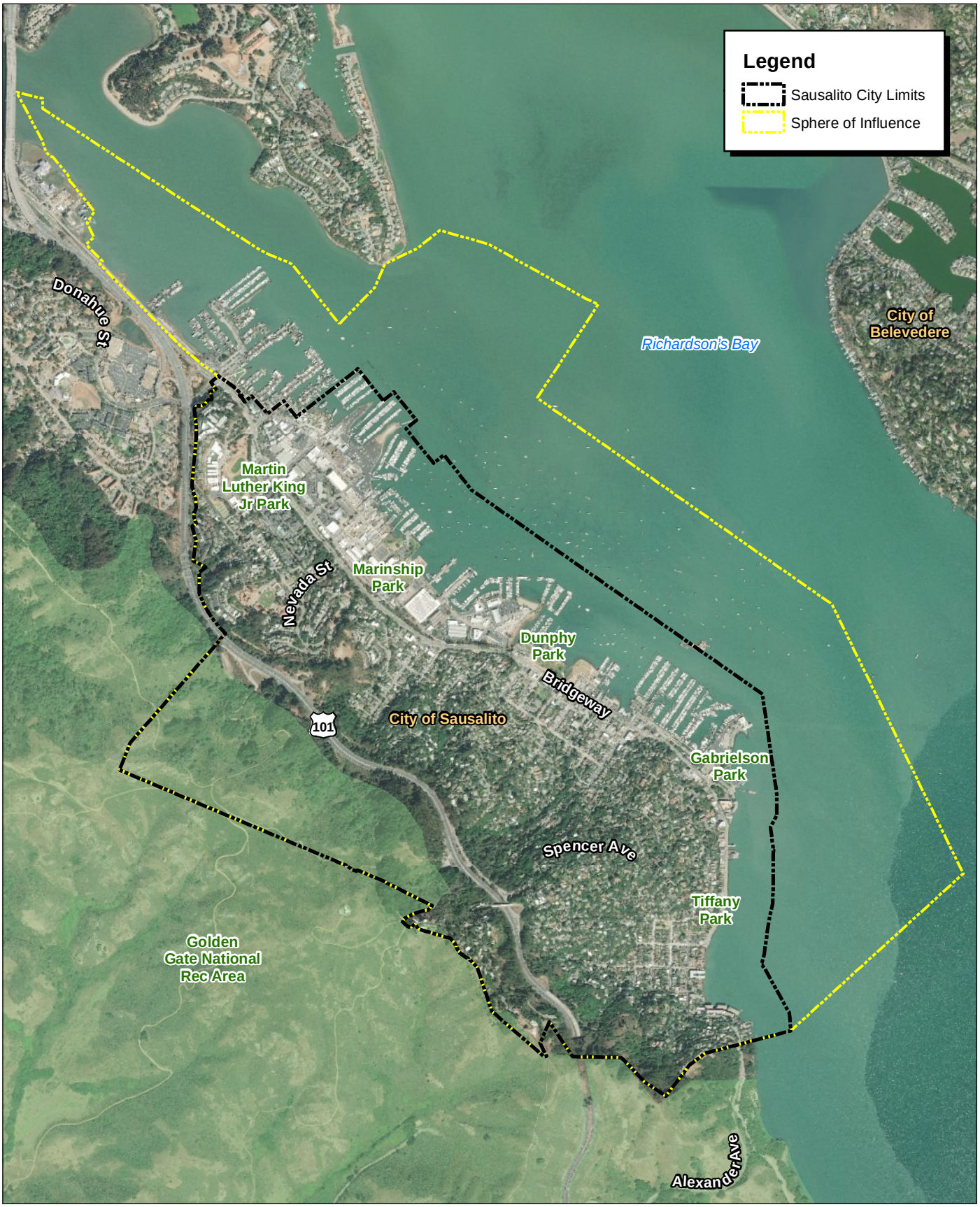

Source: ESRI Aerial Imagery. Marin County GIS data.

FIRSTCARBON SOLUTIONS™ GROUP

2,000 1,000 0 2,000 Feet

Exhibit 2-2
Sausalito Planning Area

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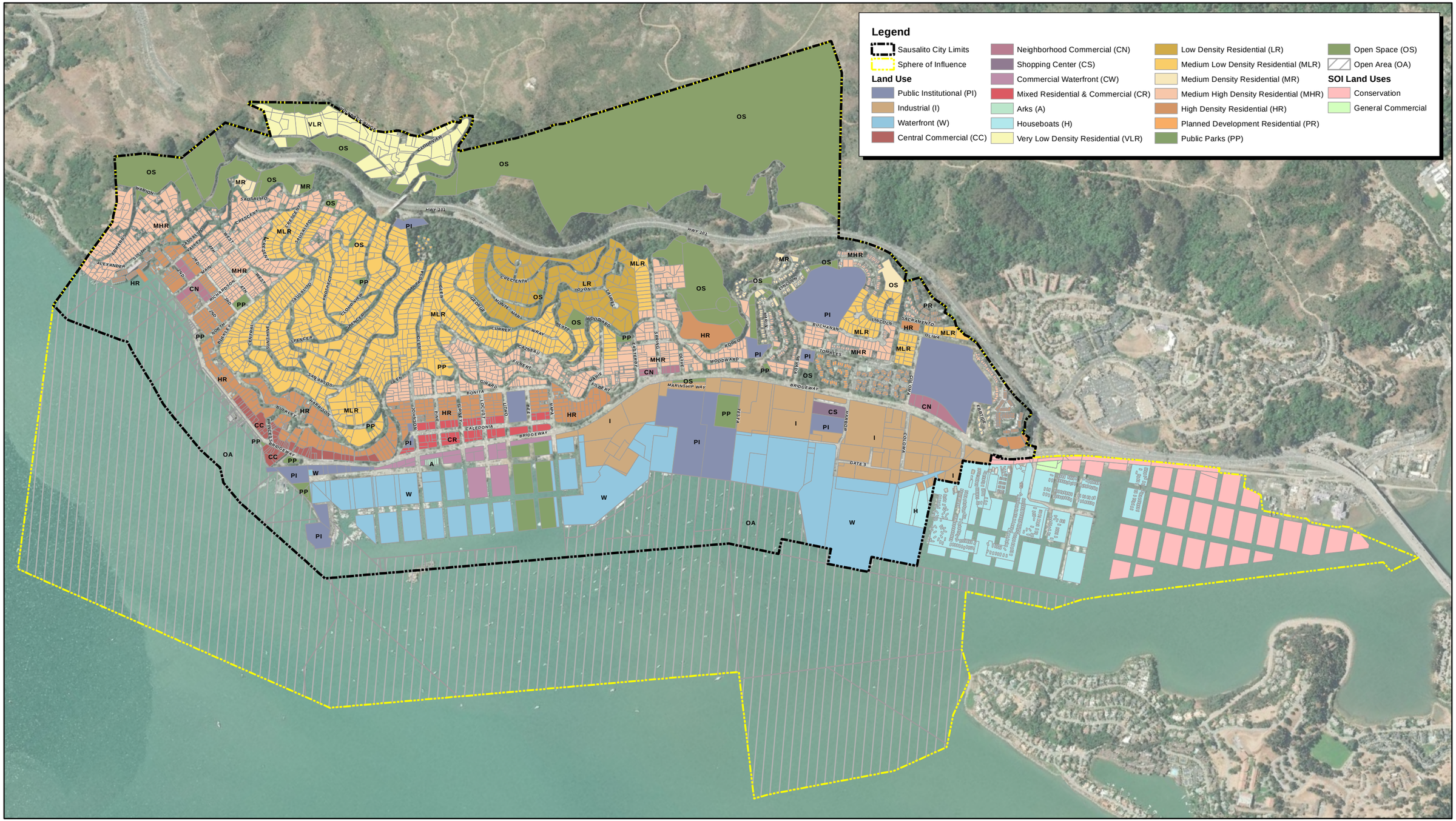

Source: ESRI Aerial Imagery. Marin County GIS data. M-Group.

FIRSTCARBON SOLUTIONS™ GROUP

1,200 600 0 1,200 Feet

Exhibit 2-3
General Plan Land Use Map

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CITY OF SAUSALITO
GENERAL PLAN UPDATE EIR

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3.0 ENVIRONMENTAL IMPACT ANALYSIS

This section of the Draft Environmental Impact Report (Draft EIR) evaluates the direct, indirect, and cumulative environmental impacts of the proposed 2040 General Plan. In accordance with Appendix G, Environmental Checklist, of the CEQA Guidelines, the potential environmental effects of the proposed 2040 General Plan are analyzed for potential significant impacts in the following environmental issue areas:

- Aesthetics;
- Air Quality;
- Biological Resources;
- Cultural and Tribal Cultural Resources;
- Energy;
- Geology, Soils, and Seismicity;
- Greenhouse Gas Emissions;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;
- Noise;
- Population, Housing, and Employment;
- Public Services and Recreation;
- Transportation;
- Utilities and Service Systems; and
- Wildfire

SECTION ORGANIZATION

Each environmental issue section includes the following sections:

- ***Existing Setting*** provides a description of the existing environmental setting and condition that provides a baseline against which impacts of the proposed 2040 General Plan can be compared.
- ***Regulatory Setting*** contains an overview of federal, State, regional, and local programs and regulations relevant to each environmental issue.
- ***Thresholds of Significance*** refer to quantitative or qualitative standards, performance levels, or criteria used to compare the existing setting with and without the proposed 2040 General Plan to determine whether the impact is significant. These thresholds are based primarily on the CEQA Guidelines, but also may reflect established health standards, ecological tolerance standards, public service capacity standards, or guidelines established by agencies or experts.

- ***Analysis, Impacts, and Mitigation Measures*** describes the methodology used in assessing potential impacts of the proposed 2040 General Plan and contains an analysis of direct and indirect impacts from construction, operation, and maintenance activities related to future development that could occur under the proposed 2040 General Plan. For each impact identified, a level of impact will be described using the following categories:

  - **Significant** impacts include a description of the circumstances where an established or defined threshold would be exceeded.
  - **Less than significant** impacts include effects that may be noticeable, but do not exceed established or defined thresholds. Potentially significant impacts that are mitigated to a less-than-significant level by mitigating programs, actions, or other factors are also included in this category.
  - **No impact** describes circumstances where there is no adverse effect on the environment.

CUMULATIVE IMPACT ANALYSIS METHODOLOGY

A cumulative impact is an impact created by the combination of the project evaluated in the EIR and other reasonably foreseeable projects or actions. CEQA Guidelines Section 15130 requires an EIR to discuss cumulative impacts of a project when the project's incremental effect is "cumulatively considerable." Used in this context, cumulatively considerable means that the incremental effects of an individual project are considerable when viewed in connection with effects of past projects, other current projects, and probable future projects.

In the case of a General Plan, cumulative effects occur when future development under the General Plan is combined with development in surrounding areas, or in some instances, within the entire region. Where the incremental effect of a project is not "cumulatively considerable," a lead agency need not consider that effect significant but must briefly describe its basis for concluding that the effect is not cumulatively considerable.

The cumulative impact discussions in Sections 3.1 through 3.16 explain the geographic scope of the area affected by each cumulative effect (e.g., immediate project vicinity, city, planning area, county, watershed, or air basin). The geographic area considered for each cumulative impact depends upon the impact that is being analyzed. For example, in assessing noise impacts, the geographic study area is more local and includes the immediate vicinity of the areas of new development under the proposed 2040 General Plan. In assessing air quality impacts, all development within the air basin contributes to regional emissions of criteria pollutants and basin-wide projections of emissions is the best tool for determining cumulative effect.

Section 15130 of the CEQA Guidelines permits two different methodologies for completion of the cumulative impact analysis.

- The "list" approach permits the use of a list of past, present, and probable future projects producing related or cumulative impacts, including projects both within and outside the city; and
- The "projections" approach allows the use of a summary of projections contained in an adopted plan or related planning document, such as a regional transportation plan, or in an EIR prepared for such a plan. The projections may be supplemented with additional information such as regional modeling.

This Draft EIR uses the projections approach and takes into account growth from the proposed 2040 General Plan within the Sausalito Planning Area, in combination with impacts from projected growth in the rest of Marin County and the surrounding region, as forecast by the Association of Bay Area of Governments (ABAG).

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3.1 AESTHETICS

This section of the Draft EIR describes existing visual character of the Sausalito Planning Area, including scenic vistas, scenic resources within scenic highways and roadways, public views, and existing sources of light and glare. Scenic vistas are long-range views of prominent scenic or background features such as open space lands or mountain ridges. Public views are short- and medium-range views that are visible from publicly accessible viewpoints, such as city streets or city parks. This section also evaluates impacts to aesthetics that are anticipated to occur from implementation of the proposed 2040 General Plan.

Information in this section is based on information provided by the following reference materials:

- Sausalito 2040 General Plan;
- Sausalito Municipal Code; and
- Marin Countywide Plan.

3.1.1 EXISTING SETTING

Visual Character and Scenic Vistas

The City of Sausalito is nestled into the wooded hillsides, bordered by Richardson's Bay on one edge and by Wolfback Ridge and the lands of the Golden Gate National Recreation Area (GGNRA) on the other. The Sausalito Municipal Code and proposed 2040 General Plan seek to maintain the views of the waterfront, the open waters of the Bay, and the natural ridgelines within the Planning Area.

Sausalito Municipal Code Section 11.12.020(V) defines "View" as a vista of San Francisco-Richardson Bay, neighboring communities, surrounding hills or a nearby or distant wooded area from the primary living areas of the home. "Views" include, but are not limited to, skylines, bridges, distant cities, geologic features, hillside terrains and wooded canyons or ridges. The term "view" does not mean an unobstructed panorama of all or any of the views defined in Section 11.12.020(V).

Additionally, Chapter 10.88 of the Municipal Code defines "View" as any view of the Sausalito Waterfront, San Francisco Bay, Mount Tamalpais, Strawberry Point, Tiburon, Belvedere, Angel Island, East Bay, and/or the City of San Francisco or any view greater than 300 feet distance and/or including significant aesthetic, cultural, natural, or historical features. The term "View" does not mean an unobstructed panorama of all or any of the views defined in Chapter 10.88

As described in Chapter 10.88 of the Municipal Code, primary views are defined as any view from primary viewing areas of a dwelling such as the living room, dining room, kitchen, master bedroom, and deck or patio spaces serving such living areas. A secondary view is defined as any

view from bathrooms, accessory bedrooms, passageways and utility areas. Public views are defined as any view from a public right-of-way, including from a public road, street, sidewalk, pedestrian lane or stair, trail, or pathway.

The natural terrain and vegetation contribute to the Planning Area's scenic qualities. The proposed 2040 General Plan seeks to maintain the integrity of the natural terrain and ridgelines and ensure that views of the natural ridgelines are maintained. Exhibit 3.1-1 illustrates the location of these ridgelines, and are further described below:

- **Cypress Ridge.** Protect the ridge to ensure that any utilities are consistent with City policy.
- **Wolfback Ridge.** Ensure that no new silhouette can be seen from public right-of-way in Old Town and the Spencer Avenue exit from Highway 101.
- **South Ridge (Edwards Avenue).** Ensure minimal impact on ridgeline views from bridgeway.
- **Caltrans Property Right-of Way.** Limit development along the Caltrans right-of-way to improvements that do not impact ridgeline views from Bridgeway or neighboring public rights-of-way.

The proposed 2040 General Plan seeks to preserve view corridors of Richardson's Bay from various locations within the Marinship. The view corridors are identified in Exhibit 3.1-2.

Scenic Highways

There are no designated State Scenic Highways in the Planning Area. However, Highway 101 is eligible for designation for the entire length that it parallels the city.[1] Starting at unincorporated Marin City in the north, Highway 101 provides four lanes in each direction, winding from Bothin Marsh Open Space Preserve to Waldo Tunnel. Along the route, undeveloped hills and bay waters are visible. After the tunnel, the highway continues and connects with the Golden Gate Bridge and the City of San Francisco.

Neither the County nor the city designate specific scenic roadways within the Sausalito Planning Area.

Light and Glare

Light pollution refers to all forms of unwanted light in the night sky, including glare, light trespass, sky glow, and over-lighting. Views of the night sky are an important part of the natural environment. Excessive light and glare can be visually disruptive to humans and nocturnal animal species.

[1] California Department of Transportation. 2019. List of eligible and officially designated State Scenic Highways. August.

During the day, sunlight reflecting from structures is a primary source of glare, while nighttime light and glare can be stationary or from mobile sources. Stationary sources of nighttime light include structure illumination, interior lighting, decorative landscape lighting, and streetlights. The principal mobile source of nighttime light and glare is vehicle headlamp illumination.

Urban land uses on the city's waterfront are the main source of daytime and nighttime light and glare. The hillsides are characterized by less intense development and generally have lower levels of ambient nighttime lighting and daytime glare. The existing light environment found in the Planning Area is considered typical for suburban areas.

3.1.2 REGULATORY SETTING

State

State Scenic Highway Program

The California Department of Transportation (Caltrans) administers the State Scenic Highway Program to preserve scenic highway character and protect them from changes that may diminish aesthetic value of adjacent lands. Within Marin County, there are no Officially Designated State Scenic Highways.[2]

Nighttime Sky – Title 24 Outdoor Lighting Standards, 2016

The California Energy Commission (CEC) regulates energy efficiency of outdoor lighting for new development. The standards serve to improve outdoor lighting quality by reducing impacts of light pollution, light trespass, and glare.[3] The standards regulate characteristics such as maximum power and brightness, shielding, and sensor controls to turn lighting on and off. Exterior lighting allowances vary by Lighting Zones (LZ). The lowest illumination levels are encouraged in LZ0 (very low) and increasingly more power is allowed in LZ1 (low), LZ2 (moderate), LZ3 (moderately high), and LZ4 (high). The statewide default location for each LZ is as follows:

LZ0: Undeveloped areas of government designated parks, recreation areas, and wildlife preserves.
LZ1: Developed portion of government designated parks, recreation areas, and wildlife preserves.
LZ2: Rural areas, as defined by the 2010 U.S. Census.
LZ3: Urban areas, as defined by the 2010 U.S. Census.

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[2] California Department of Transportation. 2019. List of eligible and officially designated State Scenic Highways. August.

[3] California Energy Commission. 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings, Title 24, Part 6 and Associated Administrative Regulations in Part 1. Website: https://www.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf. Accessed February 1, 2020.

LZ4: No statewide default location. Special district created by local government.

Local

Sausalito General Plan

The proposed 2040 General Plan contains the following policies and programs that promote protection and enhancement of aesthetics in the City of Sausalito:

Land Use and Growth Management Element

Policy LU-2.6: Public Art. Encourage local artists to exhibit their works in Sausalito through the development of a Public Art Policy.

Policy LU-4.5: Central Waterfront Uses. Promote commercial uses that maximize open water and view corridors in the Commercial Waterfront area as described in Table 1-1, General Plan Land Use Categories, and shown on the General Plan Land Use Map, Figure 1-1.

Program LU-4.6.2: Retire Other Open Water Properties. Explore processes, such as conservation easements, to retire other open water properties in order to maintain views and provide ecological value.

Policy LU-4.7: Downtown Waterfront. Maintain and enhance the existing character of the Downtown waterfront with a mixture of open vistas and commercial uses.

Waterfront Element

Policy W-1.2: Waterfront Access. Promote and enhance public access and enjoyment of the Sausalito waterfront from both land and water approaches.

Program W-1.2.1: Shoreline Access. Maintain and enhance water view corridors and walking paths to and along the shoreline where compatible from private development.

Policy W-4.2: Bay Waters. Preserve and enhance the wetlands, open waters, and ecosystem of Richardson's and San Francisco Bays and utilize these landscapes for sea level rise mitigation.

Policy W-4.3: Shoreline Areas. Preserve the undeveloped open shoreline, shoreline habitat, and public access in waterfront development consistent with public trust and private ownership purposes.

Program W-4.3.3: Zoning Ordinance (Improved Access). Revise the Zoning Ordinance to require that new development projects improve public access to the shoreline and views.

Community Design, Historic and Cultural Preservation Element

Policy CD-1.1: Sausalito Identity. Enhance Sausalito's architectural quality and diversity, general City characteristics, and historical legacy through careful design review.

Policy CD-1.2: Architectural Innovation. Encourage projects which promote architectural quality and innovative solutions rather than conformity to standard designs.

Policy CD-1.4: Maximum Height Limit. Establish a maximum height limit for all structures in Sausalito while recognizing that maximum height is not guaranteed for development proposals where view preservation and scale is an issue.

Policy CD-3.2: Public Views. Locate and design new and significantly remodeled structures and other private and public improvements with consideration for their impact on significant public views and view corridors.

Program CD-3.2.1: Design Review of Public View Impacts. Through Design Review, analyze project submittals for new and significantly remodeled structures and landscaping for their impact on views from major public vantage points.

Program CD-3.2.2: Map of Public Views. Develop and maintain a City-wide map that identifies priority public viewpoints that shall be preserved.

Policy CD-4.2: City Identity. Develop a prominent city identity.

Policy CD-4.4: Design Review. Conduct the design review process to assess the design of proposed development with consideration for objective development standards and design guidelines.

Program CD-5.1.1: Public Views. Locate and design public improvements in order to minimize their impact on public vantage points and view corridors.

Policy CD-5.2: Signage. Enhance the appearance of main thoroughfares by reducing the visual clutter of signage while improving business vitality.

Environmental Quality Element

Policy EQ-2.3: Public Open Space Use. Maintain public open space areas in a natural state compatible with the preservation of environmental resources, views and surrounding area uses.

Program EQ-2.3.2: Aesthetics. Encourage aesthetically designed public facilities (e.g. power lines, water lines, water tanks) with appropriate placement, adequate setbacks, and proper landscaping to reduce aesthetic impacts and impacts on views of hillsides, ridgelines, open space, and the Bay.

Policy EQ-2.4: Open Space Management. Maintain habitat and scenic value of open space and ensure the protection of public health and safety through the well-planned management of open space lands.

Policy EQ-4.6: Creeks and Drainage Ways. Promote the natural integrity of creeks and/or drainageways as riparian habitat, wildlife corridors, and to protect residents from flooding and other hazards.

Sustainability Element

Policy S.3.3: Tree Planting. Encourage tree planting and replacement in parks along commercial streets, and in the Marinship.

Economic Element

Policy EC-4.3: Downtown Appearance. Maintain and enhance the appearance of the Downtown to promote a vibrant, clean, and aesthetically pleasing shopping and visiting experience.

Sausalito Municipal Code

Aesthetic resources are regulated under sections of the Sausalito Municipal Code. For each zoning district, development and design standards serve to ensure that new development in the city is consistent and compatible with its established character, outlined in Chapter 10.40 (General Development Regulations) and 10.54 (Design Review Procedures). Section 10.12.040 establishes zoning districts categories including Open Space and Public (Chapter 10.20), Residential (Chapter 10.22), Commercial (Chapter 10.24), and Industrial, which only includes Industrial Marinship (Chapter 10.26).

Chapter 10.42 (Sign and Awning Regulations) establishes standards to promote an attractive city and prevent visual degradation from excess signage. This includes regulating lighting.

Chapter 11.12 (Preservation of Trees and Views) protects certain species and sizes of trees, in addition to dedicated trees of special significance to the city, on private property, and all trees and shrubs on city property. It also defines undesirable species of trees as specifically unprotected. The Sausalito Municipal Code safeguards these trees against removal, alteration, and damage, without first having obtained a tree removal or alteration permit from the city. Chapter 11.12 also establishes that vegetation must not unreasonably obstruct the view from, or the sunlight reaching, other property, and outlines procedures for making view claims.

Section 16.04.050 (Waters of Dunphy Park Declared Open Water Area) declares the waters of Dunphy Park are and shall be an open water area acquired, owned and maintained by the city for the purpose of providing active recreational boating and an unobstructed water vista for those using and enjoying the upland area of Dunphy Park.

3.1.3 THRESHOLDS OF SIGNIFICANCE

According to CEQA Guidelines Appendix G, except as provided in Public Resources Code Section 21099, the proposed project will have a significant impact related to aesthetics if it would:

- Have a substantial adverse effect on a scenic vista?
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State scenic highway?
- In non-urbanized areas, substantially degrade the existing visual character or quality 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?

- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

3.1.4 ANALYSIS, IMPACTS, AND MITIGATION MEASURES

Impacts related to aesthetics resulting from implementation of the proposed 2040 General Plan are discussed below. The impact analysis is based on the existing visual character of the Planning Area, including scenic vistas, highways, roadways, and existing sources of light and glare. Changes to aesthetic resources from the proposed 2040 General Plan are identified and qualitatively evaluated based on potential modifications to the existing aesthetic setting. Impacts related to aesthetics are assessed using significance criteria established by the CEQA guidelines.

Impact AES-1 **Development facilitated by the proposed 2040 General Plan would not have a substantial adverse effect on a scenic vista.**

A scenic vista is a long-range viewpoint that provides expansive views of a highly valued landscape for public benefit. Although the proposed 2040 General Plan does not explicitly designate scenic vistas, the Sausalito Municipal Code classifies a "View" as a vista of San Francisco-Richardson Bay, neighboring communities, surrounding hills or a nearby or distant wooded area from the primary living areas of the home. Additionally, the Municipal Code defines views as "any view of the Sausalito Waterfront, San Francisco Bay, Mount Tamalpais, Strawberry Point, Tiburon, Belvedere, Angel Island, East Bay, and/or the City of San Francisco or any view greater than 300 feet distance and/or including significant aesthetic, cultural, natural, or historical features." Furthermore, the proposed 2040 General Plan identifies ridgelines (Exhibit 3.1-1) and Marinship view corridors of Richardson's Bay (Exhibit 3.1-2) the city seeks to preserve for scenic values.

Development accommodated under the proposed 2040 General Plan could result in an incremental increase in new residential, commercial, and industrial uses. New development or redevelopment could alter existing views that are defined by the Sausalito Municipal Code. New development or redevelopment could also alter views of ridgelines or views of Richardson's Bay from the Marinship.

The proposed 2040 General Plan contains policies that maintain and enhance views of the Sausalito Waterfront, San Francisco Bay, Richardson's Bay, Mount Tamalpais, ridgelines, and other visual resources within the Planning Area. For example, Policy LU-4.5 requires the city to promote those commercial uses that maximize open water and view corridors in the Commercial Waterfront area. Policy LU-4.7 requires the city to maintain and enhance the existing character of the downtown waterfront with a mixture of open vistas and commercial uses. Policy CD-3.2 requires that new and significantly remodeled structures and other private and public improvements be located and designed with consideration for their impact on significant public views and view corridors. Program CD-3.2.1 requires the city to analyze project submittals for new and significantly remodeled structures and landscaping for their impact on views from

major public vantage points through the design review process. Program CD-3.2.2 requires the city to develop and maintain a City-wide map that identifies priority public viewpoints that shall be preserved. Lastly, Policy EQ-2.3 requires the city to maintain public open space areas in a natural state compatible with the preservation of environmental resources, views and surrounding area uses.

The Sausalito Municipal Code contains rules and regulations to maintain the natural environment, as well as development and design standards to ensure that new development is consistent and compatible with the city's established character and preserves views. Chapter 11.12 establishes that vegetation must not unreasonably obstruct views from or sunlight reaching other property, and outlines procedures for making view claims. Section 16.04.050 declares that the waters of Dunphy Park are and shall be an open water area purpose of providing active recreational boating and an unobstructed water vista for those using and enjoying the upland area of Dunphy Park. Chapter 10.40 contains general development regulations and Chapter 10.54 contains the design review procedures.

Individual project impacts would be evaluated by city planning staff and reviewed by the Planning Commission as part of the application review process. Under Section 10.54.050 of the Municipal Code, in order for the Planning Commission to approve a Design Review Permit, the Planning Commission must make a finding that the obstruction of public views and primary views from private property has been minimized.

Conclusion

Development envisioned by the proposed 2040 General Plan could result in an incremental increase in new residential, commercial, and industrial uses that could incrementally block views of the waterfront and other visual resources in the Planning Area, or incrementally alter these natural scenic resources. However, compliance with proposed 2040 General Plan policies and programs, and adherence to development and design standards in the Sausalito Municipal Code would ensure that impacts remain ***less than significant***.

Impact AES-2	**Implementation of the proposed 2040 General Plan would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State scenic highway.**

Development accommodated under the proposed 2040 General Plan could result in an incremental increase in new residential, commercial, and industrial uses. Some new development or redevelopment could occur along Highway 101, an eligible State scenic highway. Land uses along Highway 101 include Public Institutional, all density levels of Residential, Planned Development Residential, and Open Space.

The Highway 101 viewshed within the Planning Area would not experience significant change as a result of buildout of the proposed 2040 General Plan. The anticipated growth of 304 dwelling units and 734,084 square feet of new non-residential development would occur within areas that

currently support urban development within the Sausalito city limits. These areas have been developed for decades and are part of the existing Highway 101 viewshed. Importantly, the hillsides to the west of Highway 101 would remain designated for Open Space or Very Low Density Residential development, which would retain their existing visual attributes.

As discussed under Impact AES-1, all development and redevelopment under the proposed 2040 General Plan would be subject to development and design standards for each zoning district. Requiring development under the proposed 2040 General Plan to comply with additional development and design standards set forth in the Sausalito Municipal Code would ensure that scenic resources along eligible scenic roadways/eligible State scenic Highway 101 are preserved.

Development envisioned by the proposed 2040 General Plan would result in in new residential and non-residential development; however, it would not substantially affect views from Highway 101. Furthermore, compliance with proposed 2040 General Plan policies and programs, and adherence to development and design standards in the Sausalito Municipal Code would ensure that impacts to scenic resources along eligible State scenic Highway 101 remain ***less than significant***.

Impact AES-3	**Development facilitated by the proposed 2040 General Plan would not substantially degrade the existing visual character or quality of public views in non-urbanized areas. (Public views are those that are experienced from publicly accessible vantage point).**

The only large non-urbanized area of the Planning Area is the portion of Golden Gate National Recreation Area (GGNRA) that is located within city limits, west of Highway 101. Because this area is federal parkland, none of it is expected to be developed in any way not already accounted for by the GGNRA General Management Plan. Other smaller pockets of undeveloped land within the Planning Area are not at significant risk of degradation as so little potential development is envisioned under the proposed 2040 General Plan as described in Section 2, Project Description.

As described under Impact AES-1, proposed 2040 General Plan policies and programs that minimize alteration of waterfront and other visual resources within the Planning Area would also minimize impacts to visual character and quality of public views in non-urbanized areas.

Compliance with the proposed 2040 General Plan policies and programs, as well as adherence to Sausalito Municipal Code, would preserve the existing visual character and quality of public views in non-urbanized areas. As such, implementation of the proposed 2040 General Plan would result in a ***less than significant*** impact relative to this topic.

Impact AES-4 **Implementation of the proposed 2040 General Plan would not substantially conflict with applicable zoning and other regulations governing scenic quality in urbanized areas.**

Urbanized areas comprise most of the Planning Area and are dominated by impervious surfaces (such as concrete, buildings, and roads). Vegetative cover consists of native, non-native, and ornamental plants.

Development accommodated under the proposed 2040 General Plan could result in an incremental increase in new residential, commercial, and industrial uses within urbanized areas. However, new development or redevelopment being proposed under the proposed 2040 General Plan would comply with applicable zoning and other regulations governing scenic quality.

As discussed under Impact AES-1, all development and redevelopment under the proposed 2040 General Plan would be subject to development and design standards for each zoning district. Further, development would be required to comply with Chapter 11.12 of the Sausalito Municipal Code, which intends to preserve certain trees and protect views from vegetation overgrowth, thereby enhancing aesthetic character of the city.

In addition, the proposed 2040 General Plan includes policies and programs designed to preserve riparian habitat and other sensitive natural communities, which would in turn maintain aesthetic quality of creeks within urbanized areas. Policy W-4.2 requires preservation and enhancement of the open waters and ecosystems of Richardson's and San Francisco Bays. Policy W-4.3 calls for preservation of undeveloped open shoreline. Policy EQ-4.6 promotes preservation of the natural integrity of creeks and riparian habitat.

Compliance with proposed 2040 General Plan policies and programs, as well as adherence to Sausalito Municipal Code, would preserve scenic quality in urbanized areas. As such, implementation of the proposed 2040 General Plan would result in a ***less than significant*** impact relative to this topic.

Impact AES-5 **Development facilitated by the proposed 2040 General Plan would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**

Nighttime illumination and glare impacts are effects of a project's exterior lighting upon adjoining uses and areas. Light and glare impacts are determined through a comparison of existing light sources with proposed lighting plans or policies.

Development envisioned by the proposed 2040 General Plan could result in an incremental increase in new residential, commercial, and industrial uses, which could incrementally increase daytime glare or nighttime lighting in the Planning Area.

Despite new and expanded sources of nighttime illumination and glare that could occur from implementation of the proposed 2040 General Plan, the proposed 2040 General Plan is not expected to generate a substantial increase in light and glare relative to existing conditions. For

these reasons, impacts related to an increase in nighttime light and overall increase in lighting and glare would be ***less than significant***.

Impact AES-6: Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to aesthetics.

The geographic context for analysis of cumulative impacts related to aesthetics includes the incorporated and unincorporated lands surrounding the Planning Area. This analysis evaluates whether impacts of the proposed 2040 General Plan, together with impacts of cumulative development, would result in a cumulatively significant impact with respect to aesthetics. This analysis then considers whether incremental contribution of the impacts associated with implementation of the proposed 2040 General Plan would be significant. Both conditions must apply for cumulative effects to rise to the level of significance.

Significant impacts, including those associated with scenic resources, visual character, and increased light and glare would generally be site-specific and would not contribute to cumulative impacts after implementation of proposed 2040 General Plan policies and provisions in the Sausalito Municipal Code.

However, some cumulative development could contribute to an incremental increase in nighttime lighting and daytime glare. Some cumulative development could also contribute to an incremental degradation to scenic vistas, highways and roadways, and public views, as well as further conversion of open space and mature trees.

As discussed under Impacts AES-1 through AES-5, development anticipated under the proposed 2040 General Plan would be required to comply with proposed 2040 General Plan policies and programs and adhere to development and design standards in the Sausalito Municipal Code. Development facilitated by the proposed 2040 General Plan would also be subject to design review.

All projects within the cumulative geographic context would be required to comply with the Sausalito Municipal Code and proposed 2040 General Plan policies that address aesthetics, including preservation of scenic vistas, tree protection, and minimization of lighting and glare.

The proposed 2040 General Plan proposes no substantive changes in land use that would result in significant impacts related to aesthetics. Therefore, implementation of the proposed 2040 General Plan would not result in a considerable incremental contribution to cumulative impacts because the city is largely built out, the proposed 2040 General Plan contains policies to protect aesthetics, and future development under the proposed 2040 General Plan would be required to comply with development and design standards set forth in the Sausalito Municipal Code related to aesthetics. Therefore, cumulative impacts would be ***less than significant***.

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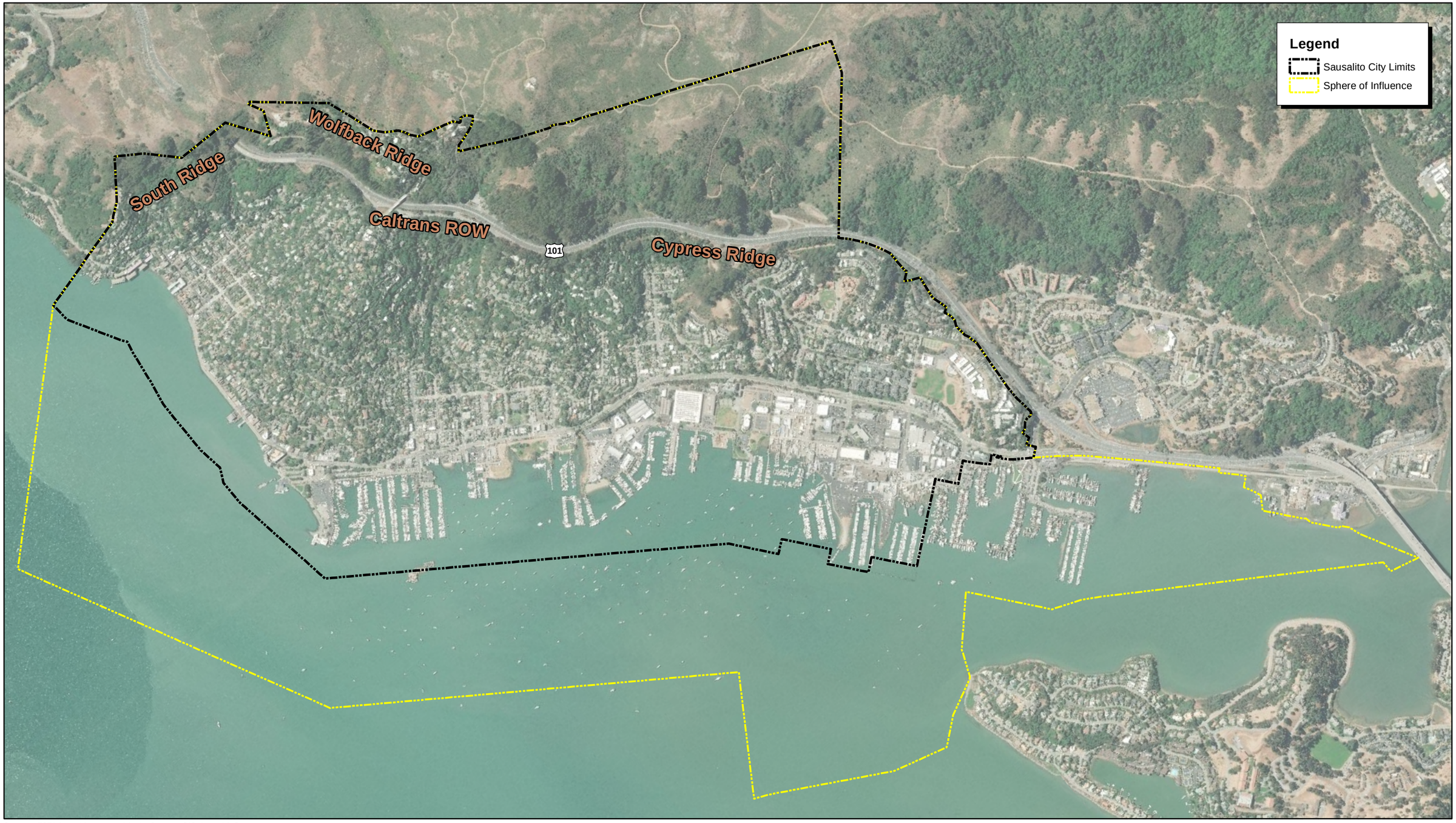

Source: ESRI Aerial Imagery. Marin County GIS data. M-Group.

FIRSTCARBON SOLUTIONS™

1,200 600 0 1,200 Feet

Exhibit 3.1-1
Ridgelines

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Source: City of Sausalito, Marin County. BKF Engineers, Surveyors, Planners.

FIRSTCARBON SOLUTIONS™

Exhibit 3.1-2
Marinship Views

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CITY OF SAUSALITO
GENERAL PLAN UPDATE EIR

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3.2 AIR QUALITY

This section describes the existing air quality setting and baseline conditions in Sausalito and evaluates the potential environmental impacts that could occur by adopting and implementing the proposed 2040 General Plan.

This section is based on the methodology recommended by the Bay Area Air Quality Management District (BAAQMD) for plan-level review. The analysis contained herein focuses on air pollution from regional emissions[1] and localized pollutant concentrations[2] and is based on the population and employment projections anticipated in Sausalito at 2040 buildout (see Section 2, Project Description). Transportation sector emissions are based on vehicle miles traveled (VMT) provided by Parisi Transportation Consulting, as modeled using the Transportation Authority of Marin Demand Model (TAMDM) (see Appendix F). Criteria air pollutant emissions modeling is included in Appendix B.

The information in this section is also based on statements, data, tables, and figures provided by the following reference materials:

- 2018 Air Monitoring Network Plan, BAAQMD, July 1, 2019;
- CEQA Air Quality Guidelines, BAAQMD, May 2017;
- 2017 Clean Air Plan, BAAQMD, April 2017;
- California Air Resources Board, Area Designations Maps / State and National, December 28, 2018; and
- BAAQMD, Improving Air Quality & Health in Bay Area Communities, Community Air Risk Evaluation Program Retrospective & Path Forward, April 2014.

Greenhouse gas emissions are discussed in Section 3.7, Greenhouse Gas Emissions.

3.2.1 EXISTING SETTING

San Francisco Bay Area Air Basin

The City of Sausalito is located within the San Francisco Bay Area Air Basin (SFBAAB or Air Basin). The Air Basin encompasses approximately 5,600 square miles and includes all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties, and portions of southwestern Solano and southern Sonoma counties. The Air Basin is characterized by a large, shallow basin surrounded by coastal mountain ranges tapering into sheltered inland valleys. The combined climatic and topographic factors result in increased potential for the accumulation of air pollutants in the inland valleys and reduced potential for buildup of air pollutants along the coast. The Air Basin is bounded by the Pacific Ocean to the west and includes complex terrain consisting of coastal mountain ranges, inland valleys, and bays.

[1] "Emissions" refers to the actual quantity of pollutant, measured in pounds per day or tons per year.
[2] "Concentrations" refers to the amount of pollutant material per volumetric unit of air. Concentrations are measured in parts per million (ppm), parts per billion (ppb), or micrograms per cubic meter (μg/m^3).

Ambient Air Quality Standards

National and California ambient air quality standards (AAQS) are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect "sensitive receptors" most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health-based AAQS for seven air pollutants, which are shown in Table 3.2-1. These pollutants are ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb). In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the general public with a reasonable margin of safety.

TABLE 3.2-1: AMBIENT AIR QUALITY STANDARDS FOR CRITERIA POLLUTANTS

POLLUTANT	AVERAGING TIME	CALIFORNIA STANDARD	FEDERAL PRIMARY STANDARD	MAJOR POLLUTANT SOURCES
OZONE (O_3)	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
CARBON MONOXIDE (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9 ppm	9 ppm	
NITROGEN DIOXIDE (NO_2)	Annual Average	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
SULFUR DIOXIDE (SO_2)	Annual Arithmetic Mean	*	*[a]	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	*[a]	
RESPIRABLE PARTICULATE MATTER (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m^3	150 µg/m^3	
RESPIRABLE PARTICULATE MATTER ($PM_{2.5}$)	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m^3	
LEAD (PB)	30-Day Average	1.5 µg/m^3	*	Present source: lead smelters, battery manufacturing and recycling facilities. Past
	Calendar Quarterly	*	1.5 µg/m^3	

POLLUTANT	AVERAGING TIME	CALIFORNIA STANDARD	FEDERAL PRIMARY STANDARD	MAJOR POLLUTANT SOURCES
	Rolling 3-Month Average	*	0.15 µg/m^3	source: combustion of leaded gasoline.
SULFATES (SO_4)	24 hours	25 µg/m^3	*	Industrial processes.
VISIBILITY REDUCING PARTICLES	8 hours	ExCo =0.23/km visibility of 10≥ miles	*	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size, and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.
HYDROGEN SULFIDE	1 hour	0.03 ppm	*	Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation.
HYDROGEN SULFIDE	24 hour	0.01 ppm	*	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Notes:
PPM = parts per million; µg/m3 = micrograms per cubic meter
** Standard has not been established for this pollutant/duration by this entity.*
[a] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked.
Source: California Air Resources Board. 2016. Ambient Air Quality Standards. May 4.

Attainment Status of the SFBAAB

Areas that meet AAQS are classified attainment areas, and areas that do not meet these standards are classified nonattainment areas. Severity classifications for O_3 range from marginal, moderate, and serious to severe and extreme. The attainment status for the SFBAAB is shown in Table 3.2-2. The Air Basin is currently designated a nonattainment area for California and National O_3, California and National $PM_{2.5}$, and California PM_{10} AAQS.

TABLE 3.2-2: ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SAN FRANCISCO BAY AREA AIR BASIN

POLLUTANT	STATE	FEDERAL
OZONE—1-HOUR	Nonattainment	Nonattainment
OZONE—8-HOUR	Nonattainment	Classification revoked (2005)

POLLUTANT	STATE	FEDERAL
PM_{10}	Nonattainment	Unclassified/Attainment
$PM_{2.5}$	Nonattainment	Nonattainment[a]
CO	Attainment	Attainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
LEAD	Attainment	Attainment
SULFATES	Attainment	Unclassified/Attainment
ALL OTHERS	Unclassified/Attainment	Unclassified/Attainment

Note:

[a] *On January 9, 2013, the EPA issued a final rule to determine that the Air Basin has attained the 24-hour $PM_{2.5}$ National AAQS. This action suspends federal State Implementation Plan planning requirements for the Bay Area. The Air Basin will continue to be designated nonattainment for the National 24-hour $PM_{2.5}$ standard until such time as BAAQMD elects to submit a re-designation request and a maintenance plan to EPA and EPA approves the proposed re-designation.*

Source: California Air Resources Board, Area Designations Maps / State and National. Website: http://www.arb.ca.gov/desig/adm/adm.htm. Accessed April 16, 2020.

City of Sausalito

Air quality in Sausalito is determined by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions. In the summer, the climate consists of mostly clear skies result in warm daytime temperatures and cool nights. Winter temperatures are mild, except for very cool but generally frost-less mornings.

Fine particle pollution, or $PM_{2.5}$, is the major regional air pollutant of concern in the city and is primarily a problem in the winter. [3]

Located in southern of Marin County next to Richardson's Bay, Sausalito is a small city with a land area of approximately 1.9 square miles. Sausalito enjoys a temperate climate, with cool, wet, and almost frostless winters and cool, dry summers with frequent fog or wind. The climate is dominated by the strength and location of a semi-permanent, subtropical high-pressure cell. During the summer, the Pacific high-pressure cell is centered over the northeastern Pacific Ocean, resulting in stable meteorological conditions and a steady northwesterly wind flow.

The BAAQMD conducts ambient air monitoring, both through a fixed-station network, and special short-term studies.[4] The ambient air monitoring network consists of over 30 stations, distributed among the nine Bay Area counties that collect local air quality data, including measurements of significant air pollutants. The San Rafael monitoring station, which monitors ozone, is the nearest monitoring station to the Sausalito Planning Area. The monitoring data is presented in Table 3.2-3 that shows the most recent five years of available data for the San Rafael Monitoring Station.

[3] Bay Area Air Quality Management District. 2019. Marin County. February 14. Website: https://www.baaqmd.gov/about-the-air-district/in-your-community/marin-county. Accessed April 16, 2020.

[4] Bay Area Air Quality Management District. 2019. 2018 Air Monitoring Network Plan. July 1.

TABLE 3.2-3: AMBIENT AIR QUALITY MONITORING SUMMARY

POLLUTANT / STANDARD	NUMBER OF DAYS THRESHOLD WERE EXCEEDED AND MAXIMUM LEVELS DURING SUCH VIOLATIONS				
	2014	2015	2016	2017	2018
OZONE (O3)					
STATE 1-HOUR ≥ 0.09 PPM	0	0	0	0	0
STATE 8-HOUR ≥ 0.07 PPM	0	0	0	0	0
FEDERAL 8-HOUR > 0.070 PPM	0	0	0	0	0
MAXIMUM 1-HOUR CONC. (PPM)	0.081	0.088	0.088	0.088	0.072
MAXIMUM 8-HOUR CONC. (PPM)	0.068	0.070	0.67	0.063	0.053
CARBON MONOXIDE (CO)					
STATE 8-HOUR > 9.0 PPM	0	0	0	0	0
FEDERAL 8-HOUR ≥ 9.0 PPM	0	0	0	0	0
MAXIMUM 8-HOUR CONC. (PPM)	1.1	0.9	1.0	1.6	1.6
NITROGEN DIOXIDE (NO_2)					
STATE 1-HOUR ≥ 180 PPB	0	0	0	0	0
FEDERAL 1-HOUR > 100 PPB	0	0	0	0	0
MAXIMUM 1-HOUR CONC. (PPB)	62.4	44.0	45.5	53.4	55.3
COARSE PARTICULATES (PM_{10})					
STATE 24-HOUR > 50 µG/M³	0	0	0	2	2
FEDERAL 24-HOUR > 150 µG/M³	0	0	0	0	1
MAXIMUM 24-HOUR CONC. (µG/M³)	40.9	42.0	27.0	94.0	166.0
FINE PARTICULATES ($PM_{2.5}$)					
FEDERAL 24-HOUR > 35 µG/M³	1	2	0	8	13
MAXIMUM 24-HOUR CONC. (µG/M³)	38.1	36.3	15.6	74.7	167.6

Notes:

*ppm = parts per million; ppb = parts per billion; µG/M³ = micrograms per cubic meter; * = insufficient data; NA = not available*

Source: California Air Resources Board, iADAM: Air Quality Data Statistics. Website: https://www.arb.ca.gov/adam/. BAAQMD Annual Bay Air Quality Summaries. Website: https://www.baaqmd.gov/about-air-quality/air-quality-summaries, Accessed April 20, 2020.

As shown in Table 3.2-3, the air quality in San Rafael is better than the majority of the Bay Area, with no exceedances of ozone, carbon monoxide, or nitrogen dioxide during the most recent five years of available data. However, PM_{10} exceeded the national 150 µg/m³ 24-hour PM_{10} standard for one day in 2018 and the State 150 µg/m³ 24-hour PM_{10} standard for two days

in both 2017 and 2018. In addition, $PM_{2.5}$ exceeded the national 35 µg/m^3 24-hour PM_{10} standard for between 0 and 13 days each year between 2014 and 2018. It should be noted that most of these exceedances were due to wildfires that create large amounts of particulate matter.

3.2.2 AIR POLLUTANTS OF CONCERN

A substance in the air that can cause harm to humans and the environment is known as an air pollutant. Pollutants can be in the form of solid particles, liquid droplets, or gases.[5] In addition, they may be natural or man-made. A hazardous air pollutant is one that is known to cause cancer and other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects.[6]

Criteria Air Pollutants

CO, ROG, NO_X, SO_2, PM_{10}, $PM_{2.5}$, and Pb are primary air pollutants and are "criteria air pollutants."[7] Criteria Air Pollutants have nationwide air quality standards (AAQS) have been established for them. ROG and NO_X are criteria pollutant precursors that form secondary criteria air pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and nitrogen dioxide (NO_2) are the principal secondary pollutants.

A description of each of the primary and secondary criteria air pollutants and their known health effects is presented below.

Carbon Monoxide (CO) is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as wood, coal, gasoline, and diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little or no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, motor vehicles operating at slow speeds are the primary source of CO in the SFBAAB. Emissions are highest during cold starts, hard acceleration, stop-and-go driving, and when a vehicle is moving at low speeds. New findings indicate that CO emissions per mile are lowest at about 45 miles per hour (mph) for the average light-duty motor vehicle and begin to increase again at higher speeds. When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces its oxygen-carrying capacity. This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia, as well as for fetuses. Even healthy people exposed to high CO concentrations can experience headaches, dizziness, fatigue, unconsciousness, and even death. The Air Basin is designated under the California and National AAQS as being in attainment of CO criteria levels.

Reactive Organic Gases (ROGs) are compounds composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of ROGs. Other sources of ROGs include evaporative emissions from paints and solvents, the

[5] Bay Area Air Quality Management District. 2017. CEQA Air Quality Guidelines, Appendix C, May.
[6] U.S. Environmental Protection Agency. Hazardous Air Pollutants. Website: https://www.epa.gov/haps. Accessed April 16, 2020.
[7] Bay Area Air Quality Management District. 2017. CEQA Air Quality Guidelines, Appendix C. May.

application of asphalt paving, and the use of household consumer products such as aerosols. Adverse effects on human health are not caused directly by ROGs, but rather by reactions of ROGs to form secondary pollutants such as O_3. There are no AAQS established for ROGs. However, because they contribute to the formation of O_3, BAAQMD has established a significance threshold for this pollutant.

Nitrogen Oxides also known as Oxides of Nitrogen (NO_X) are a by-product of fuel combustion and contribute to the formation of O_3. The two major components of NO_X are nitric oxide (NO) and nitrogen dioxide (NO_2). The principal component of NO_X produced by combustion is NO, but NO reacts with oxygen to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. NO_2 acts as an acute irritant and in equal concentrations is more injurious than NO. At atmospheric concentrations, however, NO_2 is only potentially irritating. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase in bronchitis in children (two and three years old) has also been observed at concentrations below 0.3 ppm. NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The SFBAAB is designated an attainment area for NO_2 under the National AAQS and California AAQS.

Sulfur Dioxide (SO_2) is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and from chemical processes at chemical plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO_2. When SO_2 forms sulfates (SO_4) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_x). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. At lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. The SFBAAB is designated an attainment area for SO_2 under the California and National AAQS.

Suspended Particulate Matter (PM_{10} and $PM_{2.5}$) consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM_{10}, include the particulate matter with an aerodynamic diameter of 10 microns (i.e., 10 millionths of a meter or 0.0004-inch) or less. Inhalable fine particles, or $PM_{2.5}$, have an aerodynamic diameter of 2.5 microns or less (i.e., 2.5 millionths of a meter or 0.0001 inch).

Some particulate matter, such as pollen, occurs naturally. In the Air Basin most particulate matter is caused by combustion, factories, construction, grading, demolition, agricultural activities, and motor vehicles. Extended exposure to particulate matter can increase the risk of chronic respiratory disease. PM_{10} bypasses the body's natural filtration system more easily than larger particles and can lodge deep in the lungs. The U.S. Environmental Protection Agency (USEPA) concluded that $PM_{2.5}$ penetrates even more deeply into the lungs, and this is more likely to contribute to health effects. These health effects include premature death in people with heart or lung disease, non-fatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing). Motor vehicles are currently responsible for about half of

particulates in the SFBAAB. Wood burning in fireplaces and stoves is another large source of fine particulates.

Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems. These health effects include premature death and increased hospital admissions and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individual with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms. Diesel particulate matter (DPM) is classified a carcinogen by the California Air Resources Board (CARB). The SFBAAB is designated nonattainment under the California AAQS for PM_{10} and nonattainment under both the California and National AAQS for $PM_{2.5}$.[8]

Ozone (O_3) is a gas that is formed when ROGs and NO_X, both by-products of internal combustion engine exhaust, undergo photochemical reactions in the presence of sunlight. O_3 is a secondary criteria air pollutant. O_3 concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable condition to the formation of this pollutant. O_3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. O_3 levels usually build up during the day and peak in the afternoon hours. Short-term exposure can irritate the eyes and cause constriction of the airways. Besides causing shortness of breath, it can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema. Chronic exposure to high ozone levels can permanently damage lung tissue. O_3 can also damage plants and trees and materials such as rubber and fabrics. The SFBAAB is designated nonattainment of the 1-hour California AAQS and 8-hour California and National AAQS for O_3.

Lead (Pb) is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been mobile and industrial sources. As a result of the phase-out of leaded gasoline, metal processing is currently the primary source of lead emissions. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.

Twenty years ago, mobile sources were the main contributor to ambient lead concentrations in the air. In the early 1970s, the EPA set national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. The EPA banned the use of leaded gasoline in highway vehicles in December 1995. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector and levels of lead in the air decreased dramatically. The SFBAAB is designated in attainment of the California and National AAQS for lead. Because emissions of lead are found only in projects that are permitted by BAAQMD, lead is not an air quality of concern for the proposed 2040 General Plan.

[8] On January 9, 2013, the EPA issued a final rule to determine that the SFBAAB has attained the 24-hour $PM_{2.5}$ National AAQS. This action suspends federal State Implementation Plan planning requirements for the Bay Area. The SFBAAB will continue to be designated nonattainment for the National 24-hour PM2.5 standard until such time as the BAAQMD elects to submit a re-designation request and a maintenance plan to EPA and EPA approves the proposed re-designation.

Toxic Air Contaminants

The California Health and Safety Code define a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to Section 112(b) of the federal Clean Air Act (42 U.S. Code Section 7412[b]) is a toxic air contaminant. Under State law, the California Environmental Protection Agency (CalEPA), acting through CARB, is authorized to identify a substance as a TAC if it is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act sets up a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions. To date, CARB has established formal control measures for 11 TACs that are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment (HRA), and if specific thresholds are exceeded, are required to communicate the results to the public through notices and public meetings.

At the time of the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs.[9] Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

In 1998, CARB identified diesel particulate matter (DPM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particles are 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs.

3.2.3 REGULATORY SETTING

Federal and State

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, Congress added several provisions, including nonattainment requirements for areas not meeting National AAQS

[9] California Air Resources Board. 1999. Final Staff Report: Update to the Toxic Air Contaminant List. December. Website: https://www.arb.ca.gov/toxics/Finalreport.PDF. Accessed April 16, 2020.

and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: National AAQS for criteria air pollutants, hazardous air pollutant standards, State attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions. The EPA is responsible for administering the FCAA.

The California Clean Air Act (CCAA) was first signed into law in 1988. The CCAA provides a comprehensive framework for air quality planning and regulation, and spells out, in statute, the State's air quality goals, planning and regulatory strategies, and performance. The CCAA requires all areas of the State to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS. CARB is the agency responsible for administering the CCAA.

Regional

Bay Area Air Quality Management District

The BAAQMD is the agency responsible for assuring that the National and California AAQS are attained and maintained in the SFBAAB. The BAAQMD is responsible for:

- Adopting and enforcing rules and regulations concerning air pollutant sources.
- Issuing permits for stationary sources of air pollutants.
- Inspecting stationary sources of air pollutants.
- Responding to citizen complaints.
- Monitoring ambient air quality and meteorological conditions.
- Awarding grants to reduce motor vehicle emissions.
- Conducting public education campaigns.
- Air Quality Management Planning.

Air quality conditions in the SFBAAB have improved significantly since the BAAQMD was created in 1955.[10] The BAAQMD prepares air quality management plans (AQMPs) to attain ambient air quality standards in the Air Basin. The BAAQMD prepares ozone attainment plans for the National O_3 standard and clean air plans for the California O_3 standard. The BAAQMD prepares these AQMPs in coordination with Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC).

BAAQMD 2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) adopted the 2017 Clean Air Plan (CAP) on April 19, 2017 to comply with State air quality planning requirements set forth in the California Health & Safety Code. The 2017 CAP includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter (PM), ozone (O_3), and toxic air contaminants (TACs); to reduce emissions of methane and other "super-greenhouse gases (GHGs)" that are potent

[10] Bay Area Air Quality Management District. 2017. CEQA Air Quality Guidelines, Appendix C, May.

climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

The proposed control strategy for the 2017 CAP consists of 85 specific control measures targeting a variety of local, regional, and global pollutants. The control measures have been developed for stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants. Implementation of some of the control measures could involve retrofitting, replacing, or installing new air pollution control equipment, changes in product formulations, or construction of infrastructure that have the potential to create air quality impacts.

The BAAQMD CEQA Guidelines set forth criteria for determining consistency with the CAP. In general, a project is considered consistent if 1) the project supports the primary goals of the CAP, 2) includes control measures and 3) does not interfere with implementation of the CAP measures.

BAAQMD 2017 CEQA Air Quality Guidelines

The purpose of the CEQA Air Quality Guidelines is to assist lead agencies in evaluating air quality impacts of projects and plans proposed in the SFBAAB. The Guidelines contain instructions on how to evaluate, measure, and mitigate air quality impacts generated from land development construction and operation activities. The Guidelines focus on criteria air pollutant, GHG, toxic air contaminant, and odor emissions generated from plans or projects and are intended to help lead agencies navigate through the CEQA process. The Guidelines for implementation of the Thresholds are for information purposes only to assist local agencies. Recommendations in the Guidelines are advisory and should be followed by local governments at their own discretion.

The most recent version of the CEQA Air Quality Guidelines were published May 2017, and includes revisions made to address the Supreme Court's opinion (*California Building Industry Association v. Bay Area Air Quality Management District*, December 2015).[11] The May 2017 Guidelines update does not address outdated references, links, analytical methodologies or other technical information that may be in the Guidelines or Thresholds Justification Report. The BAAQMD is currently working to update any outdated information in the Guidelines.

Community Air Risk Evaluation Program

The BAAQMD's Community Air Risk Evaluation (CARE) program was initiated in 2004 to evaluate and reduce health risks associated with exposure to outdoor TACs in the Bay Area. Based on findings of the latest report, DPM was found to account for approximately 85 percent of the cancer risk from airborne toxics.

[11] In March 2012, the Alameda County Superior Court ordered BAAQMD to set aside use of the significance thresholds within the BAAQMD 2010 CEQA Guidelines and cease dissemination until they complete an assessment of the environmental effects of the thresholds in accordance with CEQA. The Court found that the thresholds, themselves, constitute a "project" for which environmental review is required. In August 2013, the First District Court of Appeal reversed the Alameda County Superior Court's decision. The Court held that adoption of the thresholds was not a "project" subject to CEQA because environmental changes that might result from their adoption were too speculative to be considered "reasonably foreseeable" under CEQA. In December 2015, the California Supreme Court reversed the Court of Appeal's decision and remanded the matter back to the appellate court to reconsider the case in light of the Supreme Court's opinion.

Carcinogenic compounds from gasoline-powered cars and light duty trucks were also identified as significant contributors: 1,3-butadiene contributed four percent of the cancer risk-weighted emissions, and benzene contributed three percent. Collectively, five compounds (diesel PM, 1,3-butadiene, benzene, formaldehyde, and acetaldehyde) were found to be responsible for more than 90 percent of the cancer risk attributed to emissions. All of these compounds are associated with emissions from internal combustion engines. The most important sources of cancer risk-weighted emissions were combustion-related sources of DPM, including on-road mobile sources (31 percent), construction equipment (29 percent), and ships and harbor craft (13 percent). A 75 percent reduction in DPM was predicted between 2005 and 2015 when the inventory accounted for CARB's diesel regulations. Overall, cancer risk from TAC dropped by more than 50 percent between 2005 and 2015, when emissions inputs accounted for State diesel regulations and other reductions.[12]

Modeled cancer risks from TAC in 2005 were highest near sources of DPM: near core urban areas, along major roadways and freeways, and near maritime shipping terminals. Peak modeled risks were found to be located east of San Francisco, near West Oakland and the Maritime Port of Oakland. BAAQMD has identified seven impacted communities in the Bay Area:

- Western Contra Costa County and the cities of Richmond and San Pablo.
- Western Alameda County along the Interstate 880 (I-880) corridor and the cities of Berkeley, Alameda, Oakland, and Hayward.
- San Jose.
- Eastern side of San Francisco.
- Concord.
- Vallejo.
- Pittsburgh and Antioch.

The eastern side of San Francisco is the closest CARE program impacted community to Sausalito. The City of Sausalito is not located within this impacted community.

The major contributor to acute and chronic non-cancer health effects in the Air Basin is acrolein (C_3H_4O). Major sources of acrolein are on-road mobile sources and aircraft near freeways and commercial and military airports.[13]

Local

Sausalito General Plan

The proposed 2040 General Plan includes the following relevant policies and programs related to air quality:

[12] Bay Area Air Quality Management District. 2014. Improving Air Quality & Health in Bay Area Communities, Community Air Risk Evaluation Program Retrospective & Path Forward. April.

[13] Bay Area Air Quality Management District. 2006. Community Air Risk Evaluation Program, Phase I Findings and Policy Recommendations Related to TACs in the San Francisco Bay Area. September.

Environmental Quality Element

Policy EQ-5.1: Implement Research. Incorporate the growing body of climate change research to improve air quality in Sausalito due to emissions' negative impact on both local air quality and global climate change.

Program EQ-5.1.1: Update CAP. Continue to update Sausalito's Climate Action Plan with new data as well as updated policies and programs.

Program EQ-5.1.3: Emissions Targets. Update City targets for Greenhouse Gas emissions to align with the most ambitious of County, State or Federal targets.

Program EQ-5.1.4: Urban Form. Encourage land use policies that promote pedestrian and bicycle uses to reduce automobile use, improve air quality, and reduce impacts of climate change.

Program EQ-5.1.5: Clean Burning Fuels. Encourage business and residential use of clean-burning fuels.

Program EQ-5.1.6: City Vehicles. Require vehicles purchased by the City to have low emissions and do routine maintenance to ensure low emissions.

Program EQ-5.1.7: Odor-Emitting Uses. Continue to investigate the need for special conditions for potential odor-emitting uses through the environmental review process.

Policy EQ-5.2: Community Action. Collaborate with city employees, residents and businesses to improve air quality.

Program EQ-5.2.1: Air Quality Outreach. Distribute to residents and businesses an air quality public information handout prepared by the Bay Area Air Quality Management District (BAAQMD) identifying common hazardous materials and materials whose emissions are regulated.

Program EQ-5.2.2: Circulation and Parking Element Programs. Implement programs identified in the Circulation and Parking Element which could reduce vehicular emissions.

Program EQ-5.2.3: Toxic Chemicals. Initiate public awareness programs to minimize the use of toxic garden and lawn sprays for both public and private purposes (see Policy HS-1.4).

Program EQ-5.2.4: Dust Mitigation. Require that developers prepare a dust mitigation plan identifying strategies for reducing particulate emissions.

Program EQ-5.2.5: Electrify Equipment: Require city usage and promote resident usage of electric landscape equipment where possible, for example replacing gasoline-powered leaf blowers with electric blowers.

Program EQ-5.2.6: Prefer Reduced-Emission Equipment. Give preference to contractors and contracts for services to firms that use reduced-emission equipment and/or practice sustainable operations.

Program EQ-5.2.7: Climate Change Education. Promote local, county, state and federal standards among Sausalito residents and businesses, informing them of the short-and long-term effects of reducing emissions and improving air quality.

Sausalito Municipal Code

Chapter 8.18 of the Sausalito Municipal Code (Energy Code) adopts the 2019 California Energy Code, Title 24, Part 6, and incorporates the code into the Sausalito Municipal Code.

Chapter 8.54 (Construction and Demolition Waste Recovery) promotes the redirection of recyclable materials generated during construction away from landfills. All project applicants are required to complete and submit a recycling management plan to estimate the volume of debris to be generated during construction and the estimated amount of debris that would be sent to the landfill. The intent of Chapter 8.54 is to divert at least 50 percent of all debris waste from most construction, demolition, and renovation projects away from local landfills.

Chapter 11.12 (Preservation of Trees and Views) acknowledges the contribution of trees to the character and beauty of the city and provides guidelines to address potential conflicts between preservation of trees and view-related values. This chapter also encourages and promotes the planting and proper husbandry of trees throughout the city.

Chapter 17.28 (Trees, Shrubs and Plants) describes protections for trees in the public realm, including prohibitions against cutting, pruning, injuring, removing or spraying public trees, as well as prohibitions against attaching appurtenances or interfering with work on trees by city employees.

3.2.4 SENSITIVE RECEPTORS

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases. Residential areas are also considered sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Other sensitive receptors include retirement facilities, hospitals, and schools.

Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial, commercial, retail, and office areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, since the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the population.

3.2.5 THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines Appendix G, the proposed project will have a significant impact related to air quality if it would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations; or

- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

BAAQMD Significance Criteria

BAAQMD CEQA Air Quality Guidelines

As described in the Regulatory Setting section, the BAAQMD CEQA Air Quality Guidelines contain instructions on how to evaluate, measure, and mitigate air quality impacts generated from land development construction and operation activities.[14] The City of Sausalito is using the BAAQMD's 2017 thresholds to evaluate project impacts in order to protectively evaluate the potential effects of the project on air quality.

Criteria Air Pollutants and Precursors

Under its plan-level review criteria, BAAQMD requires a consistency evaluation of a plan with its current air quality plan control measures. The current AQMP is the 2017 Bay Area Clean Air Plan. The BAAQMD considers the project consistent with the air quality management plan in accordance with the following, which are discussed under Impact AIR-1 below:

- Does the project support the primary goals of the AQMP?
- Does the project include applicable control measures from the AQMP?
- Does the project disrupt or hinder implementation of any AQMP control measures?
- A comparison that the project VMT or vehicle trip increase is less than or equal to the projected population increase.

Local CO Hotspots

Congested intersections have the potential to create elevated concentrations of CO, referred to as CO hotspots. The significance criteria for CO hotspots are based on the California AAQS for CO, which are 9.0 ppm (8-hour average) and 20.0 ppm (1-hour average). Under the plan-level review, BAAQMD does not require an evaluation of CO hotspots.[15] With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology, the SFBAAB is in attainment of the California and National AAQS, and CO concentrations in the Air Basin have steadily declined. Because CO concentrations have improved, the BAAQMD does not require a CO hotspot analysis if the following criteria are met:

- The project is consistent with an applicable congestion management program established by the County Congestion Management Agency for designated roads or highways, the regional transportation plan, and local congestion management agency plans.
- The Project would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- The Project traffic would not increase traffic volumes at affected intersection to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

[14] Bay Area Air Quality Management District. 2017. CEQA Air Quality Guidelines. May.
[15] Congested intersections have the potential to create CO hotspots.

As discussed in Section 3.14, Transportation, all three criteria identified above have been met. Therefore, a CO hotspot analysis is not required for the proposed 2040 General Plan.

Community Risk and Hazards

The BAAQMD's significance thresholds for local community risk and hazard impacts apply to both the siting of a new source and to the siting of a new receptor.

Local community risk and hazard impacts are associated with TACs and $PM_{2.5}$ because emissions of these pollutants can have significant health impacts at the local level. Significant health impacts may occur when a project generates:

- An excess cancer risk level of more than 10 in one million, or a non-cancer (i.e., chronic or acute) hazard index greater than 1.0; or
- An incremental increase of greater than 0.3 micrograms per cubic meter (µg/m3) annual average $PM_{2.5}$.

For assessing community risk and hazards, sources within a 1,000-foot radius of a project site are considered. Sources are defined as freeways, high volume roadways (with volume of 10,000 vehicles or more per day or 1,000 trucks per day) and permitted sources. For a plan-level analysis, BAAQMD requires the following:

- Overlay zones around existing and planned sources of TACs; and
- Overlay zones of at least 500 feet from all freeways and high-volume roads.

For a plan-level analysis, a project must also identify goals, policies, and objectives to minimize potential impacts and create overlay zones for sources of TACs and receptors.

Odors

BAAQMD's thresholds for odors are qualitative based on BAAQMD's Regulation 7, Odorous Substances. This rule places general limitations on odorous substances and specific emission limitations on certain odorous compounds. In addition, odors are also regulated under BAAQMD Regulation 1, Rule 1-301, Public Nuisance, which states that no person shall discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the public; or which endangers the comfort, repose, health or safety of any such persons or the public, or which causes, or has a natural tendency to cause, injury or damage to business or property. Under BAAQMD's Rule 1-301, a facility that receives three or more violation notices within a 30-day period can be declared a public nuisance. BAAQMD has established odor screening thresholds for land uses that have the potential to generate substantial odor complaints, including wastewater treatment plants, landfills or transfer stations, composting facilities, confined animal facilities, food manufacturing, and chemical plants. For a plan-level analysis, BAAQMD requires:

- Potential existing and planned location of odors sources to be identified.
- Policies to reduce odors.

3.2.6 ANALYSIS, IMPACTS, AND MITIGATION MEASURES

Impacts related to air quality resulting from implementation of the proposed 2040 General Plan are discussed below. The impact analysis is based on air quality modeling of the criteria air pollutant emissions that would result from projected future growth between the existing conditions and year 2040. The California Emissions Estimator Model (CalEEMod Version 2016.3.2) was used to compute emissions of air pollutants (see Appendix B).

Impact AIR-1 Implementation of the proposed 2040 General Plan would not conflict with or obstruct implementation of the applicable air quality plan.

2017 Bay Area Clean Air Plan

The current AQMP is the 2017 Bay Area Clean Air Plan. The primary goals of the 2017 Bay Area Clean Air Plan are to attain the State and Federal AAQS, eliminate disparities among Bay Area communities in cancer health risk from toxic air contaminants, and reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050. Based on the analysis below, the proposed 2040 General Plan has been found to be consistent with the AQMP prepared by the BAAQMD.

Attain Air Quality Standards

BAAQMD's 2017 Bay Area Clean Air Plan strategy is based on regional population and employment projections within the Bay Area compiled by ABAG[16]. Demographic trends incorporated into the Plan Bay Area determine vehicle miles traveled (VMT) within the Bay Area, which BAAQMD utilizes to forecast future air quality trends. The SFBAAB is currently designated a nonattainment area for O_3, $PM_{2.5}$, and PM_{10} (State AAQS only).

The city's population has remained relatively constant since 1990, when it had a population of 7,193. In 2019, the city's population was 7,416, which represents a 3 percent increase over 27 years. Sausalito households averaged 1.53 persons per household in 2019, approximately 38.3 percent smaller than the Marin County average of 2.48 persons per household. The proposed 2040 General Plan could yield up to 304 new residential units, 94 of which would be new accessory dwelling units within the Sausalito Planning Area. Assuming a household size of 1.53 for residential units, a total of 467 new persons would be accommodated under the proposed 2040 General Plan. At buildout of the proposed 2040 General Plan, the Sausalito population is projected to be approximately 7,883. ABAG forecasts the population buildout to be 7,765. Since these forecasts are within 118 persons of each other, they provide similar population forecast.

With respect to employment, the city's employment base is dominated by two sectors:

- Accommodation and Food Services (1,061 jobs in 2014)
- Professional, Scientific, and Technical Services (974 jobs in 2014)

These two sectors supply almost 40 percent of employment in Sausalito. There has been substantial growth in Professional, Scientific, and Technical Services over the previous decade

[16] Projections 2040 by Jurisdiction (Curated), prepared by ABAG. Website: http://projections.planbayarea.org/. Accessed April 20, 2020.

(a 20 percent growth from the previous total of 879 jobs).[17] The proposed 2040 General Plan could yield up to 587,961 new square feet of commercial uses and 146,124 new square feet of industrial uses within the Sausalito Planning Area. Assuming one employee per 400 square feet of commercial and one employee per 500 square feet of industrial uses, approximately 1,762 new employees would be introduced into the Planning Area from full buildout of the proposed 2040 General Plan.

ABAG forecasts 5,885 employees in Sausalito in 2040. The city believes that employment figures from buildout of the proposed 2040 General Plan may be lower than those generated by ABAG. Further, the largely residential character of Sausalito does not provide significant land area for commercial and employment growth. Job growth is more likely to take place elsewhere in Marin County, as illustrated by ABAG projections.

The proposed 2040 General Plan includes policies and programs that require the city to coordinate with regional agencies on regional planning initiatives, to ensure that planning decisions support regional goals of improving air quality. Objective EQ-5 requires the city to strive to achieve federal and State air quality standards by managing locally generated pollutants and reducing greenhouse gases and other emissions in the city. Specifically, Policy EQ-5.2 requires the city to collaborate with city employees, residents and businesses to improve air quality through outreach, circulation and parking programs, toxic chemical awareness programs, dust mitigation, use of electrify equipment, and reduction of emission equipment. As such, while growth anticipated under the proposed 2040 General Plan could slightly exceed regional growth projections for Sausalito, the proposed 2040 General Plan policies and programs would ensure that future development in the city through 2040 would not hinder BAAQMD's ability to attain the California or National AAQS. Accordingly, impacts would be ***less than significant***.

Reduce Cancer Health Risk from Toxic Air Contaminants

Development anticipated by the proposed 2040 General Plan could result in an incremental increase in new residential, commercial, and industrial uses. Most development under the proposed 2040 General Plan is expected to be located near Bridgeway and the waterfront in eastern portions of the Planning Area. As identified in the discussion of community risk and hazards (see Impact AIR-3 below), new sensitive land uses could be proximate to major sources of TACs, and new commercial land uses could generate an increase in TACs. Adherence to BAAQMD regulations would ensure new sources of TACs do not expose populations to significant health risk; however, siting of land uses proximate to major sources of air pollution is outside the control of BAAQMD. These impacts are addressed under Impact AIR-3, below. Implementation of proposed 2040 General Plan policies and programs would reduce community risk and hazards listed in Impact AIR-3 to ***less than significant***.

Reduce GHG Emissions

Greenhouse gas emissions are discussed in Section 3.7, Greenhouse Gas Emissions. As discussed therein, implementation of the proposed 2040 General Plan would achieve the 2030 statewide GHG reduction goal and is forecasted to advance toward the 2050 statewide goal. In addition, the proposed 2040 General Plan is consistent with regional strategies for infill

[17] Economic Development Chapter, 2018. Sausalito General Plan Update Comprehensive Existing Conditions Report. May.

development identified by the MTC/ABAG in the Plan Bay Area. Consequently, the proposed 2040 General Plan is consistent with the goals of the 2017 Bay Area Clean Air Plan to reduce GHG emissions. Accordingly, impacts would be ***less than significant***.

Include Applicable Control Measures From the AQMP

Table 3.2-4 identifies the control measures included in the 2017 Bay Area Clean Air Plan and the proposed 2040 General Plan polices and regulations in the Sausalito Municipal Code related to the control measures. As shown in Table 3.2-4, the proposed 2040 General Plan and Municipal Code are consistent with the control measures included in the 2017 Bay Area Clean Air Plan. As such, the proposed 2040 General Plan would be consistent with the 2017 Bay Area Clean Air Plan under this criterion. Therefore, impacts due to inconsistency under this criterion would be ***less than significant***.

TABLE 3.2-4: SAUSALITO PROPOSED 2040 GENERAL PLAN CONSISTENCY WITH 2017 CLEAN AIR PLAN

2017 BAY AREA CLEAN AIR PLAN CONTROL MEASURE	CONSISTENT WITH CONTROL MEASURE?	DISCUSSION
TR2 (TRIP REDUCTION PROGRAMS): ENCOURAGE TRIP REDUCTION POLICIES AND PROGRAMS IN LOCAL PLANS. ENCOURAGE LOCAL GOVERNMENTS TO REQUIRE MITIGATION OF VEHICLE TRAVEL AS PART OF NEW DEVELOPMENT APPROVAL, TO ADOPT TRANSIT BENEFTS ORDINANCES IN ORDER TO REDUCE TRANSIT COSTS TO EMPLOYEES, AND TO DEVELOP INNOVATIVE WAYS TO ENCOURAGE RIDESHARE, TRANSIT, CYCLING, AND WALKING FOR WORK TRIPS.	Yes	The proposed 2040 General Plan includes the following policies to reduce vehicle miles traveled: • Policy CP-2.4. Cooperation with Local Businesses. Work cooperatively with local business interests in developing programs to reduce traffic, emissions, vehicle miles traveled, and parking impacts. Programs: • CP-2.4.1. Employee Parking Program. Consider feasibility of employee parking program in worker-rich areas of the City (Downtown and the Marinship) to reduce employee parking impacts on neighboring residential and commercial areas. • CP-2.4.2. Employer Outreach. Develop a list of commuter VMT reduction strategies and work with City business groups to inform businesses of them. • CP-2.4.3. Trip Reduction Ordinance. Continue to update and enforce the adopted Trip Reduction Ordinance which requires employers with 50 or more employees to provide incentives for their employees to use transportation alternatives to get to work. • CP-2.4.4. Downtown Shared Parking Model. Continue to update and implement the Downtown Shared Parking Model.
TR9 (BICYCLE AND PEDESTRIAN ACCESS FACILITIES): ENCOURAGE PLANNING FOR BICYCLE AND PEDESTRIAN FACILITIES IN LOCAL PLANS.	Yes	The proposed 2040 General Plan includes the following policies related to bicycle and pedestrian facilities: • Policy W-1.1. Sausalito Waterfront. Leverage Sausalito's greatest asset, its waterfront, with careful consideration of pedestrian engagement, floating homes, and maritime lifestyles. • Policy W-1.2. Waterfront Access. Promote and enhance public access and enjoyment of the Sausalito waterfront from both land and water approaches. • Policy W-1.3. Waterfront Path. Provide functional access to the waterfront for bicyclists and pedestrians that promotes accessibility and prioritizes the working waterfront.

2017 BAY AREA CLEAN AIR PLAN CONTROL MEASURE	CONSISTENT WITH CONTROL MEASURE?	DISCUSSION
		• Policy W-1.7. Recreational Diversity. Work with local, regional, and State agencies as well as local organizations to provide a diversity of water-dependent recreational uses, especially those unique to Sausalito. • Policy CD-7.1. Public Stairs. Preserve and enhance public stairs and pathways for purposes of pedestrian safety and enjoyment, as well as emergency evacuation. • Policy CP-5.1. Bicycle Master Plan. Plan, design, implement, and maintain bicycle infrastructure in Sausalito according to a Bicycle Master Plan. • Policy CP-5.2. North-South Greenway. Link Sausalito to County-wide bicycle routes such as the North-South Greenway. • Policy CP-5.3. Bridgeway Bikeway South: Long-Term Solutions. Investigate and study long-term solutions to either ameliorate or bypass the most constricted and/or congested conditions at Alexander Avenue, South Street, and Bridgeway south of the Downtown. • Policy CP-5.4. Bicycle Route Design and Standards. Ensure that all existing and proposed bike routes, lanes, paths, and intersections are compliant with the most up-to-date standards to reduce conflicts between bicyclists, vehicles, and pedestrians, promote safety, and encourage the use of nonmotorized travel. • Policy CP-5.5. Regional Bicycle and Pedestrian Trails. Continue to support the San Francisco Bay Trail, Bay Area Ridge Trail, and other agencies and jurisdictions in their efforts to provide bicycle and pedestrian trails throughout the nine counties of the San Francisco Bay Area. • Policy CP-5.6. Pedestrian Trails and Paths. Maintain, improve, and extend existing public paths and stairways for use by residents and establish new pathway connections to complete the system as shown on Figure 5-3. • Policy CP-5.7. Bicyclist Safety. Provide a safe biking environment along City streets and bicycle trails. • Policy CP-5.8. Pedestrian Safety. Provide a safe walking environment along City streets and pathways. • Policy CP-5.10. Accessibility. Ensure City sidewalks and pathways are accessible for people with physical disabilities. • Policy CP-5.11. Pedestrian/Bicycle Outreach. Promote bicycling and walking among residents and workers as an alternative to vehicular travel. • Policy CP-5.12. Complete Streets. Implement complete streets to ease walking and cycling in the City. • Policy CP-5.13. Development Plan Review. New development and substantial remodels in the Marinship should give special attention to the establishment and enhancement of pedestrian and bicycle pathways.
EN2 (DECREASE ELECTRICITY DEMAND): WORK WITH LOCAL GOVERNMENTS TO ADOPT ADDITIONAL ENERGY-EFFICIENCY POLICIES AND PROGRAMS.	Yes	The proposed 2040 General Plan includes the following policies to decrease electricity demand: • Policy S-2.3. Applied Research. New research and technology that will aid sustainability should be applied to City policies as applicable. • Policy S-2.3.7. Marin Clean Energy. Promote Marin Clean Energy to residents and businesses, particularly MCE Deep Green, and purchase MCE Deep Green for all city facilities. • Policy S-5.1. Energy-Conscious Developments. Promote and enforce development standards that minimize energy use. • Policy S-5.2. City Efficiency. Take actions to minimize City's energy usage and provide leadership in conservation.
BL4 (URBAN HEAT ISLAND MITIGATION):	Yes	Chapter 8.18 of the Municipal Code adopts the 2019 California Energy Code, Title 24, Part 6 of the California Code of Regulations. Cool roofs became part of

2017 BAY AREA CLEAN AIR PLAN CONTROL MEASURE	CONSISTENT WITH CONTROL MEASURE?	DISCUSSION
PERFORM OUTREACH TO CITIES AND COUNTIES TO MAKE THEM AWARE OF COOL ROOFING AND PAVING TECHNIQUES.		the requirements of the California Energy Code in October 2005.
NW2 (URBAN TREEE PLANTING): ENCOURAGE LOCAL GOVERNMENTS TO ADOPT A MUNICIPAL TREE PLANTING ORDINANCE.	Yes	Proposed 2040 General Plan Objective S-3 encourages the link between built and natural environments with policies encouraging resilient plants, maintaining landscaping, tree plantings and replacements. Chapter 17.28 of the Municipal Code (Trees, Shrubs and Plants) protects existing public trees. Chapter 11.12 of the Municipal Code (Preservation of Trees and Views) presents guidelines to resolve resident conflicts regarding tree and view values.
WA3 (GREEN WASTE DIVERSION): FACILITATE ADOPTION OF LOCAL ORDINANCES AND PROGRAMS TO REDUCE THE AMOUNT OF GREEN WASTE GOING TO LANDFILLS.	Yes	The proposed 2040 General Plan includes the following policies to reduce the amount of green waste going to landfills: • Policy S-4.2. Solid Waste Disposal. Strive to reduce the amount of solid waste generated in Sausalito in accordance with State law and Zero Waste Marin goals. • Policy S-6.1. Zero Waste Marin. Continue to work with the Marin Hazardous and Solid Waste Joint Powers Authority towards Zero Waste by 2025. • Policy S-6.2. Waste education. Implement education and social media programs to change Sausalito's waste-related behavior, emphasizing composting and recycling.
WA4 (RECYCLING AND WASTE REDUCTION): PROMOTE COMMUNITY-WIDE ZERO WASTE GOALS AND RECYCLING OF CONSTRUCTION AND DEMOLITION MATERIALS.	Yes	Chapter 8.54 of the Municipal Code (Construction and Demolition Waste Recovery) facilitates diverting construction debris waste away from landfills.
WR2 (SUPPORT WATER CONSERVATION): INCORPORATE WATER CONSERVATION BEST PRACTICES INTO LOCAL PLANNING GUIDANCE.	Yes	The proposed 2040 General Plan includes the following policy related to water conservation: • Policy EQ-4.7. Water Conservation. Promote and encourage water conservation measures to assure that an adequate and safe supply of high-quality water is available for residents. Chapter 8.52 of the Municipal Code (Water Conserving Landscaping) contains regulations to support water conservation.

Source: Bay Area Air Quality Management District. 2017 Clean Air Plan. Adopted April 19, 2017.

Disrupt or Hinder Implementation of any AQMP Control Measures

As described above, and shown in Table 3.2-4, the proposed 2040 General Plan and Sausalito Municipal Code are consistent with the control measures included in the 2017 Bay Area Clean Air Plan. As such, the proposed 2040 General Plan would not hinder BAAQMD from implementing the control measures in the 2017 Bay Area Clean Air Plan. Therefore, impacts due to inconsistency under this criterion would be ***less than significant***.

Regional Growth Projections for VMT and Population and Employment

The VMT created from implementation of the proposed 2040 General Plan has been analyzed in Section 3.14, Transportation, which found that although the total VMT would increase from the existing 623,781 VMT to 785,940 VMT with buildout of the proposed 2040 General Plan, the service population would also increase from the existing 21,460 service population to a service population of 27,008 with buildout of the proposed 2040 General Plan. Due to the balanced growth of both residential and employment opportunities in the proposed 2040 General Plan, as well as the extensive public transit options available in the city, the VMT per service population is anticipated to remain at 29.1 VMT per service population for both existing conditions and for proposed 2040 General Plan buildout conditions. As such the proposed 2040 General Plan would not result in an increase in VMT per service population. Therefore, impacts due to an increase in VMT would be ***less than significant***.

Conclusion

Development envisioned by the proposed 2040 General Plan would be consistent with the 2017 Bay Area Clean Air Plan, since it supports the primary goals of the AQMP, includes applicable control measures from the AQMP, does not disrupt or hinder implementation of any AQMP control measures, and would not result in an increase in VMT that is more than projected increase in population. Through implementation of the applicable proposed 2040 General Plan policies, potential air quality impacts from buildout of the proposed 2040 General Plan would be reduced to less than significant levels. As such the proposed 2040 General Plan would not result in an increase in VMT per service population. Therefore, the proposed 2040 General Plan will not result in an inconsistency with the 2017 Bay Area Clean Air Plan and impacts would be ***less than significant***.

Impact AIR-2 **Implementation of the proposed 2040 General Plan would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard.**

BAAQMD has identified thresholds of significance for criteria pollutant emissions and criteria air pollutant precursors, including ROG, NO_X, PM_{10}, and $PM_{2.5}$. Development projects below the significance thresholds are not expected to generate sufficient criteria pollutant emissions to violate any air quality standard or contribute substantially to an existing or projected air quality violation. According to BAAQMD's CEQA Guidelines, long-range plans (e.g., general plan, redevelopment plans, specific plans, area plans, community plans, regional plans, congestion management plans, etc.) present unique challenges for assessing impacts. Due to the SFBAAB's nonattainment status for ozone and PM and the cumulative impacts of growth on air quality, these plans almost always have significant, unavoidable adverse air quality impacts.

Operational Buildout Emissions

The proposed 2040 General Plan could yield up to 304 new residential units, 587,961 new square feet of commercial uses and 146,124 new square feet of industrial uses within the Sausalito Planning Area. Development of future projects within the Planning Area would be subject to the city's standard CEQA review process and would be required to assess project-specific emissions in relation to the BAAQMD significance thresholds. Although BAAQMD's CEQA Air Quality Guidelines only require an emissions inventory of criteria air pollutants for project-level analyses, an inventory of criteria air pollutants was generated for the proposed 2040

General Plan, since enough information regarding the buildout of the proposed 2040 General Plan is available and can be used to identify the magnitude of emissions from buildout of the proposed 2040 General Plan for informational purposes only (i.e., not for the purpose of determining significance of potential air quality impacts). The total net increase of residential, commercial, and industrial land uses that could be developed with implementation of the proposed 2040 General Plan was entered into the CalEEMod model and the calculated criteria air pollutants are shown in Table 3.2-5.

TABLE 3.2-5: CRITERIA AIR POLLUTANT EMISSIONS GENERATED BY THE PROPOSED 2040 GENERAL PLAN

CATEGORY	CRITERIA AIR POLLUTANTS (POUNDS/DAY)			
	ROG	NO_X	Exhaust PM^{10}	Exhaust $PM^{2.5}$
AREA	26.9	6.2	0.6	0.6
ENERGY	0.3	2.4	0.2	0.2
TRANSPORTATION	16.5	52.4	0.3	0.3
TOTAL	43.7	60.9	1.1	1.1
TONS PER YEAR	7.1	9.1	0.1	0.1
Source: CALEEMOD v 2016.3.2 (see Appendix B).				

As shown in Table 3.2-5, implementation of the proposed 2040 General Plan is likely to lead to increases in criteria pollutant emissions within the San Francisco Bay Air Basin that is in non-attainment for ozone, PM_{10} and $PM_{2.5}$ air quality standards. The proposed 2040 General Plan focuses on protecting the city's residents from exposure to harmful air pollutants. The proposed 2040 General Plan provides for balanced growth between housing and employment within the city, which would limit air emissions through maintaining the VMT per service population. In addition, the proposed 2040 General Plan contains policies and programs to reduce criteria air pollutants to the maximum extent practicable. The Circulation and Parking Element provides several policies that are designed to reduce vehicle miles traveled through expanding public transit and alternative transportation within the city that include water-based transportation as well as improvements to bicycle and pedestrian circulation. The proposed 2040 General Plan also provides specific air quality policies and programs that include:

- Program EQ-5.1.4 that encourages land use policies that promote pedestrian and bicycle use to reduce automobile use;
- Program EQ-5.1.5 that encourages businesses and residents to use clean-burning fuels;
- Program EQ-5.1.6 that requires vehicles purchased by the city to have low emissions and do routine maintenance to ensure low emissions;
- Program EQ-5.2.2 that implements programs in the Circulation Element which could reduce vehicle emissions;
- Program EQ-5.2.4 requires developers to prepare a dust mitigation plan prior to the start of construction activities in the city;

- Program EQ-5.2.5 that requires city usage and promotes resident usage of electric landscape equipment; and
- Program EQ-5.2.6 that gives preference to contractors and contracts for service firms that use reduced-emission equipment and/or practice sustainable operations.

In addition, all new development within the city would be required to meet the BAAQMD rules and regulations that include Regulation 6-3-306 that restrict the installation of wood burning fireplaces into a new building and Regulation 8-3-301 that limits the allowed VOC levels in the architectural coatings applied onto buildings within the city. The 2019 CCR Title 24 Part 6 standards also now require that all homes built in California to have zero-net-energy use, which is achieved through energy-efficiency measures as well required rooftop solar photovoltaic systems. The 2019 CCR Title 24 Part 6 standards also apply to nonresidential buildings and require a variety of energy efficiency measures to be implemented that will reduce energy as usage as well as air emissions.

Therefore, compliance with the applicable policies and programs in the proposed 2040 General Plan, as well applicable State and BAAQMD rules and regulations, would minimize the potential air quality impacts created from implementation of the proposed 2040 General Plan, ensuring that operation-related air quality impacts remain at ***less than significant*** levels.

Construction Emissions

BAAQMD's plan-level guidelines do not require an evaluation of construction emissions for plan-level projects. There is no proposed development under the proposed 2040 General Plan at this time. Future development proposals under the proposed 2040 General Plan would be subject to separate environmental review pursuant to CEQA in order to identify and mitigate potential air quality impacts. Because the details regarding future construction activities are not known at this time, including phasing of future individual projects, construction duration and phasing, and preliminary construction equipment, construction emissions are evaluated qualitatively in accordance with BAAQMD's plan-level guidance.

Construction emissions associated with individual development projects under the proposed 2040 General Plan would generate an increase in criteria air pollutants and TACs. BAAQMD has developed project-level thresholds for construction activities. Subsequent environmental review of future development projects would be required to assess potential impacts under BAAQMD's project-level thresholds. Construction emissions from buildout of future projects within the Sausalito Planning Area would primarily be: 1) exhaust emissions from off-road diesel-powered construction equipment; 2) dust generated by demolition, grading, earthmoving, and other construction activities; 3) exhaust emissions from on-road vehicles; and 4) off-gas emissions of ROGs from application of asphalt, paints, and coatings.

The proposed 2040 General Plan includes policies and programs that would minimize air quality impacts during construction. Specifically, Program EQ-5.2.4 requires the preparation of a dust mitigation plan prior to the start of construction activities in the city; EQ-5.2.5 promotes usage of electric landscape equipment; and EQ-5.2.6 that gives preference to contractors that use reduced-emission equipment. In addition, construction activities within the city would be required to meet the BAAQMD rules and regulations that include Regulation 8-3-301 that limits the allowed VOC levels in the architectural coatings applied onto buildings within the city.

It should be noted that mass emissions from a project are not correlated with concentrations of air pollutants. Projects that exceed the regional significance threshold contribute to the nonattainment designation. As the attainment designation is based on the AAQS, which are set at levels of exposure that are determined to not result in adverse health, the proposed 2040 General Plan would cumulatively contribute to health impacts within the SFBAAB. Known health effects related to ozone include worsening of bronchitis, asthma, and emphysema and a decrease in lung function. Particulate matter can also lead to a variety of health effects in people. These include premature death of people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, decreased lung function, and increased respiratory symptoms.

Regional emissions contribute to these known health effects but it is speculative for this broad based proposed 2040 General Plan to determine how exceeding the regional thresholds would affect the number of days the region is in nonattainment since mass emissions are not correlated with concentrations of emissions or how many additional individuals in the SFBAAB would be affected by the health effects cited above. The BAAQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals to elevated concentrations of air quality in the SFBAAB. To achieve the health-based standards established by the EPA, BAAQMD prepares an air quality management plan that detail regional programs to attain the AAQS.

The proposed 2040 General Plan could result in an incremental increase in new development. Should cumulative new development occur within the city of Sausalito, regional significance thresholds could be exceeded and could contribute to an increase in health effects in the Air Basin until such time the attainment standard are met in the SFBAAB. However, compliance with the proposed 2040 General Plan policies and programs and adherence to the development standards in the Sausalito Municipal Code for construction emissions and dust control, will ensure that construction-related air quality impacts remain at ***less than significant*** levels.

Conclusion

The proposed 2040 General Plan could result in an incremental increase in new development and is likely to lead to increases in criteria pollutant emissions within the San Francisco Bay Air Basin that is in non-attainment for ozone, PM_{10} and $PM_{2.5}$ air quality standards. However, the proposed 2040 General Plan provides for balanced growth between housing and employment within the city, which would limit air emissions through maintaining the VMT per service population. In addition, compliance with the applicable policies and programs in the proposed 2040 General Plan, as well applicable State and BAAQMD rules and regulations, would minimize the potential construction and operation-related air quality impacts created from implementation of the proposed 2040 General Plan. Therefore, the proposed 2040 General Plan will not result in a cumulatively considerable net increase of any criteria pollutant and impacts would be ***less than significant***.

Impact AIR-3 Development facilitated by the proposed 2040 General Plan would not expose sensitive receptors to substantial pollutant concentrations.

The BAAQMD has identified local community risks from air pollutants to include exposure to TACs and $PM_{2.5}$ concentrations. TACs are a defined set of airborne pollutants that may pose a present or potential hazard to human health and $PM_{2.5}$ can cause a wide range of health effects (e.g., aggravating asthma and bronchitis, causing visits to the hospital for respiratory and

cardiovascular systems, and contributing to heart attacks and deaths). Common stationary source types of TAC and $PM_{2.5}$ emissions include gasoline stations, dry cleaners, and diesel backup generators, which are subject to BAAQMD permit requirements. The other, often more significant, common source type is on-road motor vehicles on freeways and roads such as trucks and cars, and off-road sources such as construction equipment, ships, and trains. Implementation of the proposed 2040 General Plan would have the potential of introducing new sources of TAC and $PM_{2.5}$ emissions within the city as well as siting new sensitive receptors, such as new homes in close proximity to existing sources of TAC and $PM_{2.5}$ emissions.

The *Air Quality and Land Use Handbook: A Community Health Perspective*, adopted by CARB, May 2005 was prepared to address the siting of sensitive land uses in close proximity to sources of TAC emissions that include the following sources within the city:

- Within 500 feet of Highway 101;
- Within 300 feet of dry cleaning operations that use perchloroethylene; and
- Within 50 feet of a typical gas station (currently no large gas stations exist in the city).

The proposed 2040 General Plan includes policies and programs that would minimize exposure to TAC and $PM_{2.5}$ concentrations within the city. Specifically, Program EQ-5.2.1 requires the city to provide public information that identifies common hazardous materials and Program EQ-5.2.3 requires the city to initial public awareness to minimize the use of toxic garden and lawn sprays. Program HS-1.4.1 requires the city to work with Marin County and other jurisdictions to properly manage hazardous waste and Program HS-1.4.4 eliminates the use of harmful materials on public lands and minimizes their use throughout the city. Program HS-1.4.8 requires that all businesses that store more than 55 gallons of hazardous materials onsite to file a hazardous materials business plan with the County Office of Waste Management. In addition, all new sources of TAC emissions within the city would be required to obtain an Air Permit from BAAQMD that includes analysis of any TAC or $PM_{2.5}$ emissions created from the new source and the potential health impacts to the nearest sensitive receptor.

Therefore, compliance with the applicable policies and programs in the proposed 2040 General Plan as well applicable BAAQMD rules and regulations, would minimize the potential exposure of sensitive receptors to substantial concentrations of TACs and $PM_{2.5}$ within the city, and impacts would be ***less than significant***.

Impact AIR-4 Development facilitated by the proposed 2040 General Plan would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

As stated in the BAAQMD CEQA Guidelines, land uses that typical produce objectionable odors include agricultural uses, wastewater treatment plants, food manufacturing plants, chemical plants, composting, refineries, landfills, and confined animal facilities. Projected development in the proposed 2040 General Plan would include residential, commercial, and industrial development, and would include uses that are not anticipated to produce objectionable odors.

The proposed 2040 General Plan includes Program EQ-5.1.7 that requires analysis of potential odor-emitting land uses through the environmental review process. In addition, BAAQMD Regulation 7 limits emissions of odorous substance with Air Basin. Therefore, compliance with the applicable policies and programs in the proposed 2040 General Plan as well applicable

BAAQMD rules and regulations, would minimize odor emissions from adversely affecting a substantial number of people within the city and impacts would be ***less than significant***.

Impact AIR-5 Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would result in significant cumulative impacts with respect to air quality.

This analysis evaluates whether the impacts of the proposed 2040 General Plan, together with the impacts of cumulative development, could result in a cumulatively significant impact with respect to air quality. This analysis then considers whether the incremental contribution of the impacts associated with the implementation of the proposed 2040 General Plan would be significant. Both conditions must apply in order for a project's cumulative effects to rise to the level of a significant impact.

The geographic context for the analysis of cumulative impacts related to air quality includes the San Francisco Bay Area Air Basin. Development envisioned by the proposed 2040 General Plan could result in an incremental increase in new development is likely to lead to increases in criteria pollutant emissions within the San Francisco Bay Air Basin that is in non-attainment for ozone, PM_{10} and $PM_{2.5}$ air quality standards. As described under Impact AIR-2, compliance with the applicable policies and programs in the proposed 2040 General Plan as well applicable State and BAAQMD rules and regulations, would minimize the potential construction and operation-related air quality impacts created from implementation of the proposed 2040 General Plan; regional air quality impacts were identified as less than significant. In addition, development of future projects within the Planning Area would be subject to the city's standard CEQA review process and would be required to assess project-specific emissions in relation to the BAAQMD significance thresholds that have been developed to address cumulative air impacts throughout the Air Basin.

Therefore, in combination with past, present, and reasonably foreseeable projects and through implementation of the applicable proposed 2040 General Plan policies and programs outlined in Impacts AIR-1 through AIR-4 above, would not result in a significant cumulative impact with respect to air quality and impacts would be ***less than significant***.

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3.3 BIOLOGICAL RESOURCES

This section of the Draft EIR describes the existing biological resources within the Sausalito Planning Area, including special-status plant and wildlife species, sensitive habitats, regulated waterways and wetlands, mature native trees, and wildlife movement corridors. This section also evaluates impacts to biological resources that are anticipated to occur from implementation of the proposed 2040 General Plan.

Biological resources associated with the Planning Area were identified through a review of available background information, which included the following:

- California Wildlife Habitat Relationships System;
- California Department of Fish and Wildlife's (CDFW) Natural Diversity Data Base (CNDDB) for reported occurrences of special-status vegetation communities, plants, and animals;
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California; and
- International Union for Conservation of Nature and Natural Resources Red List of Threatened Species.

3.3.1 EXISTING SETTING

The City of Sausalito is located north of the City of San Francisco. The city is bordered by Richardson's Bay to the north and the San Francisco Bay to the east, the unincorporated community of Marin City to the northwest, and the GGNRA and the Marin Hills to the west and south. Highway 101 runs through the Planning Area (Exhibit 2-1).

California Wildlife Habitat Relationships System

The California Wildlife Habitat Relationships (CWHR) is an information system based on current published and unpublished biological information and professional judgment by recognized experts on California's wildlife. CWHR contains life history, geographic range, habitat relationships, and management information on 712 species of amphibians, reptiles, birds, and mammals known to occur in the state. When first published in 1988, the classification scheme had 53 habitats. At present, there are 59 wildlife habitats in the CWHR System: 27 tree, 12 shrub, 6 herbaceous, 4 aquatic, 8 agricultural, 1 developed, and 1 non-vegetated.

According to the CWHR, there are four principal habitat types in the Sausalito Planning Area: urban, woodland, shrub/woodland, and marine habitat. Exhibit 3.3-1 illustrates the location of each habitat type within the Planning Area. A brief description of each habitat type follows.

Urban

Urban areas are dominated by impervious surfaces (such as concrete, buildings and roads). Vegetative cover consists of native, non-native, and ornamental plants. Wildlife species diversity

and vegetative cover both decrease towards the center of the urban environment. However, in less developed urban areas some species of wildlife such as hummingbirds, sparrows, and other small birds which can survive due to the higher density of plants creating an approximate substitute for the natural environment. Urban areas comprise the largest portion of the Sausalito Planning Area and are primarily located within the central and eastern portions of the Planning Area.

Woodland and Shrub/Woodland

In Sausalito, Shrub/woodland natural communities are found in the area west of Highway 101. These woodlands are a mixture of native and introduced plant species, and sensitive plant species may be found here. Woodlands communities dominated by native species include:

- Oak savannah: includes open grasslands non-native annuals with isolated oak trees (species of the *Quercus* genus)
- Oak woodland: includes at least 30 percent tree canopy cover. The canopy is dominated by varying oak species (*Quercus* spp.), including coast live oak (*Quercus agrifolia*); co-occurring with other native tree species, including bay laurel (*Umbellularia californica*), madrone (*Arbutus menziesii*), and buckeye (*Aesculus californica*); the understory consists of a variety of herbaceous species such as miner's lettuce (*Claytonia perfoliate*), wild iris (*Iris* sp.), wild strawberry (*Fragaria vesca*), and grasses; shrubs may include California toyon (*Heteromeles arbutifolia*) and poison oak (*Toxicodendron diversilobum*).

Marine

The coastline of the Planning Area is primarily classified as Estuarine and Marine Deepwater habitat type with some areas classified as Estuarine and Marine Wetland (Exhibit 3.3-2). The open bay waters support a wide variety of fish, including over 100 marine fish species that pass through the area on their way from the San Francisco Bay to the Pacific Ocean. The estuarine communities within the Planning Area also could support numerous species of shorebirds such as cormorants, pelicans, grebes, and ducks which utilize these habitats for foraging. The substrate along the coastline may house marine worms and clams, while rip rap and hard piling may support mollusks such as mussels and barnacles. Additionally, natural communities of eelgrass (*Zostera marina*), and underwater flowering plant, are found in Richardson's Bay and in select areas along the Sausalito shoreline, as shown in Exhibit 3.3-3.

Special-Status or Sensitive Natural Communities

Special-status or sensitive natural communities are defined as communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. These communities may or may not contain special-status species or their habitat. Sensitive natural communities are usually identified by the California Department of Fish and Wildlife (CDFW) in the CNDDB and/or by other agencies in local or regional plans, policies, or regulations. Furthermore, most types of wetlands and riparian communities are considered special-status or sensitive natural communities due to their limited distribution in California.

The CNDDB records search for the proposed 2040 General Plan revealed no sensitive natural community within or adjacent to the Sausalito Planning Area.

Special-Status Species

Special-status plant and animal species are those that are afforded special recognition by federal, State, or local resource agencies or organizations. Special-status species are of relatively limited distribution and generally require specialized habitat conditions.

Special-status plants are those that meet the definition of "endangered, rare, or threatened" under CEQA Guidelines Section 15380. For the purposes of this Draft EIR, this includes all plant species that meet any of the following criteria:

- Listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (ESA) (50 Code of Federal Regulations [CFR] 17 12 [listed plants] and various notices in the Federal Register [proposed species]).
- Candidates for possible future listing as threatened or endangered under the ESA.
- Listed or candidates for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (14 California Code of Regulations [CCR] 670.5).
- Listed as rare under the California Native Plant Protection Act (California Fish and Game Code § 1900 et seq.).
- Considered by the CNPS to be rare, threatened, or endangered in California (CNPS Lists 1B and 2).

Special-status wildlife are animals that meet the definition of "endangered, rare, or threatened" under CEQA Guidelines Section 15380. For the purposes of this Draft EIR, this includes all animal species that meet any of the following criteria:

- Listed or proposed for listing as threatened or endangered under the ESA (50 CFR 17.11 [listed animals] and various notices in the Federal Register [proposed species]).
- Candidates for possible future listing as threatened or endangered under the ESA.
- Listed or candidates for listing by the State of California as threatened or endangered under the CESA (14 CCR 670.5).
- Special protected by the federal Migratory Bird Treaty Act (16 United States Code [USC] 703-711).
- Otherwise protected under State or federal law.

The Sausalito Planning Area was evaluated by querying the California Natural Diversity Data Base (CNDDB), the USFWS, and the CNPS for previously recorded occurrences of special-status species. The CDFW maintains records for the distribution and known occurrences of sensitive species and habitats in the CNDDB, which is organized into map areas based on 7.5-minute topographic maps produced by the U.S. Geological Survey. The CNDDB is based on actual

recorded occurrences but does not constitute an exhaustive inventory of every resource. The absence of an occurrence in a particular location does not necessarily mean that special-status species are absent from that area, but that no data has been entered into the CNDDB inventory. Detailed field surveys are generally required to provide a conclusive determination on the presence or absence of sensitive resources from a particular location where there is evidence of potential occurrence.

Special-Status Plant Species

The records search for the proposed 2040 General Plan identified a total of five special-status plant species that have been previously recorded within the Sausalito Planning Area.

Table 3.3-1 provides a list of the five special-status plant species, their habitat, and current protective status. Exhibit 3.3-4 illustrates the location of each occurrence documented by the CNDDB within the boundaries of the Planning Area. The Listing Status identifies the federal status (e.g., Federal Endangered), state status (e.g., California Endangered Species), and CNPS status. The CNPS status rankings are listed below:

- List 1A – Plants presumed extirpated in California
- List 1B – Plants rare, threatened, or endangered in California and elsewhere
- List 3 – Plants about which more information is needed (a review list)
- List 4 – Plants of limited distribution (a watch list)
- 0.1 – Seriously threatened in California
- 0.2 – Moderately threatened in California
- 0.3 – Not very threatened in California

Special-Status Animal Species

The records search for the proposed 2040 General Plan identified a total of six special-status animal species have been previously recorded within the Sausalito Planning Area, including 2 birds, 1 fish, 2 invertebrates, and 1 mammal.

TABLE 3.3-1: SPECIAL-STATUS PLANTS PRESENT OR POTENTIALLY PRESENT IN SAUSALITO PLANNING AREA

COMMON NAME SCIENTIFIC NAME	LISTING STATUS (USFWS/CDFW/CNPS)	GENERAL HABITAT REQUIREMENTS
PLANTS		
POINT REYES SALTY BIRD'S-BEAK *CHLOROPYRON MARITIMUM* SSP. *PALUSTRE*	--/--/1B.2	Annual hemiparasitic herb found in coastal swamp marshes and swamps. 0 – 10 m.
DARK-EYED GILIA *GILIA MILLEFOLIATA*	--/--/1B.2	Annual herb found in coastal dunes along the North Coast of California. 2-30 m.
WHITE-RAYED PENTACHAETA *PENTACHAETA BELLIDIFLORA*	FE/CE/1B.1	Annual herb found in open dry rocky slopes and grassy areas in cismontane woodlands and grasslands. Often on soils derived from serpentine bedrock. 35-610 m.
HAIRLESS POPCORNFLOWER *PLAGIOBOTHRYS GLABER*	--/--/1A	Annual herb found in coastal salt marshes and alkaline meadows. 5-125 m.
OREGON POLEMONIUM *CARNEUM*	--/--/2B.2	Perennial herb found in coastal prairies, coastal scrub, lower montane coniferous forests. 0 – 1830 m.

Notes:

Abbreviations:

FE – Federal Endangered
CE – California Endangered Species

CNPS Rankings:

List 1a – Plants Presumed Extirpated In California
List 1b – Plants Rare, Threatened, or Endangered in California and Elsewhere
List 3 – Plants about which More Information is Needed (A Review List)
List 4 – Plants of Limited Distribution (A Watch List)
0.1 – Seriously Threatened In California
0.2 – Moderately Threatened In California
0.3 – Not Very Threatened In California

Source: CDFW CNDDB 2018; CNPS Inventory of Rare and Endangered Plants of California, 2018.

Table 3.3-2 provides a list of the six special-status animal species, their habitat, and current protective status. Exhibit 3.3-4 illustrates the location of each occurrence documented by the CNDDB within boundaries the Planning Area. The Listing Status identifies the federal status (e.g., Federal Endangered or Threatened) and State status (e.g., California Endangered, Threatened, Fully Protected or Species of Special Concern; or Watch List).

TABLE 3.3-2: SPECIAL-STATUS ANIMALS PRESENT OR POTENTIALLY PRESENT IN SAUSALITO PLANNING AREA

COMMON NAME SCIENTIFIC NAME	LISTING STATUS (USFWS/CDFW)	GENERAL HABITAT REQUIREMENTS
BIRDS		
AMERICAN PEREGRINE FALCON *FALCO PEREGRINUS ANATUM*	--/CFP	Found near wetlands, lakes, rivers, or other water. Nests on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.
CALIFORNIA BLACK RAIL *LATERALLUS JAMAICENSIS COTURNICULUS*	--/CT	Nests in marshes and wet meadows across North America, including riparian marshes, coastal prairies, saltmarshes, and impounded wetlands. All its habitats have stable shallow water, usually just 1.2 inches deep at most.
FISH		
LONGFIN SMELT *SPIRINCHUS THALEICHTHYS*	FC/CT	A small anadromous fish historically abundant in the San Francisco Estuary and the Sacramento/San Joaquin Delta (Bay-Delta). This species can tolerate a wide range of salinity and will utilize a variety of habitats from nearshore waters, to estuaries and lower portions of freshwater streams.
INVERTEBRATES		
MISSIONENSIS MISSION BLUE BUTTERFLY *ICARICIA ICARIOIDES*	FE/--	The Mission blue requires a larval host plant and appropriate nectar plants in a coastal grassland habitat. The host plants include silver lupine (*Lupinus albifrons*), summer lupine (*Lupinus formosus*), and varicolor lupine (*Lupinus variicolor*). Nectar plants are varied, and often grow in association with the lupine host plants.
MARIN HESPERIAN *VESPERICOLA MARINENSIS*	--/--	Terrestrial species of snail, largely confined to Marin County, little is currently known about its habitat preferences, life history and biology.
MAMMALS		
SOUTHERN SEA OTTER ***ENHYDRA LUTRIS NEREIS***	FT/CFP	Considered a keystone species, sea otters play a significant role in nearshore marine ecosystems of the North Pacific Ocean, including kelp forests but also seagrass beds where they forage for crustaceans, mollusks, urchins and other invertebrates.

Notes:

Abbreviations:

FE – Federal Endangered
FT – Federal Threatened
FC – Federal Candidate for Listing
CE – California Endangered Species
CT – California Threatened
CFP – California Fully Protected
CSC – California Species of Special Concern (CDFW)
WL – Watch List

Source: CDFW CNDDB 2018.

Wildlife Corridors

Wildlife corridors are connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as between foraging and denning areas, or they may be regional in nature,

allowing movement across the landscape. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Maintaining the continuity of established wildlife corridors is important to sustain species with specific foraging requirements, preserve a species' distribution potential, and retain diversity among many wildlife populations. Therefore, resource agencies consider wildlife corridors to be a sensitive resource.

Most of the area west of Highway 101 (north of Wolfback Ridge Road) and adjacent to GGNRA is undeveloped and essentially an extension of the habitat found within the GGNRA. In addition, the urban forest canopy can support movement of a variety of migratory bird species, while any creeks and un-named drainages could serve as potential corridors for wildlife.

Golden Gate National Recreation Area

Managed by the National Park Service, Golden Gate National Recreation Area (GGNRA) encompasses 82,027 acres of ecologically and historically significant landscapes stretching from southern San Mateo County to northern Marin County. Each year, GGNRA attracts over 15 million visitors to its scenic and historic attractions that include Muir Woods National Monument, Alcatraz Island, Lands' End, and former military forts. GGNRA provides an abundance of recreational and educational opportunities, with diverse active and passive recreational and educational opportunities from contemplative to active pursuits, including participation in stewardship and volunteer activities. A system of designated trails and scenic park roads supports access to sites that provide visitors with a broad range of activities and varied experiences.[1] In Marin County, GGNRA includes Muir Woods, Fort Baker, and many different trails, including the Tennessee Valley Trailhead. Within city limits, GGNRA covers approximately 182 acres.

City Open Space Areas

Two major open space preserves are owned by the city: 1) Cypress Ridge Open Space Preserve, which encompasses 10 acres along the east side of Highway 101 between Rodeo Avenue and Spring Street, and (2) Sausalito Creek Wildlife Refuge, which encompasses 2.1 acres between Lincoln Street and Butte Street.

[1] National Park Service. 2019. Golden Gate National Recreation Area, California: Places. December 2. Website: https://www.nps.gov/goga/learn/historyculture/places.htm. Accessed March 20, 2020.

3.3.2 REGULATORY SETTING

Federal

Endangered Species Act

The ESA, passed in 1973, defines an endangered species as any species or subspecies that is in danger of extinction throughout all or a significant portion of its range. A threatened species is defined as any species or subspecies that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Once a species is listed, it is fully protected from a "take" unless a take permit is issued by the USFWS. A take is defined as the harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct, including modification of its habitat (16 USC 1532, 50 CFR 17.3). Proposed endangered or threatened species are those species for which a proposed regulation, but not a final rule, has been published in the Federal Register.

Clean Water Act - Section 404

Section 404 of the Clean Water Act regulates all discharges of dredged or fill material into Waters of the United States. Discharges of fill material includes the placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and subaqueous utility lines (33 CFR § 323.2[f]).

Waters of the United States include lakes, rivers, streams, intermittent drainages, mudflats, sandflats, wetlands, sloughs, and wet meadows (33 CFR § 328.3[a]). Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR § 328.3[b]). Waters of the United States exhibit a defined bed and bank and ordinary high water mark (OHWM). The OHWM is defined by the U.S. Army Corps of Engineers (USACE) as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR § 328.3[e]).

Discharge of fill material into Waters of the United States, including wetlands, is regulated by the USACE under Section 404 of the Clean Water Act (33 USC 1251–1376). Executive Order 11990 is a federal implementation policy, which is intended to result in no net loss of wetlands.

Clean Water Act – Section 401

Section 401 of the Clean Water Act (33 USC 1341) requires an applicant who is seeking a 404 permit to first obtain a water quality certification from the Regional Water Quality Control Board (RWQCB). To issue a water quality certification, the RWQCB must indicate that the proposed fill

is consistent with the standards set forth by the State. The San Francisco RWQCB is responsible for enforcing water quality criteria and protecting water resources in Sausalito.

Migratory Bird Treaty Act

Migratory birds are protected under the Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703–711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Most of the birds found in the City of Sausalito are protected under the MBTA.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 USC § 668) protects these birds from direct take and prohibits the take or commerce of any part of these species. The USFWS administers the act, and reviews federal agency actions that may affect these species.

State

California Endangered Species Act (Fish and Game Code §2050-2097)

The CESA protects certain plant and animal species when they are of special ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the State. CESA established that it is State policy to conserve, protect, restore, and enhance endangered species and their habitats.

CESA was expanded upon the original Native Plant Protection Act (NPPA) and enhanced legal protection for plants. To be consistent with federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the Act as threatened species but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Under State law, plant and animal species may be formally designated by official listing by the California Fish and Game Commission.

Predatory Birds (Fish and Game Code §3503, 3503.5, 3800)

Under the California Fish and Game Code, all predatory birds in the order Falconiformes or Strigiformes in California, generally called "raptors," are protected. The law indicates that it is unlawful to take, posses, or destroy the nest or eggs of any such bird unless it is in accordance with the code. Any activity that would cause a nest to be abandoned or cause a reduction or loss in a reproductive effort is considered a take. This generally includes construction activities.

Lake and Streambed Alteration (Fish and Game Code §1601-1603)

Under the California Fish and Game Code, CDFW has jurisdiction over any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any lake or stream. Private landowners or project proponents must obtain a "Streambed Alteration Agreement" from CDFW prior to any alteration of a lakebed, stream channel, or their banks. Through this agreement, the CDFW may impose conditions to limit and fully mitigate impacts on fish and wildlife resources. These agreements are usually initiated through the local CDFW

warden and will specify timing and construction conditions, including any mitigation necessary to protect fish and wildlife from impacts of the work.

California Environmental Quality Act (Public Resources Code § 21000)

CEQA provides that a species that is not listed on the federal or State endangered species list may be considered rare or endangered if the species meets certain criteria. Under CEQA, public agencies must determine if a project would adversely affect a species that is not protected by FESA or CESA. Species that are not listed under FESA or CESA, but are otherwise eligible for listing (i.e., candidate or proposed) may be protected by the local government until the opportunity to list the species arises for the responsible agency.

Species that may be considered for review are included on a list of "Species of Special Concern," developed by the CDFW. Additionally, the CNPS maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. List 1A contains plants that are believed to be extinct. List 1B contains plants that are rare, threatened, or endangered in California and elsewhere. List 2 contains plants that are rare, threatened, or endangered in California, but more numerous elsewhere. List 3 contains plants where additional information is needed. List 4 contains plants with a limited distribution.

Porter-Cologne Water Quality Act

The RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste, within any region that could affect the water of the State" (California Water Code § 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Act. Waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the State" (California Water Code 13050(e)).

National Pollutant Discharge Elimination System (NPDES)

The CWA requires local jurisdictions to address the problem of pollutants in stormwater runoff from development. The CWA provides for the control of the discharge of any pollutant into navigable waters from any point sources. To regulate point source pollution, the CWA provides that the United States Environmental Protection Agency (USEPA) may issue National Pollution Discharge Elimination System (NPDES) permits. NPDES permits are issued by the USEPA or by the states under USEPA-approved permit programs that incorporate CWA's technological standards. California's permit program is implemented through the SWRCB and RWQCBs. Section 402(p) of the CWA establishes a framework for regulating municipal and industrial stormwater discharges under the NPDES program and requires controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and systems, and design and engineering methods. The regional boards implement the CWA's municipal stormwater requirements through the State's Municipal Storm Water Permitting Program. While federal regulations allow the permitting options for stormwater discharge (Individual and General Permits), the SWRCB has elected to adopt only one statewide General Permit.

California Native Plant Protection Act

The California Native Plant Protection Act is intended to preserve, protect, and enhance endangered or rare native plants in California. This act directs CDFW to establish criteria for determining what native plants are rare or endangered. Under this Act, a species is endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes. A species is rare, although not threatened with immediate extinction, if it is in such small numbers throughout its range that it may become endangered if its present environment worsens. This act prohibits any person from importing into or taking, possessing or selling within California, except as incident to the possession or sale of the real property on which the plant is growing, any endangered or rare native plant or as otherwise excepted under the Act.

The CNPS maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to population of rare plants receive consideration under CEQA review. The CNPS ranking system applicable to the project are defined below:

- **List 1A:** Plants presumed extinct
- **List 1B:** Plants rare, threatened or endangered in California and elsewhere
- **List 2:** Plants rare, threatened or endangered in California, but more numerous elsewhere

Regional

San Francisco Bay Conservation and Development Commission

The San Francisco Bay Conservation and Development Commission (BCDC) has jurisdiction over all areas of San Francisco Bay that are subject to tidal action. Tidal action is defined by the shoreline that extends up to mean high water, except in marsh areas, where BCDC's jurisdiction extends to 5 feet above mean sea level. The BCDC also has "shoreline band" jurisdiction over an area 100 feet wide inland and parallel to the shoreline. For projects within BCDC jurisdiction, permits may be required, depending on the nature of the activity. Those projects requiring a permit must comply with the requirements of the McAteer-Petris Act and the Bay Plan.

Marin County Stream Conservation Area Ordinance

Marin County adopted the interim Stream Conservation Area (SCA) Ordinance in October 2013. It is intended to "protect the hydraulic function, habitat value, and water quality of streams."[2] The ordinance established an area where impacts to riparian and stream habitat due to new development must be avoided or mitigated, as well as guidelines and procedures for obtaining a SCA permit.

The SCA ordinance applies only to unincorporated areas within Marin County, so it may potentially have an influence only on areas adjacent to the city.

[2] County of Marin, Stream Conservation Area Ordinance. Website: https://www.marincounty.org /depts/cd/divisions/planning/stream-conservation-area-ordinance. Accessed March 20, 2020.

Local

Sausalito General Plan

The stated purpose of the objectives, policies, and programs listed in the Environmental Quality Element of the proposed 2040 General Plan is to maintain and restore the natural resources, including native vegetation and wildlife habitat that are found within the developed portions of the city, as well as to protect and manage the undeveloped areas with open space and conservation values.

The proposed 2040 General Plan identifies six threatened or endangered plants and animals located within the planning area. The plant species are the Point Reyes Bird's-beak (located in the Shoreline and Manzanita sphere of influence areas) and the White-rayed Pentachaeta (located primarily within GGNRA). The four wildlife species are Ridgway's Rail, California Black Rail, Salt Marsh Harvest Mouse, and the Mission Blue Butterfly.

The proposed 2040 General Plan includes the following policies and programs that assist in reducing or avoiding impacts related to biological resources:

Environmental Quality Element

Policy EQ-1.1: Preservation Strategy. Utilize the development review process to protect natural areas in private ownership.

Program EQ-1.1.1: Conditions of Approval. Identify and protect natural resources as conditions of project approval.

Policy EQ-1.2: Natural Terrain and Native Vegetation. Protect the natural terrain and native vegetation and recognize the role of natural terrain and native vegetation in landslide mitigation and management.

Program EQ-1.2.2: Tree Ordinance. Continue to implement the Tree Ordinance and provide support for the maintenance and protection of appropriate vegetation in order to protect desired trees, remove undesired trees, and balance tree maintenance with fire safety, views, and privacy.

Policy EQ-1.3: Wetlands Restoration. Restore Sausalito's wetlands to improve environmental quality and mitigate sea level rise.

Policy EQ-1.4: Threatened and Endangered Species. Protect threatened and endangered species of wildlife and plants native to Sausalito and the Southern Marin area.

Program EQ-1.4.2: Catalogue Threatened and Endangered Species. Continue to catalogue and update information on threatened and endangered species and locally scarce species or habitats. This catalogue will be used to review project proposals.

Program EQ-4.2.1: Stormwater Pollution Prevention Program. Continue to participate in the Marin County Stormwater Pollution Prevention Program (MCSTOPPP).

Policy EQ-4.6: Creeks and Drainageways. Promote the natural integrity of creeks and/or drainageways as riparian habitat, wildlife corridors, and to protect residents from flooding and other hazards.

Program EQ-4.6.3: Riparian Areas. Discourage any construction proposed to occupy riparian areas as identified on Figure 6-8 [of the General Plan].

Waterfront Element

Policy W-4.1: Ecological Functions. Require that no net loss of ecological functions occur as a result of uses, development, shoreline modifications, or expansion of existing uses.

Program W-4.1.1: Mitigation sequencing. If a loss of ecological function is foreseeable, use mitigation sequencing steps in the following order to mitigate the loss: avoid, rectify, minimize, and/or compensate for loss.

Policy W-4.2: Bay Waters. Preserve and enhance the wetlands, open waters, and ecosystem of Richardson's and San Francisco Bays and utilize these landscapes for sea level rise mitigation.

Program W-4.2.2: Marine Life. Create development policies that support the retention of Richardson's Bay's aquatic ecosystem, particularly the eelgrass beds.

Policy W-4.3: Shoreline Areas. Preserve the undeveloped open shoreline, shoreline habitat, and public access in waterfront development consistent with public trust and private ownership purposes.

Program W-4.3.5: Wetlands Preservation Strategy. Review Federal, State, Regional, and local policies, principles, and guidelines to develop a consistent wetland preservation strategy.

Program W-4.3.6: Wetland Purchase. Establish a program to purchase of development rights by the City or other entity for the purpose of preserving and enhancing wetland and other resource conservation values.

Program W-4.3.7: Maintain Open Area. Continue to prevent new development on wetlands and in over-water parcels.

Sausalito Municipal Code

Chapter 10.40.070(D.)(3.) (Creek Setbacks) establishes that no structures of any kind, other than stairs and pathways on grade and/or retaining walls for slope stabilization purposes, shall be located within 20 feet of the 100-year flood elevation line of an open natural drainage way or wetland (i.e., creek) identified on Map GP-14 of the environmental quality element of the general plan. Additionally, setbacks from creeks and wetland areas could be required as part of

the environmental review process pursuant to the CEQA, as applicable. Also, during design review, the Planning Commission may determine that additional setbacks from watercourses are necessary to ensure consistency with relevant policies contained in the environmental quality element of the general plan.

Chapter 11.12 (Preservation of Trees and Views) acknowledges the contribution of trees to the character and beauty of the city and provides guidelines to address potential conflicts between preservation of trees and view-related values.

Chapter 17.28 (Trees, Shrubs and Plants) describes protections for trees in the public realm, including prohibitions against cutting, pruning, injuring, removing or spraying public trees, as well as prohibitions against attaching appurtenances or interfering with work on trees by city employees.

3.3.3 THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines Appendix G, the proposed project would have a significant impact related to biological resources if it would:

- Have a substantial adverse effect, either directly or indirectly 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 CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

3.3.4 ANALYSIS, IMPACTS, AND MITIGATION MEASURES

Impacts to biological resources resulting from implementation of the proposed 2040 General Plan are discussed below. The impact analysis is based on queries of the CNDDB, the USFWS list of special-status species, and the CNPS Lists 1A, 1B and 4, which identify existing biological resources within the Sausalito Planning Area. Impacts to biological resources are assessed using the significance criteria established by the CEQA guidelines. This analysis identifies the potential

direct and indirect impacts to biological resources from construction, operation, and maintenance activities related to future development that could occur under the proposed 2040 General Plan.

Impact BIO-1 **Development facilitated by the proposed 2040 General Plan would not have a substantial adverse effect, either directly or through habitat modifications, on candidate, sensitive, or special-status species.**

As discussed in the Existing Setting section, five special-status plant species and six special-status animal species have been recorded to occur within the Sausalito Planning Area. The special-status animal species include two bird species, one fish species, two invertebrate species, and one mammal species. Subsequent development under the proposed 2040 General Plan could result in the direct/indirect loss or indirect disturbance of special-status plant or animal species or their habitats that are known to occur, or have potential to occur, in the region.

Significant impacts on special-status plant species associated with individual subsequent projects could include the direct loss of individual plants and of habitat areas associated with these special-status plant species. Indirect impacts to special-status plant species could include habitat degradation as a result of impacts to water quantity and quality.

Significant impacts on special-status animal species associated with individual subsequent projects could include, but are not limited to, the following:

- Increased mortality caused by higher numbers of automobiles in new areas of development;
- Direct mortality from the collapse of underground burrows, resulting from soil compaction;
- Direct mortality resulting from the movement of equipment and vehicles through construction areas;
- Direct mortality resulting from removal of trees with active nests;
- Direct mortality or loss of suitable habitat resulting from the trimming or removal of obligate host plants;
- Direct mortality resulting from the filling of wetlands features;
- Loss of breeding and foraging habitat resulting from the filling of seasonal or perennial wetlands;
- Loss of breeding, foraging, and refuge habitat resulting from the permanent removal of riparian vegetation;
- Loss of suitable habitat for vernal pool invertebrates resulting from the destruction or degradation of vernal pools or seasonal wetlands;
- Abandonment of eggs or young and subsequent nest failure for special-status nesting birds, including raptors, and other non-special status migratory birds resulting from construction-related noises;
- Loss or disturbance of rookeries and other colonial nests;
- Loss of suitable foraging habitat for special-status raptor species;

- Loss of migration corridors resulting from the construction of permanent structures or features; and
- Impacts to fisheries/species associated with waterways.

Special-status plant and animal species receive protection from various federal and State laws and regulations, including FESA and CESA. These regulations generally prohibit the taking of protected plant and animal species, or direct impacts to foraging or breeding habitat, without a special permit.

The proposed 2040 General Plan includes policies and programs specifically designed to address these potential impacts to biological resources. Policy EQ-1.4 plainly states that threatened and endangered species shall be protected under the proposed 2040 General Plan. To protect special-status species, Program EQ-1.1.1 requires new developments to identify and protect natural resources as conditions of project approval. Other policies found in the general plan recognize the importance of protecting valuable wildlife habitat. Policy W-4.2 and Program W-4.2.2 call for preservation and enhancement of the open waters and habitats found in Richardson's Bay, which have high ecological value for marine species such as eelgrass (Exhibit 3.3-3). Policy EQ-4.6 promotes that the natural integrity of creeks and riparian habitat remain intact, as these areas could serve as important corridors for the movement of wildlife.

Future development under the proposed 2040 General Plan would comply with the various federal and State laws and regulations that protect special-status plant and animal species, including FESA and CESA. In addition, future projects would comply with requirements of the Sausalito Municipal Code and the proposed 2040 General Plan policies and programs related to biological resources. Therefore, future development under the proposed 2040 General Plan would not result in significant adverse effects to biological resources. As such, implementation of the proposed 2040 General Plan would result in a ***less than significant*** impact relative to this topic.

Impact BIO-2	**Development facilitated by the proposed 2040 General Plan would not have a substantial adverse effect on riparian habitats, other sensitive natural communities, federally protected wetlands, or Waters of the United States and/or State, through direct removal, filling, or hydrological interruption.**

As discussed in the Existing Setting section, no sensitive biological communities are present within the Sausalito Planning Area, and therefore, would not be impacted by implementation of the proposed 2040 General Plan.

While not always documented as sensitive natural communities in the CNDDB, streams, rivers, estuaries, and eelgrass beds are of high concern because they provide unique aquatic habitat for many endemic species, including special-status plants, birds, invertebrates, amphibians and fish species. These aquatic habitats oftentimes qualify as protected wetlands or jurisdictional waters and are protected from disturbance through the Clean Water Act.

Subsequent development under the proposed 2040 General Plan, primarily adjacent to Richardson's Bay, could result in direct or indirect effects on estuarine habitat and other sensitive marine communities. Federally protected wetlands and other Waters of the United States and/or State could be affected through direct removal, filling, hydrological interruption (including dewatering), alteration of bed and bank, and other construction-related activities.

Riparian habitats and sensitive natural communities receive protection under the California Fish and Game Code (§1601 – 1603). Any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any lake or stream, must obtain a "Streambed Alteration Agreement" from CDFW prior to any alteration of a lake bed, stream channel, or their banks. Through this agreement, the CDFW may impose conditions to limit and fully mitigate impacts on fish and wildlife resources.

Section 404 of the Clean Water Act requires any project that involves disturbance to a wetland or Water of the United States to obtain a permit that authorizes the disturbance. If a wetland or jurisdictional water is determined to be present, then a permit must be obtained from the USACE to authorize a disturbance to the wetland. Although subsequent projects may disturb protected wetlands and/or jurisdictional waters, the regulatory process that is established through Section 404 of the Clean Water Act ensures that there is "no net loss" of wetlands or jurisdictional waters. If, through the design process, it is determined that a future development project cannot avoid a wetland or jurisdictional water, then the USACE would require that there be an equal amount of wetland created elsewhere to mitigate any loss of wetland.

Section 401 of the Clean Water Act (33 USC 1341) requires an applicant who is seeking a 404 permit to first obtain a water quality certification from the RWQCB. To issue a water quality certification, the RWQCB must indicate that the proposed fill is consistent with the standards set forth by the State.

The proposed 2040 General Plan includes policies and programs designed to protect riparian habitat and other sensitive natural communities, as well as protect wetlands and Waters of the United States and/or Waters of the State. Policy W-4.2 and Program W-4.2.2 require the preservation and enhancement of open waters and ecosystem of Richardson's and San Francisco Bays. Policy W-4.3 calls for the preservation of the undeveloped open shoreline and shoreline habitat. Policy EQ-4.6 promotes the preservation of the natural integrity of creeks and riparian habitat, as these areas provide numerous ecological and hydrological benefits including but not limited to providing wildlife habitat, maintaining water quality and providing protection against flooding. To protect such habitats, Program EQ-4.6.3 discourages any construction proposed to occupy riparian areas. In addition, Chapter 10.40.070 of the Sausalito Municipal Code prohibits development within 20 feet of the 100-year flood elevation line of an open natural drainage way or creek identified in the General Plan.

Marin County adopted an interim SCA Ordinance in October 2013, with the intention to protect the hydraulic function, habitat value, and water quality of streams in the County. However, the SCA ordinance applies only to unincorporated areas within Marin County, so it may potentially have an influence only on areas adjacent to the city.

Future development under the proposed 2040 General Plan would comply with adopted State, federal, and local regulations for the protection of sensitive natural communities, including riparian habitat, wetlands, and Waters of the United States and/or State. In addition, future projects would comply with requirements of the Sausalito Municipal Code and the proposed 2040 General Plan policies and programs related to the protection of these biological resources. Therefore, future development under the proposed 2040 General Plan would not result in significant adverse effects to riparian habitat, other sensitive natural communities, federally protected wetlands, Waters of the United States, or Waters of the State. Impacts would be considered ***less than significant*** under this criterion.

Impact BIO-3 **Development facilitated by the proposed 2040 General Plan would not 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.**

As described in the Existing Setting section, the un-named drainages serve as aquatic and terrestrial wildlife migration corridors within the Sausalito Planning Area. Species using these corridors include aquatic, terrestrial, and avian species.

The undeveloped areas west of Highway 101 currently allow for wildlife movement within city limits as well as adjacent GGNRA lands. In addition, the urban forest canopy can support movement of a variety of migratory bird species, while any creeks and drainages could serve as potential corridors for wildlife.

Many of the policies already presented in this chapter have ancillary benefits of protecting movement habitat for wildlife. Policy EQ-4.6 promotes the natural integrity of creeks and riparian habitat, as these areas could serve as important corridors for the movement of wildlife. Policy EQ-1.2 ensures that any potential impacts on wildlife movement will be reduced to a less-than-significant level by advocating for the protection of natural terrain and vegetation found in the City of Sausalito.

Future development under the proposed 2040 General Plan would comply with adopted State, federal, and local regulations for the protection of biological resources. In addition, future projects would comply with requirements of the Sausalito Municipal Code and the proposed 2040 General Plan policies and programs related to biological resources. Therefore, future development under the proposed 2040 General Plan would not result in significant adverse effects to wildlife corridors or native wildlife nursery sites, and impacts would be considered ***less than significant*** under this criterion.

Impact BIO-4 **Development facilitated by the proposed 2040 General Plan would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**

Implementation of the proposed 2040 General Plan would be subject to all applicable local policies and regulations related to the protection of important biological resources. Specifically,

development under the proposed 2040 General Plan would be required to comply with the city's Tree Ordinance.

Chapter 11.12 of the Sausalito Municipal Code acknowledges the contribution of trees to the character and beauty of the city and provides guidelines to address potential conflict between preservation of trees and view-related values. Chapter 17.28 of the Municipal Code goes further and describes protections for trees in the public realm, including prohibitions against cutting, pruning, injuring, removing or spraying public trees, as well as prohibitions against attaching appurtenances or interfering with work on trees by city employees. Therefore, the proposed 2040 General Plan would comply with applicable local regulations and impacts would be ***less than significant***.

Impact BIO-5 **Development facilitated by the proposed 2040 General Plan would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.**

As discussed in the Regulatory Setting section, GGNRA encompasses 82,027 acres of ecologically and historically significant landscapes stretching from southern San Mateo County to northern Marin County. A portion of GGNRA is within city limits (Exhibit 2-2).

The BCDC has jurisdiction over all areas of San Francisco Bay that are subject to tidal action. Tidal action is defined as any area by the shoreline that extends up to mean high water, except in marsh areas, where BCDC's jurisdiction extends to five feet above mean sea level. The BCDC also has "shoreline band" jurisdiction over an area 100 feet wide inland and parallel to the shoreline. For projects within BCDC jurisdiction, permits may be required depending on the nature of the activity. Those projects requiring a permit must comply with the requirements of the McAteer-Petris Act and the Bay Plan.

There are no other local, regional, or State habitat conservation plans that are applicable to the Sausalito Planning Area. As such, implementation of the proposed 2040 General Plan would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. The proposed 2040 General Plan would have a ***less than significant*** impact relative to this topic.

Impact BIO-6 **Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to biological resources.**

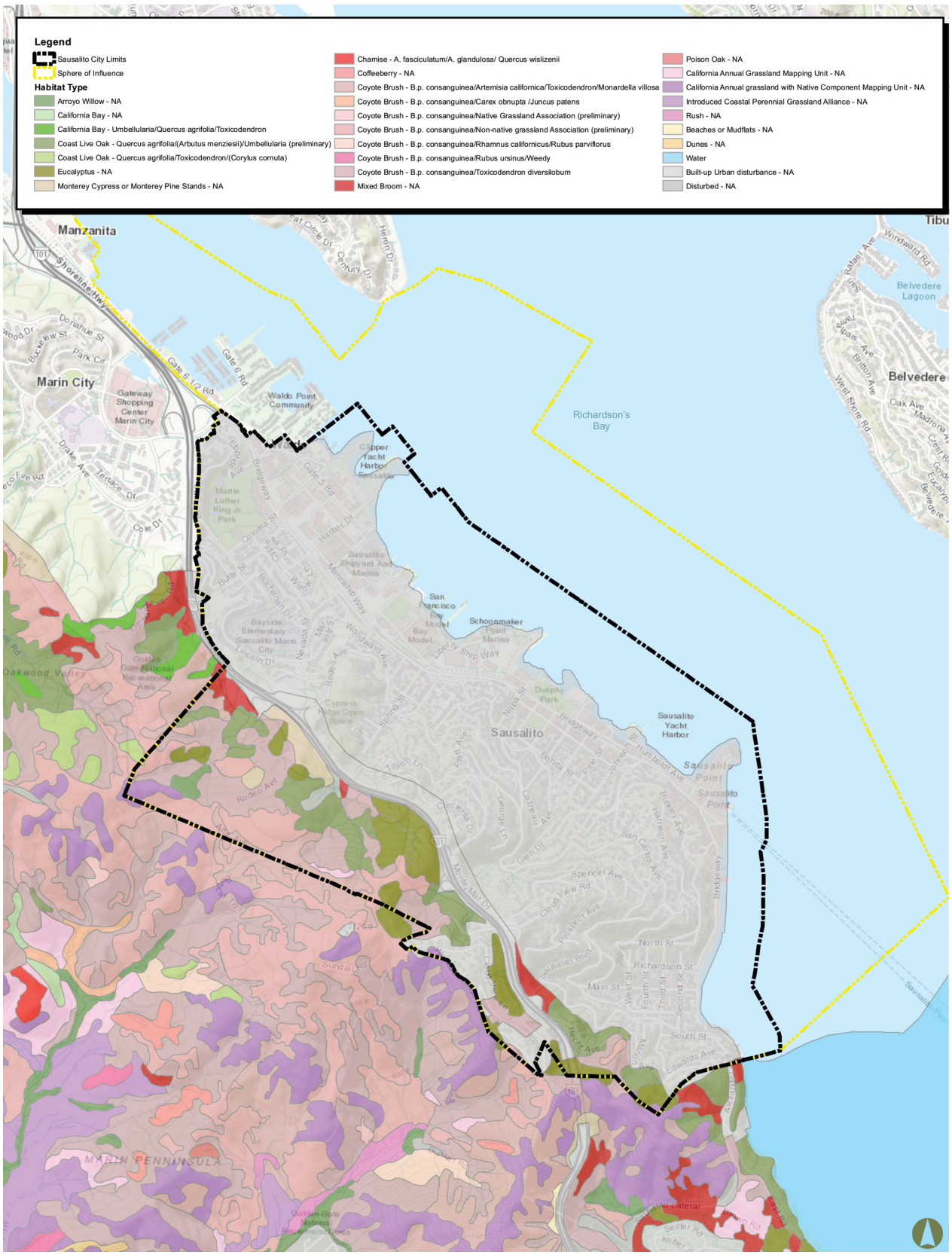
The geographic context for analysis of cumulative impacts to biological resources includes the incorporated and unincorporated lands surrounding the Sausalito Planning Area. This analysis evaluates whether the impacts of the proposed 2040 General Plan, together with the impacts of cumulative development, would result in a cumulatively significant impact on special-status species; wetlands and other Waters of the Unites States and/or State; or other biological resources protected by federal, State, or local regulations or policies. This analysis then considers

whether incremental contribution of impacts associated with the implementation of the proposed 2040 General Plan would be significant. Both conditions must apply for a project's cumulative effects to rise to the level of significance.

Cumulative development contributes to an incremental reduction in the amount of existing wildlife habitat, particularly for birds and larger mammals. Habitat for species intolerant of human disturbance can be lost as development encroaches into previously undeveloped areas, disrupting or eliminating movement corridors and fragmenting the remaining suitable habitat retained within parks, private open space, or undeveloped properties. New development in the region would result in further conversion of existing natural habitats to urban and suburban conditions, limiting the existing habitat values of the surrounding area. This could include further loss of wetlands and sensitive natural communities, reduction in essential habitat for special-status species, removal of mature native trees and other important wildlife habitat features, and obstruction of important wildlife movement corridors. Additional development may also contribute to degradation of the aquatic habitat found in Richardson's and San Francisco Bay throughout the region, including the Sausalito Planning Area.

As described in the Regulatory Setting section, numerous laws and regulations are in place to protect biological resources, including, but not limited to, the CESA, ESA, and the Clean Water Act. The BCDC has jurisdiction over all areas of San Francisco Bay that are subject to tidal action. Development facilitated by the proposed 2040 General Plan, and other future projects within the cumulative geographic context, would be required to comply with federal, State, and local laws and policies and all applicable permitting requirements of the regulatory and oversight agencies intended to address potential impacts on biological resources. Additionally, development projects under the proposed 2040 General Plan would be required to demonstrate that biological resources would not be significantly affected.

The proposed 2040 General Plan proposes no substantive changes in land use that would result in significant impacts to biological resources. Therefore, implementation of the proposed 2040 General Plan would not result in a considerable incremental contribution to cumulative impacts to biological resources, because the Sausalito Planning Area is largely built out, the proposed 2040 General Plan contains policies and programs to protect sensitive vegetative and wildlife habitat as well as creek corridors, and future development under the proposed 2040 General Plan would be required to comply with regulations set forth by State and federal agencies to protect biological resources. Therefore, cumulative impacts would be ***less than significant***.



Source: City of Sausalito.

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Exhibit 3.3-1
Habitat Types

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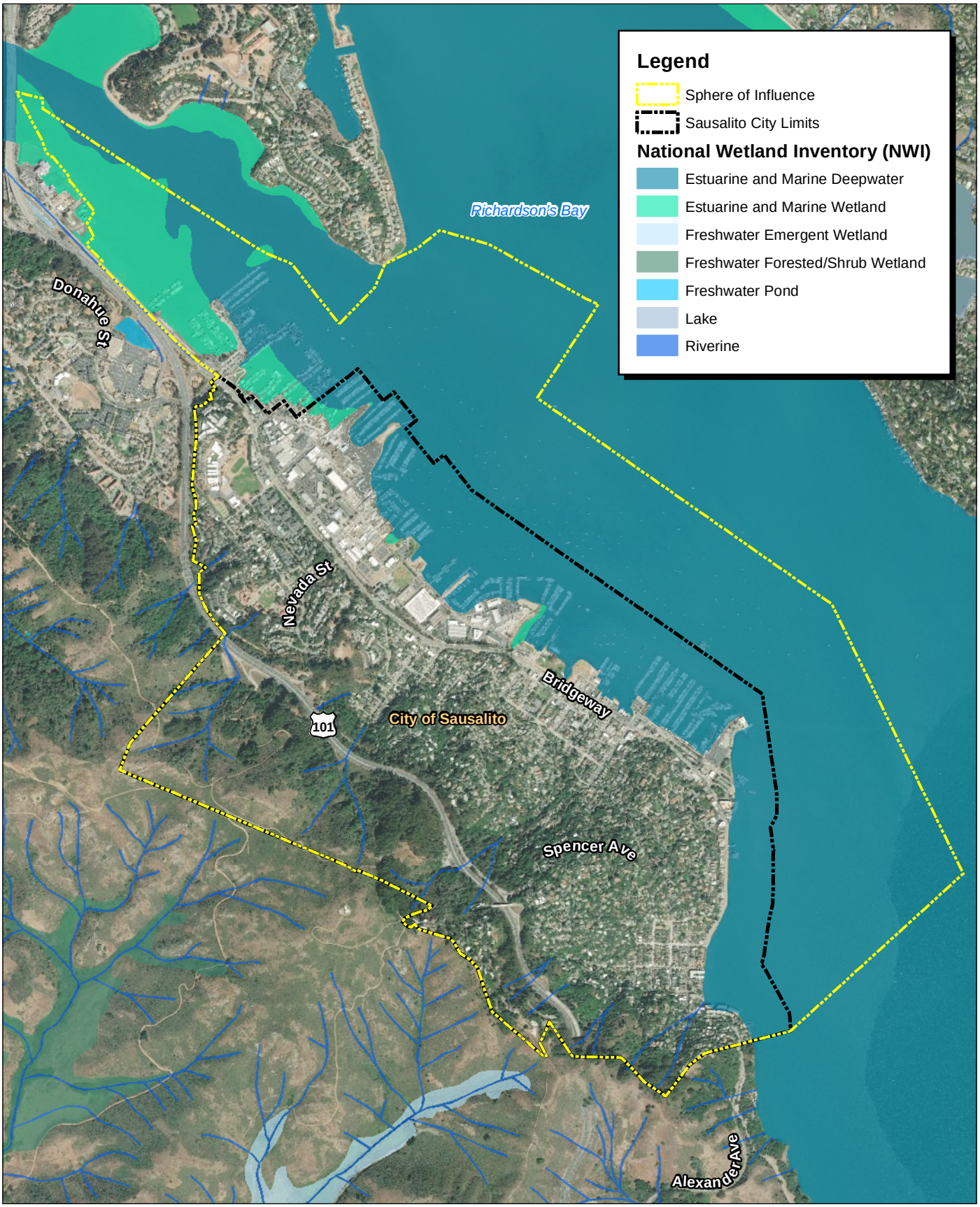

Source: ESRI Aerial Imagery. USFWS National Wetland Inventory Data.

FIRSTCARBON SOLUTIONS™ GROUP

2,000 1,000 0 2,000 Feet

Exhibit 3.3-2
USFWS National Wetlands Inventory Map

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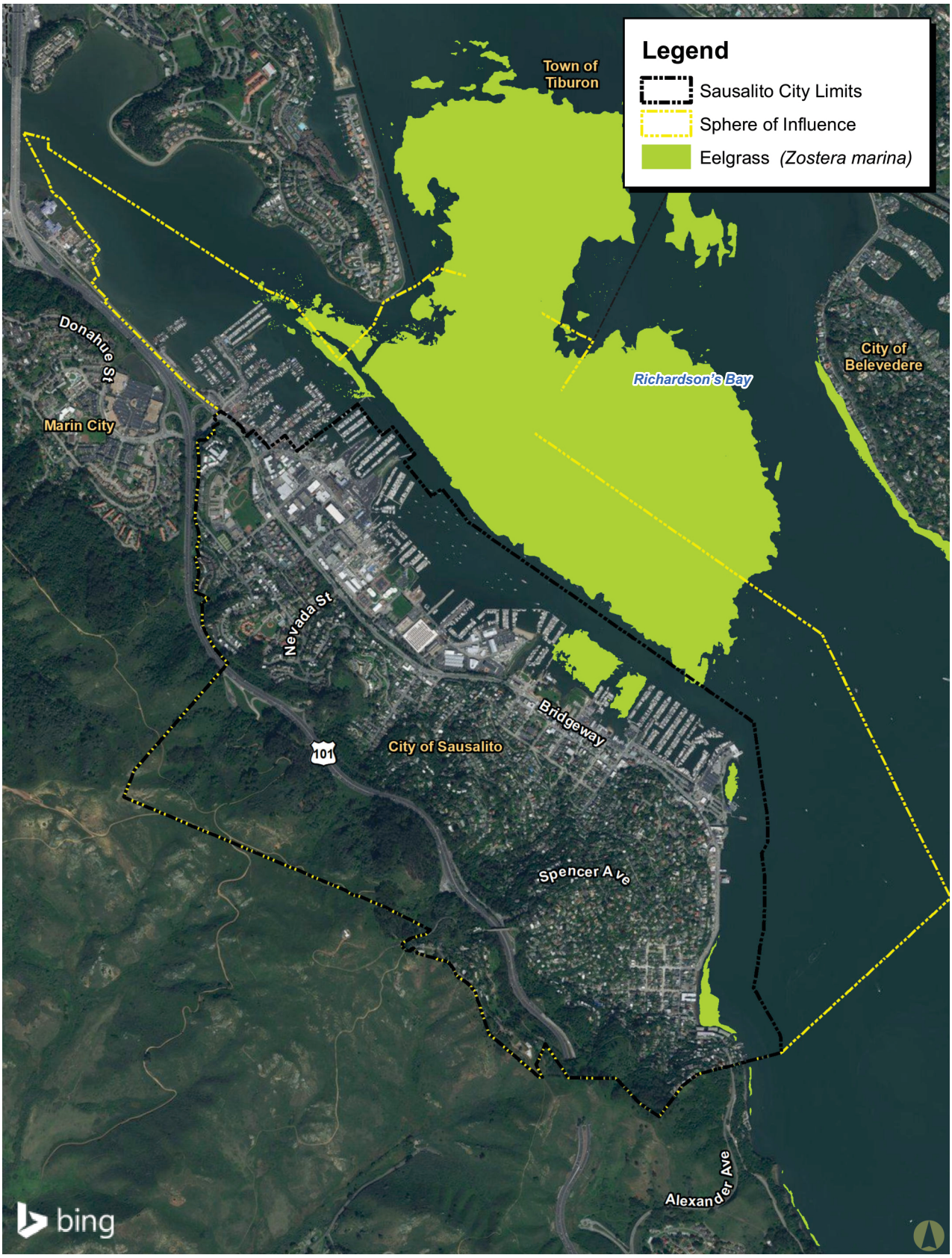

Source: City of Sausalito.

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Exhibit 3.3-3
Eelgrass Communities in Sausalito

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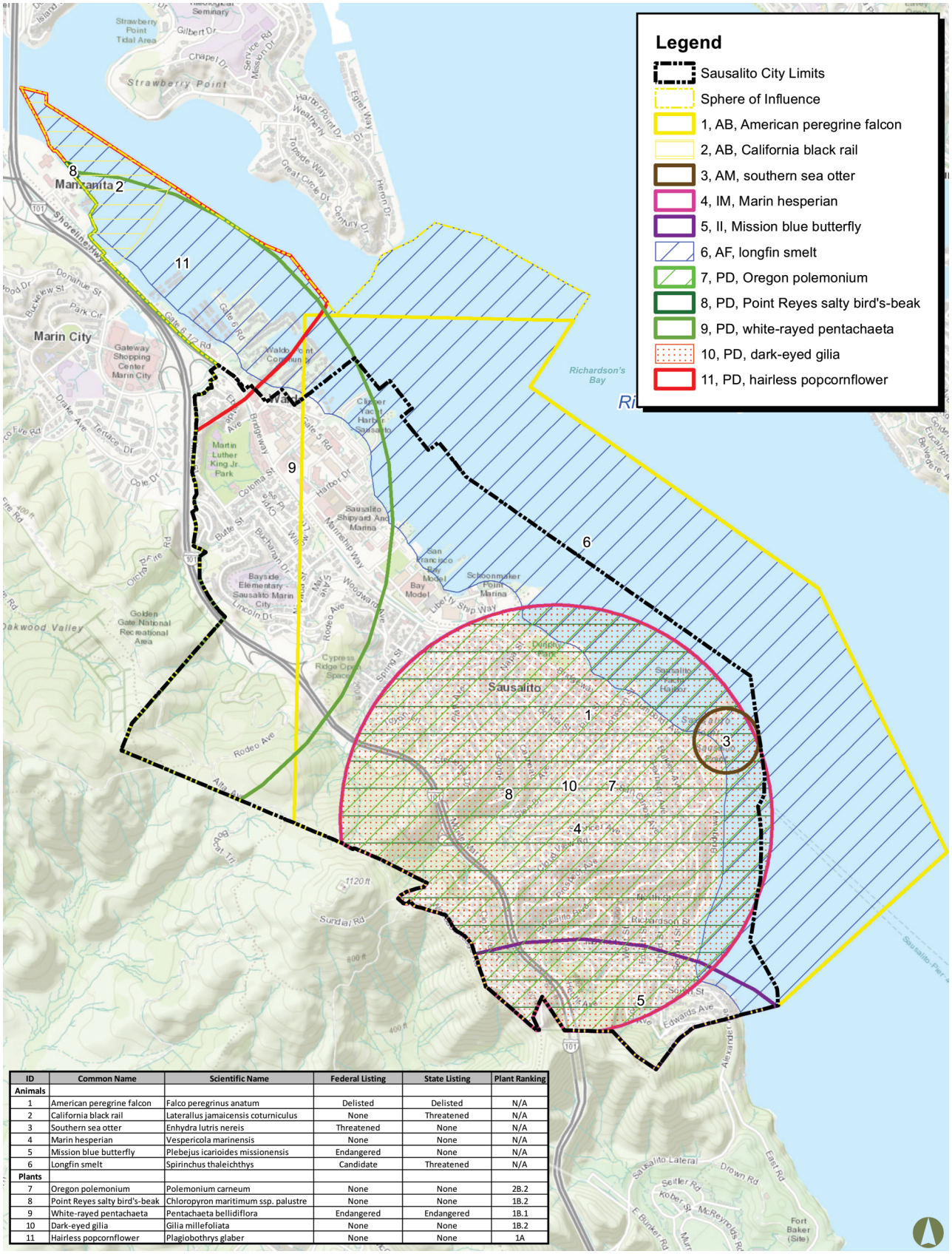

ID	Common Name	Scientific Name	Federal Listing	State Listing	Plant Ranking
Animals					
1	American peregrine falcon	Falco peregrinus anatum	Delisted	Delisted	N/A
2	California black rail	Laterallus jamaicensis coturniculus	None	Threatened	N/A
3	Southern sea otter	Enhydra lutris nereis	Threatened	None	N/A
4	Marin hesperian	Vespericola marinensis	None	None	N/A
5	Mission blue butterfly	Plebejus icarioides missionensis	Endangered	None	N/A
6	Longfin smelt	Spirinchus thaleichthys	Candidate	Threatened	N/A
Plants					
7	Oregon polemonium	Polemonium carneum	None	None	2B.2
8	Point Reyes salty bird's-beak	Chloropyron maritimum ssp. palustre	None	None	1B.2
9	White-rayed pentachaeta	Pentachaeta bellidiflora	Endangered	Endangered	1B.1
10	Dark-eyed gilia	Gilia millefoliata	None	None	1B.2
11	Hairless popcornflower	Plagiobothrys glaber	None	None	1A

Source: City of Sausalito.

FIRSTCARBON SOLUTIONS™

Exhibit 3.3-4
Known Occurrences of Special-Status Species

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3.4 CULTURAL AND TRIBAL CULTURAL RESOURCES

This section of the Draft EIR examines the proposed 2040 General Plan's potential to impact cultural resources within the City of Sausalito. Cultural resources refer broadly to prehistoric and historic buildings, structures, objects, sites, and districts exhibiting important historical, cultural, scientific, or technological associations and which exhibit historic integrity.[1] This definition extends to Tribal Cultural Resources which refers to sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. For the purposes of CEQA, cultural resources/tribal cultural resources are divided into four subcategories: archaeological resources, historic resources, human remains, and Native American tribal cultural resources.

More specifically, cultural resources and historic resources are often considered together under the term cultural resources, which are historical resources that have been formally recognized by a lead agency and/or are listed or determined legible for listing on the California Register of Historical Resources (CR) (PRC § 5024.1, Title 14 California Code of Regulations [CCR], § 4852). It is notable that, the fact that a resource is not yet identified as a historical resource or found eligible for the CR does not preclude a lead agency from determining that said resource is a historical resource pursuant to PRC Sections 5020.1(j) or 5024.1. Under CEQA, a substantial adverse change in the significance of a historical resource would constitute a significant effect on the environment. The effects on paleontological resources are addressed in Section 3.6, Geology, Soils, and Seismicity.

Information in this section is based on information provided by the following sources and reference materials:

- Office of Historic Preservation Directory of Properties in the Historic Property Data File for Marin County;
- Northwest Information Center records search for the Sausalito Planning Area;
- The National Register of Historic Places;
- The California Register of Historic Resources;
- The California Historical Landmarks List;
- The California Points of Historical Interest List; and
- City of Sausalito Historic Resources Inventory List.

Appendix D contains supporting information for this section, including the Native American Heritage Commission (NAHC) Sacred Lands File Search results and copies of letters sent to Native American Tribes pursuant to Senate Bill (SB) 18.

[1] Historic integrity refers to the authenticity of a property's historic identity, evidenced by survival of physical characteristics that existed during the property's prehistoric or historic period. Historic integrity is the composite of seven qualities: location, design, setting, materials, workmanship, feeling, association.

3.4.1 ENVIRONMENTAL SETTING

Following is an overview of the prehistory, ethnography, and historic background, providing a context in which to understand the background and relevance of sites and structures found in the proposed 2040 General Plan area. This section is not intended to be a comprehensive review of the current resources available; rather, it serves as a general overview. Further details can be found in ethnographic studies, mission records, and major published sources.[2,3,4,5,6,7]

Paleo-Environmental Setting

The San Francisco Bay Area, which includes the City of Sausalito, has experienced several major environmental changes from the Pleistocene (1.6 million to 10,000 years ago) to the current day, all which have shaped the emergence and trajectory of the indigenous cultures who still call the region home. Beginning around 15,000 years ago, melting glaciers led to a rapid rise in the San Francisco Bay, causing it to exceed its shores and flood surrounding areas. This was followed by a dramatic shift in vegetation as the climate became warmer, allowing for the proliferation of alder, Douglas fir, oak, and tanoak, and then cooler again, so that by 11,500 Before Present (B.P.), chaparral and oak woodland had largely begun to replace coniferous forest species. Also, during this time, many of large herbivores like mammoth, bison, ground sloth, horse, and camel, as well as many large carnivores became extinct. Water levels increased in the San Francisco Bay and its peripheral channels and tributaries until around 8,000 years ago after which, it began to slow. This slowing resulted in mudflats and tidal marshes which formed sometime between 7,600 and 7,200 years ago.[8] This caused many rivers and streams to aggrade their valleys by depositing sediment, gradually building up the ground surface and burying former surfaces. This process also buried most evidence of human occupation around the San Francisco Bay shoreline prior to this time.[9]

By the Middle Holocene (8200 – 4200 B.P.), sea levels had stabilized, and rich tidal marshes and extensive mudflats formed around the tributaries of the San Francisco Bay.[10] This period was

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2 Kroeber, A.L. 1925. Handbook of the Indians of California. Bulletin 78. Bureau of American Ethnology. Washington, D.C.: Smithsonian Institution.

3 Beardsley, R.K. 1948. "Cultural Sequences in Central California Archaeology." American Antiquity 14:1-28.

4 Bennyhoff, J. 1950. Californian Fish Spears and Harpoons. Berkeley: University of California Anthropological Records 9(4):295-338.

5 Chartkoff J.L. and K.K. Chartkoff. 1984. The Archaeology of California. Menlo Park: Stanford University Press.

6 Moratto, M.J. 1984. California Archaeology. San Diego: Academic Press.

7 Jones, T.L. and Kathryn A. Klar. 2007. California Prehistory. Lanham: AltaMira Press; Rowman & Littlefield Publishers, Inc.

8 Wells, Lisa E. 1995. Environmental Setting and Quaternary History of the San Francisco Estuary. In Recent Geologic Studies in the San Francisco Bay Area, edited by E. Sangines, D. Anderson, and A. Buising. The Pacific Section of the Society of Economic Paleontologists and Mineralogists, Vol. 76, May 3-5, 1995 San Francisco, California.

9 Meyer, Jack and Jeffrey Rosenthal. 2007. Geoarchaeological Overview of the Nine Bay Area Counties in Caltrans District 4.

10 Pestrong, Raymond. 1972. San Francisco Bay Tidelands.

characterized by lower rainfall and higher temperatures, with warm and dry summers that allowed for the proliferation of pines, herbs, and oak trees. Archaeologists have recorded the presence of Native American sites dating to this period along these waterways due to favorable conditions and plentiful resources.[11] Radiocarbon dates from these sites show widespread but minimal populations of hunter gathers lived in the San Francisco Bay Area and coastal environs before 4,000 B.P. Recorded sites include prehistoric shell mounds and middens, lithic scatters, quarries, habitation sites (including burials), bedrock mortars, and a variety of milling feature sites, petroglyph sites, and isolated burials.[12]

While only five such prehistoric sites have been recorded within the Sausalito city limits and are on file with the Northwest Information Center (NWIC), understanding changes within the paleoenvironment of the San Francisco Bay Area can provide insight into where Native Americans located their occupation sites, and where archaeologists might additional undiscovered sites in the city today.

Prehistoric Setting

The San Francisco Bay Area supported a dense population of hunter-gatherers over thousands of years, leaving a rich a varied archaeological record. The Bay Area was a place of incredible language diversity, with at least seven languages spoken at the time of Spanish settlement in 1776. The diverse ecosystem of the bay and surrounding lands supported an average of three to five persons per square mile but reached 11 persons per square mile in the North Bay. At the time of Spanish contact, the people of the Bay Area were organized into local tribelets that defended fixed territories under independent leaders. Typically, individual Bay Area tribelets included 200 to 400 people distributed among three to five semi-permanent villages, within territories measuring approximately 10 to 12 miles in diameter.

Archaeological investigations in Northern California have documented human occupation and activity dating from 9,000 to 11,500 years ago. Early archaeologists in the San Francisco Bay Area concentrated on recording and excavating large coastal shell mounds, including the Emeryville Shellmound (CA-ALA-309) and the Ellis Landing Site (CA-CCO-295).They discovered deeply buried stratified sites with numerous burials and associated funerary objects. The data they recovered would later help other archaeologists to develop chronological and cultural frameworks to define the region's archaeological sites and to understand the complex movements and interactions of the indigenous people in this region.[13]

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[11] See Moratto, Michael J. 1984. Archaeology. Academic Press, Orlando, Florida; Atwater, Brian, Charles Hedel, and Edward Helley. 1977. Late Quaternary Depositional History, Holocene Sea-Level Changes, and Vertical Crustal Movement, Southern San Francisco Bay, California, Geological Survey Professional Paper 1014. U.S. Department of the Interior, Washington D.C.

[12] Fredrickson, David. 1974. Cultural Diversity in Early Central California: A View from the North Coast Ranges.

[13] Moratto, M.J. 1984. California Archaeology. San Diego: Academic Press.

Early archaeological investigations in central California were conducted at sites located in the Sacramento- San Joaquin Delta region. The first published account documents investigations in the Lodi and Stockton area. The initial archaeological reports typically contained descriptive narratives with more systematic approaches sponsored by Sacramento Junior College in the 1930s. At the same time, University of California at Berkeley excavated several sites in the lower Sacramento Valley and Delta region, which resulted in recognizing archaeological site patterns based on a variation of inter-site assemblages. Research during the 1930s identified temporal periods in central California prehistory and provided an initial chronological sequence. In 1939, researcher Jeremiah Lillard of Sacramento Junior College noted that each cultural period led directly to the next and that influences spread from the Delta region to other regions in central California.[14] In the late 1940s and early 1950s, researcher Richard Beardsley of the University of California Berkeley documented similarities in artifacts among sites in the San Francisco Bay region and the Delta and refined his findings into a cultural model that ultimately became known as the Central California Taxonomic System (CCTS). This system proposed a uniform, linear sequence of cultural succession separated in into an Early, Middle, and Late Horizon.[15]

To address some of the flaws in the CCTS system, D. A. Fredrickson introduced a revision that incorporated a system of spatial and cultural integrative units.[16] Fredrickson separated cultural, temporal, and spatial units from each other and assigned them to six chronological periods: Paleo- Indian (12000 to 8000 B.P.); Lower, Middle and Upper Archaic (8000 to 1500 B.P.), and Emergent (Upper and Lower, 1500 to 250 B.P). The suggested temporal ranges are similar temporally to Beardsley's horizons, which are broad cultural units that can be arranged in a temporal sequence. In addition, Fredrickson defined several patterns—a general way of life shared within a specific geographical region. These patterns include:

- Windmiller Pattern or Early Horizon (4500 to 3500 B.P.)
- Berkeley Pattern or Middle Horizon (3500 to 1500 B.P.)
- Augustine Pattern or Late Horizon (1500 to 250 B.P.)

Brief descriptions of these temporal ranges and their unique characteristics follow.

Windmiller Pattern or Early Horizon (4500 to 3500 B.P.)

Characterized by the Windmiller Pattern, the Early Horizon was centered in the Cosumnes district of the Delta and emphasized hunting rather than gathering, as evidenced by the abundance of projectile points in relation to plant processing tools. Additionally, atlatl, dart, and spear technologies typically included stemmed projectile points of slate and chert but minimal obsidian. The large variety of projectile point types and faunal remains suggests exploitation of

[14] Lillard, J.B. and W.K. Purves. 1936. The Archaeology of the Deer Creek-Cosumnes Area, Sacramento Co., California. Sacramento. Sacramento Junior College, Department of Anthropology Bulletin 1.

[15] Beardsley, R.K. 1948. Cultural Sequences in Central California Archaeology. American Antiquity 14:1–28.

[16] Frederickson, D.A. 1973. Early Cultures of the North Coast Ranges, California. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Davis.

numerous types of terrestrial and aquatic species.[17] Burials occurred in cemeteries and intra-village graves. These burials typically were ventrally extended, although some dorsal extensions are known with a westerly orientation and a high number of grave goods. Trade networks focused on acquisition of ornamental and ceremonial objects in finished form rather than on raw material. The presence of artifacts made of exotic materials such as quartz, obsidian, and shell indicates an extensive trade network that may represent the arrival of Utian populations into central California. Also indicative of this period are rectangular Haliotis and Olivella shell beads, and charmstones that usually were perforated.[18]

Berkeley Pattern or Middle Horizon (3500 to 1500 B.P.)

The Middle Horizon is characterized by the Berkeley Pattern, which displays considerable changes from the Early Horizon. This period exhibited a strong milling technology represented by minimally shaped cobble mortars and pestles, although metates and manos were still used. Dart and atlatl technologies during this period were characterized by non-stemmed projectile points made primarily of obsidian. Fredrickson suggests that the Berkeley Pattern marked the eastward expansion of Miwok groups from the San Francisco Bay Area. Compared with the Early Horizon, there is a higher proportion of grinding implements at this time, implying an emphasis on plant resources rather than on hunting. Typical burials occurred within the village with flexed positions, variable cardinal orientation, and some cremations. As noted by Lillard, Heizer, and Fenenga, the practice of spreading ground ochre over the burial was common at this time. Grave goods during this period are generally sparse and typically include only utilitarian items and a few ornamental objects. However, objects such as charmstones, quartz crystals, and bone whistles occasionally were present, which suggest the religious or ceremonial significance of the individual.[19] During this period, larger populations are suggested by the number and depth of sites compared with the Windmiller Pattern. According to Fredrickson, the Berkeley Pattern reflects gradual expansion or assimilation of different populations rather than sudden population replacement and a gradual shift in economic emphasis.[20]

Augustine Pattern or Late Horizon (1500 to 250 B.P.)

The Late Horizon is characterized by the Augustine Pattern, which represents a shift in the general subsistence pattern. Changes include the introduction of bow and arrow technology; and most importantly, acorns became the predominant food resource. Trade systems expanded to include raw resources as well as finished products. There are more baked clay artifacts and extensive use of Haliotis ornaments of many elaborate shapes and forms. According to Moratto, burial patterns retained the use of flexed burials with variable orientation, but there was a

[17] Bennyhoff, J. 1950. Californian Fish Spears and Harpoons. University of California Anthropological Records 9(4):295–338.

[18] Ragir, S.R. 1972. The Early Horizon in Central California Prehistory. Contributions of the University of California Archaeological Research Facility 15. Berkeley, CA.

[19] Lillard, J.B., R.F. Heizer, and F. Fenenga. 1939. An Introduction to the Archaeology of Central California. Sacramento Junior College, Department of Anthropology, Bulletin 2.

[20] Fredrickson, D.A. 1973. Early Cultures of the North Coast of the North Coast Ranges, California. PhD dissertation.

reduction in the use of ochre and widespread evidence of cremation.[21] Judging from the number and types of grave goods associated with the two types of burials, cremation seems to have been reserved for individuals of higher status, whereas other individuals were buried in flexed positions. Johnson suggests that the Augustine Pattern represents expansion of the Wintuan population from the north, which resulted in combining new traits with those established during the Berkeley Pattern.[22]

Bay Area archaeological research has expanded from an emphasis on defining chronological and cultural units to a more comprehensive look at settlement and subsistence systems. This shift is illustrated by the early use of burials to identify mortuary assemblages and more recent research using osteological data to determine the health of prehistoric populations. Although debate continues over a single model or sequence for California, the general framework consisting of three temporal/cultural units is generally accepted, although the identification of regional and local variation is a major goal of current archaeological research.

Ethnographic Setting

For over 3,000 years, Native Americans known as the Coast Miwok occupied the shoreline and hills of today's Sausalito prior to arrival of white settlers. The Coast Miwok were hunter-gatherers whose shell mounds, artifacts, and burial middens still reside under modern-day Sausalito. Miwok is a California Penutian language that consists of several continuous and discrete groups. The Sausalito Planning Area is located within the traditional territory of the Huimen group of Coast Miwok who comprise the southernmost territory, and were centered around the village of *liwanelowa*, just to the southwest of modern-day Sausalito.[23] The Huimens controlled the southern tip of the Marin Peninsula, as well as lands surrounding Richardson's Bay, the southeastern slopes of Mt. Tamalpais, the Ring Mountain vicinity, and Muir Beach; approximately 38 square miles of in all.[24]

A chief headed each large Coast Miwok village, and the position was not hereditary. The chief was tasked with taking care of people, offering counsel, and addressing the tribal members. There was also a woman chief in the village whose task was to oversee certain traditional dances, such as the Acorn Dance. A second woman oversaw the women's ceremonial house, and as such played an important cultural role. Old dancers amongst the tribe were also looked to for healing rituals during times of illness. The Miwok social scheme is described as having divided the people into balanced halves or moieties, which are totemic, and adhesion to which is

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[21] Moratto, M.J. 1984. California Archaeology. San Diego: Academic Press.

[22] Johnson, J.J. 1976. Archaeological Investigations at the Blodgett Site (CA-SAC-267), Sloughhouse Locality, California. Report to the U.S. National Parks Service, Western Regional Office, Tucson, Arizona.

[23] Callaghan, Catherine A. 1970 Bodega Miwok Dictionary. University of California Publications in Linguistics 60. Berkeley, California.

[24] Milliken, Randall. 2009. Ethnohistory and the Ethnogeography of the Coast Miwok and their Neighbors, 1783-1840. Technical Paper for the National Park Service, Golden Gate National Recreation Area, Cultural Resources and Museum Management Division, San Francisco.

hereditary. Descent was patrilineal, and marriage was preferential amongst relatives of the opposite moiety.[25]

The Coast Miwok believed in Animism—a religious belief in which objects, places, and creatures, all possess a distinct spirit. One form of this belief was practiced as the Kuksu religion or Kuksu Cult; it involved acting, ceremonial dancing, feather dress costumes, singing, ritual fasting, offerings, and prayer. The deceased were either cremated or interred in a flexed position in the earth; cremation appears to be more common than flexed burial Mourning ceremonies included wailing and dancing.[26] The ceremony was completed with a ritualistic washing of the mourners by people of the opposite totemic moiety. Mourners may have also cut their hair off in demonstration of grief and thrown it in the water; after which, speaking the name of the deceased became taboo.[27]

The Coast Miwok economy was based upon hunting, fishing, and gathering that supplied the tribal groups with a reliable sustenance year-round. The land provided abundant and diverse resources from marine foods along the waterways, to deer, bear, rabbit, woodrats, gophers, squirrels, terrestrial birds, and waterfowl. Acorns were a staple food, the leached meal was boiled with hot stones to create a mush, which was consumed in a bowl or made into cakes and bread. Buckeye fruits were also leached and prepared into a mush that was eaten with salt. Dried acorns, seeds, and tubers, as well as salmon runs, mud hens, and migratory birds, such as late winter geese would have sustained the Coast Miwok through winter and spring. Marine resources represented a large portion of the diet of the Coast Miwok, and included steelhead trout, salmon, and shellfish, such as mussels and clams.[28]

Coast Miwok dwellings were conical and grass-covered and erected on a frame of two forked interlocking poles of willow or driftwood, against which additional poles leaned and were woven together to form a frame. Grass, rushes, or tule reeds were tied together with lupine-root rush to form a shingle-like exterior. Dwellings likely had a slightly excavated hearth in the center below the smoke hole. Dwellings could accommodate six to ten individuals. Large villages had a circular sweathouse, which was placed about 4-5 feet deep in the ground. Forked posts were laid around the perimeter, with their top level to the surface and were connected by poles to a large forked post in the center of the pit. Transverse sticks covered with brush, grass, and earth formed the exterior. The entrance is described as "gallery like, with a drop." Sweathouses were larger structures and served as a social and work center for men. Some larger Coast Miwok villages contained a ceremonial chamber or dance house, which had a similar construction to the sweathouses. The ceremonial chambers that included both sexes measured approximately

[25] Kelly, Isabel. 1978. Coast Miwok, In Handbook of North American Indians, edited by William C. Sturtevant.
[26] Kroeber, Alfred L. 1976. Handbook of California Indians.
[27] Heizer, Robert F. 1947. Francis Drake and the California Indians, 1579. March 20.
[28] Kelly, Isabel. 1978. Coast Miwok, In Handbook of North American Indians, edited by William C. Sturtevant.

15 feet in diameter and were excavated about 2 feet deep. The chambers used for women, were smaller and had grass or tule roofs, without an earthen covering.[29]

Charms for hunting and fishing were constructed from polished stones, including obsidian and green chalcedony. Stones were used to make a variety of lithics included projectile points used as utility knives, and butchering knives. The chief weapon and hunting tool of the Coast Miwok was the bow and arrow. The bow was backed with sinew, often from the wing of a brown pelican, which had been reshaped. From wood, the Coast Miwok hollowed log foot drums, double-bladed balsa paddles, and utensils. Boulders were used to create mortars. The Coast Miwok made cordage from lupine root (*Lupinus chamissonis*), and by twining the cordage together made a three-ply rope. Nets were also made from twine. Primarily women made baskets for various purposes for willow and the techniques were both coiled and twined. Baskets included mush bowls, cooking baskets, storage baskets, hopper and parching trays, and burden baskets.[30]

Historic Setting

European Exploration and Spanish Colonization (1579 – 1821)

Early explorers, including Sir Francis Drake in 1579 and Sebastian Rodriguez Cermeño in 1595 have provided written accounts of their encounters of Coast Miwok culture. In 1775, the Spanish ship *San Carlos*, piloted by Jose De Canizares, entered the San Francisco Bay, and arrived at modern day Sausalito. Observing the many small willow trees growing in the area, they gave the place the name "Saucito," meaning little willow, which later evolved into "Sausalito." In his report to Commander Don Juan de Ayala, de Canizares mentions the several hills surrounding the area, three small islands, and the types of trees. He also made note of the ideal setting for anchoring ships, observing that water depth and current would provide good anchorage.

Further European encounters with the Coast Miwok occurred in 1811 and 1812, when the Russians established a colony at Fort Ross to hunt sea otters for their pelts. The founding of the Mission San Francisco de Asís in 1776, Mission San Rafael de Arcángel in 1817, and the Mission San Francisco Solano in the town of Sonoma in 1823, led to the evangelization of many Native Americans from the local tribes, and led to the dislocation of tribal populations and the deterioration of tribal culture. A total of 163 Huimen people were baptized at missions including Mission Dolores, including 100 adults and 63 children.[31]

Missions offered cramped and unsanitary conditions, as well as European-introduced diseases for which the Miwok had no immunity, which led to significant disruption of indigenous populations and lifeways. The Coast Miwok populations were small to begin with—precontact

[29] Kelly, Isabel. 1978. Coast Miwok, In Handbook of North American Indians, edited by William C. Sturtevant.
[30] Ibid.
[31] Milliken, Randall. 2009. Ethnohistory and the Ethnogeography of the Coast Miwok and their Neighbors, 1783-1840. June.

the population may have numbered as high as 2,000; however, by the early 1850s Kroeber estimates their numbers had dwindled to 250 and only 60 by 1880.[32]

Mexican Period (1821 – 1846)

In 1821, Mexico achieved independence from Spain and in 1824 the first Mexican Republic was established. The Mexican Colony Law established rules for petitioning of land grants in Alta California, and by 1828 the rules were codified. In 1834, Governor José Figueroa ordered the missions secularized. The Mexican Period was marked by secularization as the Spanish-colonial mission system collapsed and the lands fell from Mission control.

In 1822, an English seaman named William Anthony Richardson arrived in what today is the Presidio Bay. He immediately befriended Ignacio Martinez, the Comandante of El Presidio (the Mexican military garrison in San Francisco), and in 1838, married Martinez's daughter, Maria Antonia.[33] Upon marrying, he received nearly 20,000 acres of land in southern and western areas of today's Marin County.[34] Richardson built his hacienda near today's Caledonia Street in the City of Sausalito and is considered the town's founder.

Early American Period (1848–1860s)

The Early American Period in California is marked by the end of the of the Mexican-American War in 1848 when the U.S. took possession of the territories, in total or parts, of present-day Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming in signing the Treaty of Guadalupe Hidalgo. The Treaty provided resident Mexicans with American citizenship and guaranteed title to land granted to them during the Mexican period. Shortly before the signing of the Treaty, on January 24, 1848, James W. Marshall discovered gold along the American River in California. News of the discovery brought thousands of immigrants (known as "Forty-niners") to California from all over the U.S., as well as other countries. The immigration of thousands of Forty-niners in search of gold prompted California's admission as the 31st state into the Union in 1850, creating the need for a State capital. Cities vied for the opportunity to house the State capital for the power, prestige, and economic benefit that accompanied it, and in 1849, Pueblo de San Jose became California's first capital, and the first state legislative assembly convened there on December 15, 1849. In 1850, California officially became a state, and Marin County was one of the original 27 counties created.

William Richardson had several successful business ventures but eventually lost them all; the majority of Rancho del Sausalito was sold in 1868 to the Sausalito Land and Ferry Company. With arrival of ferries and construction of railroads, Sausalito became a transportation hub.[35] A diverse merchant and commerce class developed, including Portuguese boatbuilders, Chinese

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[32] Kroeber, Alfred L. 1925, Handbook of the Indians of California. Bureau of American Ethnology, Bulletin 78, Washington, D.C.

[33] Meherin, Elenore. 1944. Sausalito's First Settler Was William Anthony Richardson, Young English Merchant Sailor. February 24.

[34] Knapp & VerPlanck. 2011. Historic Context Statement: Marinship, Sausalito, California. June.

[35] Ibid.

shopkeepers, dairy ranchers, fishermen, Italian and German merchants, boarding house operators, and railroad workers.

While not designated an official historic area, the former Marinship yard in the northern part of the city holds an important place in Sausalito history. Naval shipbuilding in the San Francisco Bay Area began in 1854 and private shipyards became common, including in Sausalito, during the last half of the 19th century.[36]

History of Sausalito (1868-1970s)

In 1868, the Sausalito Land & Ferry Company was established and regular ferry service from the city to San Francisco began. A street layout and subdivisions of land soon followed, effectively establishing a real estate market along the central waterfront. Prior to the opening of the Golden Gate Bridge, a robust ferry service thrived. However, following completion of the Bridge in 1937, ridership steadily declined. Sausalito's train and ferry services ended in 1941.

In 1942, construction of the current 210-acre Marinship area on Richardson's Bay began shipbuilding operations that continued through World War II. During the war, 15 Liberty Ships and 78 tankers were delivered to the U.S. Maritime Commission.[37] The last tanker was launched from the Marinship on September 8, 1945; the Marinship closed in 1946 and was transferred to the U.S. Army Corps of Engineers, which subdivided it and sold large parcels to local industries.[38]

The United States' entry into World War II transformed Sausalito as its importance as a transit hub decayed. The opening of the Marinship and high-paying jobs drew a large labor force to the shipyards, nearly doubling the city's population.[39] However, with the end of World War II, demand for merchant vessels and tankers declined. The shipyard closed in 1945 and the Marinship was decommissioned in 1946.[40]

Passenger ferries returned to Sausalito in 1970, bringing tourists and visitors. Today, the city is a hub for art and culture as well as software, multimedia, and financial enterprises. The city's scenic location, historic character, and proximity to the Golden Gate National Recreation Area (GGNRA) draws more than one million tourists each year, representing an important driver of the local economy.[41]

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36 Knapp & VerPlanck. 2011. Historic Context Statement: Marinship, Sausalito, California. June.
37 Historic Context Statement: Marinship, Sausalito, California. June 2011. Prepared by Knapp & VerPlanck.
38 Ibid.
39 Ibid.
40 Ibid.
41 Sausalito Chamber of Commerce. About Us. Website: https://www.sausalito.org/pages/About Us. Accessed November 1, 2017.

3.4.2 CULTURAL RESOURCES IN THE PROPOSED SAUSALITO 2040 GENERAL PLAN AREA

Historic Resources, Districts, and Landmarks

The Community Design, Historic, and Cultural Preservation Element of the proposed 2040 General Plan identifies the Sausalito Historic District, as well as six Historic Landmarks within the city and three sites that are listed on the NRHP.

The Historic District is located around the intersection of Princess and Bridgeway Streets and serves as one of the main attractions of the city, as shown on Exhibit 3.4-1. It is a commercial district composed of Italianate style commercial buildings built between 1885 and 1900 and utilitarian commercial built between 1914 and 1924, both associated with periods of growth and heavy construction in the downtown area. The Historic District comprises the following areas:[42]

- Northern portion, on Bridgeway north of Princess Street: characterized by 2- and 3-story attached row buildings from the 1980s through the decade following World War II. Most buildings have bay windows, boxed cornices, false fronts, Italianate roofline detail, recessed entryways, and transoms.
- Central Portion, centered around a small, triangular park/plaza with a fountain from the 1915 San Francisco Panama Pacific International Exposition: the park combines the feeling of a Victorian garden with that of a Mediterranean plaza. Along with the Sausalito Hotel, the park is adjacent to the last remains of the railroad/ferryboat era.
- Southern Bridgeway south of Princess Street: characterized by unobscured views of the Richardson's and San Francisco Bays and a combination of 1920s functional structures (such as stores and garages) and Victorian-era buildings.
- Princess Street: the transition between Bridgeway and the Hill neighborhood, characterized by a transition between the Bridgeway area at the base of the street to the residential area at the top of the street, with several unique buildings that are visible in early photos of the area.

The Sausalito Historic District is one of twelve Certified Local Districts in California. In addition to the Sausalito Historic District, the city recognizes the eligibility or potential eligibility of two additional districts: the Ark Row District, near the intersection of Humboldt Avenue and Anchor Street, and Marinship District, further to the north along the waterfront.

[42] City of Sausalito Historic Preservation Guidelines. Website: www.sausalito.gov/depart ments/community-development/planning-division/historic-preservation-guidelines. Accessed May 29, 2020.

Sausalito Historic Landmarks

The proposed 2040 General Plan identifies the following sites within the city that are designated historic landmarks (see Exhibit 3.4-1):

1. Castle by the Sea, 221 Bridgeway
2. Christ Episcopal Church, Santa Rosa & San Carlos Avenues
3. Madrona Cottage, 76 Cazneau Avenue
4. NWPRR Freight Depot, Second & Main Streets
5. The Bungalow/Tanglewood, 168 Harrison Avenue
6. Elderberry Cottage, 625 Locust Road

National Register of Historic Places

The proposed 2040 General Plan identifies the following sites within the city that are listed on the National Register of Historic Places (NRHP) (see Exhibit 3.4-1):

1. Griswold House, 639 Main Street
2. Casa Madrona, 156 Bulkley Avenue
3. Sausalito Woman's Club, Central & San Carlos Avenues
4. Marinship Machine Shop, 25 Liberty Ship Way

Northwest Information Center Records and Office of Historic Preservation Historic Properties Directory

According to files maintained by the Northwest Information Center (NWIC), and Office of Historic Preservation's Historic Properties Directory and the City of Sausalito, there are a total of 116 cultural resources that have been identified within the city. These include five prehistoric archaeological sites, one historic archaeological site, and 110 historic buildings. The identified archaeological sites are described in Table 3.4-1 below.

TABLE 3.4-1: ARCHAEOLOGICAL RESOURCES LOCATED WITHIN THE CITY OF SAUSALITO

PRIMARY #	TRINOMIAL	TYPE	DESCRIPTION
P-21-000002	CA-MRN-3	Prehistoric Site	Habitation (midden and burials) site
P-21-000034	CA-MRN-1	Prehistoric Site	Habitation (midden) site
P-21-000501	CA-MRN-574H	Historic Site	Standing Structures and Wharfs
P-21-000563	CA-MRN-2	Prehistoric Site	Habitation (shellmound) site
P-21-000623	CA-MRN-639	Prehistoric Site	Habitation (midden) site
P-21-002670	(None)	Prehistoric Site	Habitation (midden) Site

Source: Office of Historic Preservation's Historic Properties Directory and records on file at the Northwest Information Center 2020.

Currently, the City of Sausalito has 110 listed historic buildings. Of these, 109 have been assigned a Primary number by the NWIC, 100 are listed in the State Office of Historic Preservation's 2012 Historic Properties Directory (HPD), 27 are listed in the City of Sausalito 1999 Historic Resources Inventory List, five are City of Sausalito Historical Landmarks, four are listed in the NRHP, and 56 are eligible for listing in the NRHP or CR. These resources are listed in Table 3.4-2.

TABLE 3.4-2: HISTORIC BUILDINGS WITHIN THE CITY OF SAUSALITO AS LISTED BY THE NWIC, MARIN COUNTY HPD, CITY OF SAUSALITO HISTORIC RESOURCES INVENTORY LIST, AND CITY OF SAUSALITO HISTORICAL LANDMARKS

PRIMARY #	ADDRESS	NAME	YEAR-BUILT	NRS STATUS
21-001791	120 Central Ave	Sausalito Woman's Club	1918	1S
21-001710	156 Bulkley Ave	Barrett, William., House/Casa Madrona	1885	1D, 1S
16000865	25 Liberty Ship Way	Marinship Machine Shop	1942	1S
21-001797	639 Main St	Griswold House	1893	1S, 2S3
21-001738	109 Bulkley Ave	Laneside/Laneside Apartments	1891	2D2
21-001706	12 El Portal	Sausalito Hotel	1909	2D2
21-001730	12 Princess St	Jean Baptiste Meat Market, Gemini	1892	2D2
21-001743	19 Princess St	Sausalito Salvage Shop	1874	2D2
21-001742	21 Princess St	Porto Bello Antiques	1886	2D2
21-001731	28 Princess St	Princess Court	1913	2D2
21-001744	3 Princess St	Kersting Galleries	1885	2D2
21-001732	36 Princess St	The Store	1894	2D2
21-001729	4 Princess St	Schnell, Jacob, Boarding House	1884	2D2
21-001733	40 Princess St	(unnamed structure)	1894	2D2
21-001739	48 Bulkley Ave	Apartments	1894	2D2
21-001734	52 Princess St	Tapia Art Studio	1894	2D2
21-001740	54 Bulkley Ave	Zephyr Cottage	1891	2D2
21-001697	558 Bridgeway	San Francisco Yacht Club, Ondine	1898	2D2
21-001760	558 Bridgeway	Sausalito Central Business Historic	1874	2S2
21-001758	561 Bridgeway	Dexter's House Apartments	1889	2D2
21-001756	569 Bridgeway	Old Ferry Grill/Swanson Art Gall	1908	2D2
21-001754	579 Bridgeway	Twin Victorian Cottage #1	1886	2D2
21-001755	583 Bridgeway	Twin Victorian Cottage #2	1886	2D2

PRIMARY #	ADDRESS	NAME	YEAR-BUILT	NRS STATUS
21-001753	585 Bridgeway	C. Frederick Faude Antiques	1914	2D2
21-001698	588 Bridgeway	Langes Landing, Scomas	1887	2D2
21-001752	589 Bridgeway	Sausalito Gem Shop	1904	2D2
21-001751	595 Bridgeway	Ruby Begonia Boutiques	1907	2D2
21-001750	599 Bridgeway	Lincoln Garage/Kebaya Company	1924	2D2
21-001749	605 Bridgeway	Marin Fruit Company	1912	2D2
21-001748	605 Bridgeway	Town & Company Antiques	1924	2D2
21-001735	62 Princess St	Sausalito City Hall, Unitours	1887	2D2
21-001747	621 Bridgeway	Flying Fish Restaurant	1910	2D2
21-001746	625 Bridgeway	Venice Gourmet	1894	2D2
21-001745	639 Bridgeway	Giovani's Pizza	1887	2D2
21-001700	660 Bridgeway	Old Purity House	1935	2D2
21-001701	664 Bridgeway	Becker Building, Saga of Finland	1897	2D2
21-001728	667 Bridgeway	Mecchi & Ratto Building, Stephens	1914	2D2
21-001702	668 Bridgeway	Princess Theatre, Gate Theatre, TA	1915	2D2
21-001703	670 Bridgeway	Fielders General Store, Old Dime S	1885	2D2
21-001725	679 Bridgeway	Cat n' Fiddle Bar	1915	2D2
21-001724	683 Bridgeway	Priceless Shop	1924	2D2
21-001723	687 Bridgeway	Swenson's	1902	2D2
21-001722	693 Bridgeway	Sausalito News Building, Games PEO	1897	2D2
21-001721	701 Bridgeway	El Monte Hotel, Del Monte Hotel	1879	2D2
21-001720	715 Bridgeway	Bank of Sausalito, Wells Fargo Bank	1924	2D2
21-001719	721 Bridgeway	Burlwood Gallery	1894	2D2
21-001718	731 Bridgeway	Sausalito City Hall, Bank of Sausalito	1894	2D2
21-001717	737 Bridgeway	Patterson's Bar	1894	2D2
21-001716	743 Bridgeway	Tamalpais Stables/Arcade Shops	1894	2D2
21-001715	749 Bridgeway	Sausalito News Building/The Tide	1899	2D2
21-001714	755 Bridgeway	GG of Sausalito	1889	2D2
21-001713	757 Bridgeway	No Name Bar	1894	2D2

PRIMARY #	ADDRESS	NAME	YEAR-BUILT	NRS STATUS
21-001711	777 Bridgeway	Mason's Garage/Village Fair	1924	2D2
21-001741	83 Princess St	Glen Bank/Spring Bank/Richards	1884	2D2
21-001736	90 Princess St	Cabana Bonita	1893	2D2
21-001709	El Portal	Plaza Vina Del Mar	1904	2D2
21-001759	El Portal	Ferryboat Landing	1875	2D2
21-001699	Princess St	Ferryboat Landing Site, Yee Tock Chee Park	1977	2D2
21-001737	Princess St	Portals of the Nook	1891	2D2
21-001707	28 El Portal	Northwest Pacific Railroad Express Office	1916	2D
21-001778	201 Bridgeway	Walhalla, Valhalla/ Chart House	1893	3S
21-001804	16 San Carlos Ave	Villa Veneta	1892	3S
21-001782	112 Bulkley Ave	Sausalito First Presbyterian Church	1909	3S
21-001787	116 Caledonia St	Linsley House	1903	3S
21-001807	215 South St	Horn House, Victorian Gothic Cottage	1860	3S
21-001810	220 West St	Koster House	1904	3S
21-001777	221 Bridgeway	Castle-by-the-Sea	1902	3S
21-001761	26 Alexander Ave	Craig Hazel	1890	3S
21-001785	31 Bulkley Ave	Collie House	1884	3S
21-001790	41 Cazneau Ave	Laurel Lodge	1875	3S
21-001767	428 Turney St	Sylva House	1900	3S
21-001794	47 Girard Ave	Gardner House, The Bower	1869	3S
21-001789	76 Cazneau Ave	Cottage Madrona	1874	3S
21-001801	93 San Carlos Ave	Treat House	1905	3S
21-001786	Bulkley Ave	O'Connell Seat	1901	3S
21-001806	Santa Rosa Ave	Christ Episcopal Church	1882	3S
21-001766	603 Main St	Shiller Haus	1899	3S
21-001796	50 Harrison Ave	The Hearth	1893	3S
21-001768	64 Alexander Ave	Spreckels Cottage/ Oak Cliff	1895	7N
21-001771	Alta Ave.	Shanghai Tunnel and Springs	1885	7N
21-001762	Bee Street	NPC Railroad Freight Building	1901	7N

PRIMARY #	ADDRESS	NAME	YEAR-BUILT	NRS STATUS
21-000619	Bickbur	Gilead, Bickbur	1907	7N
21-002283	Bridgeway	Vina Del Mar Park Plaza and Fountain	NA	7L
21-001757	565 Bridgeway	Unnamed	1940	7R
21-001727	671 Bridgeway	First National Bank of Sausalito	1917	7R
21-001726	675 Bridgeway	Sausalito Chamber of Commerce	1924	7R
21-001704	676 Bridgeway	Seven Seas Restaurant	1885	7R
21-001705	688 Bridgeway	Sausalito Ferry Company	1979	7R
21-001712	763 Bridgeway	Medical/ Dental Building	1958	7R
21-001772	1705 Bridgeway	Richardson School	1871	7N
21-001784	Bulkley Ave	Alta Mira Hotel	1925	7N
21-001793	35 Central Ave	The Heights/H.C. Campbell House/Birch Cottage	1896	7N
21-001792	108 Central Ave	Du Bois House	1889	7N
21-001795	100 Harrison Ave	Nesteldown/McCormack House	1884	7N
21-001812	168 Harrison Ave	The Bungalow/Tanglewood	1874	7N
21-000041	515 Humboldt St.	Ark—"Caprice"	1880	7W
21-001764	47 Miller Ave	O.C. Miller Carriage House	1879	7N
21-001799	517 Pine Street	Oldlands, Wosser House	1874	7N
21-001803	86 San Carlos Ave	Hazel Mount	1871	7N
21-001802	87 San Carlos Ave	Sweetbriar, Cantwell House	1902	7N
21-001800	172 San Carlos Ave	Bellevue Cottage	1889	7N
21-001809	26 Spencer Court	Birds Nest Cottage	1899	7N
Unlisted	725 Locust Rd	Elderberry Cottage	Unlisted	7N
21-000501	Unlisted	Napa Street Pier	1945	6Y
21-002568	Unlisted	MMWD-1	Unlisted	7
21-002601	Unlisted	Arques Shipyard and Marina	Unlisted	7
21-002602	Unlisted	Tunnel No. 27-00.40 (L and R)	Unlisted	7
21-002641	Unlisted	Gaylord India Restaurant	Unlisted	7
21-002695	Unlisted	Locust Street Pump Station	Unlisted	7
21-002887	206 Second Street	206 Second Street	Unlisted	7

PRIMARY #	ADDRESS	NAME	YEAR-BUILT	NRS STATUS
21-002901	Unlisted	Sausalito Fire Station #2	Unlisted	7

Key:

1 Properties Listed in the National Register (NRHP) or the California Register (CR)

1D Contributor to a district or multiple resource property listed in NRHP by the keeper. Listed in the CR

1S Individual property listed in NRHP by the keeper. Listed in the CR

2 Properties Determined Eligible for Listing in the National Register (NRHP) or the California Register (CR)

2D Contributor to a district determined eligible for NRHP by the keeper. Listed in CR

2D2 Contributor to a district determined eligible for NRHP by consensus through Section 106 process. Listed in the CR

2D3 Contributor to a district determined eligible for NRHP by Part I Tax Certification. Listed in the CR

2S2 Individual property determined eligible for NRHP by consensus through Section 106 process. Listed in the CR

2S3 Individual property determined eligible for NRHP by Part I Tax Certification. Listed in the CR

3 Appears Eligible for National Register (NRHP) or the California Register (CR) through Survey Evaluation

3S Appears eligible for NRHP as an individual property through survey evaluation

5 Properties Recognized as Historically Significant by Local Government

5S2 Individual property that is eligible for local listing or designation

7 Not Evaluated for National Register (NRHP) or California Register (CR) or Needs Revaluation

7N Needs to be reevaluated (Formerly NRHP Status Code 4)

7R Identified in Reconnaissance Level Survey: Not evaluated.

7W Submitted to OHP for action-withdrawn

Source: Office of Historic Preservation's Historic Properties Directory and records on file at the Northwest Information Center 2020.

Archaeological Sensitivity Zones

Three archaeological sensitivity zones have been identified in the Environmental Quality Element of the proposed 2040 General Plan. The potential of discovering archaeological materials would be very high within any of the 3 sensitivity zones. The 3 sensitivity zones are listed below and shown on Exhibit 3.4-1:

- **Zone 1.** Consists of the shoreline starting at Vina del Mar Park and extending southward to South Street. Prehistoric sites could be found extending from the shoreline itself up to and into the mouths of the drainages at approximately Third Street.
- **Zone 2.** This area extends from Vina del Mar Park to the west, approximately ending at Napa Street. Archaeological site placement could again range from the old shoreline to the upper reaches of the drainages running down from the south; Bonita Street, at least on its eastern end, probably marked the line of extension. Further to the west the actual toe of the hills drops lower down to the vicinity of Caledonia Street near Bee Street.
- **Zone 3.** This area includes the original shoreline between Dunphy Park and Martin Luther King School. The construction of the Marinship facility to build supply ships during World War II caused a massive filling of the marshlands found on the bay side of Bridgeway in this area. Bridgeway, which occupies high ground from its intersection with Napa Street to the west as far as approximately the intersection of Bridgeway and Nevada Street, probably marked the extent of any indigenous site placement. From

Nevada Street to the Martin Luther King Park, archaeological site placement may have continued as far as Tomales Street behind the former distillery, now an area of housing (Willow and Cypress Lanes).

3.4.3 REGULATORY SETTING

Federal

National Historic Preservation Act, Public Law 89-665 United States Code 3000101 et seq.

The National Historic Preservation Act (NHPA) established the Advisory Council on Historic Preservation (ACHP), State Historic Preservation Offices (SHPO), the NRHP, and Section 106 review. The goal of the NHPA is to encourage federal agencies to act as responsible stewards of the Nation's historic resources insofar as their actions affect historic resources- meaning those listed on or eligible for listing on the NRHP. The NRHP recognizes buildings, structures, sites, district, and objects equal to or greater than 50 years old which are determined to be significant in respect to American history, architecture, archaeology, engineering or culture, and at the local, state, or national level. To be determined eligible for listing on the NRHP a resource must also retain integrity in terms of location, design, setting, materials, workmanship, feeling, and association.

Resources determined eligible for, or which are listed on the NRHP, are afforded protection under Section 106 of the NHPA (as well as under the California Environmental Quality Act). The Section 106 process serves to carry out the mission of the NHPA in that, when there is a federal or federally licensed action that has the potential to affect historic resources (i.e. those resources listed on or determined legible for listing on the NRHP), that agency is required to identify and assess the effects of its actions on historic resources.

Three buildings within the City of Sausalito are currently listed on the NHPA.

National Park Service General Management Plan for Golden Gate National Recreation Area

The southeastern area of GGNRA borders the southern and southwestern area of the City of Sausalito, with some portion enclosed in city limits.

The 2014 National Park Service General Management Plan for GGNRA identifies several Management Concepts and Goals that apply to the protection and preservation of cultural resources.[43]

[43] Golden Gate National Recreation Area and Muir Woods National Monument General Management Plan/Environmental Impact Statement, Summary Edition, pp. 22–23.

Goals for the "Connecting People with the Parks" Management Concept:

- Maximize adaptive reuse, rehabilitation, stabilization, and interpretation of cultural resources (structures, landscapes, archeological sites, ethnographic resources, and museum collections) to support visitor enjoyment, understanding, and community connections.
- Work with the public, park partners, local communities, historical organizations, and regional collaborators to steward, preserve, and protect cultural resources.
- Preserve and protect cultural resources so that visitors can connect with and appreciate these resources and their stories.

Goals for the "Focusing on National Treasures" Management Concept:

- Emphasize the fundamental resources that contribute to the national significance of the park, including national historic landmarks. Manage all other resources to complement significant resources and visitor experience.
- Tie the associated cultural resources, museum collections, and histories to the showcased sites.
- Preserve and protect cultural resources to highlight the interpretive and educational values and provide, wherever possible, direct contact with the resources.

In addition, the Plan identifies several Management Zones, intended to outline the desired conditions for natural and cultural resources, visitor experience, and level of development. For example, the "Historic Immersion" Management Zone would "preserve historic sites, structures, and landscapes that are evocative of their period of significance. Selected exteriors and designated portions of interior spaces would be managed to protect their historic values and attributes. Visitors would have opportunities to be immersed in the historic setting to explore history with direct contact to cultural resources, complemented by rich interpretation of past stories and events."[44] The "Evolved Cultural Landscape" Management Zone would "preserve significant historic, archeological, architectural, and landscape features while being adaptively reused for contemporary park and partner needs."

State

California Register of Historical Resources

As defined by Section 15064.5(a)(3)(A-D) of the CEQA Guidelines, a resource shall be considered historically significant if the resource meets the criteria for listing on the California Register of Historical Resources (CR). The CR and many local preservation ordinances have employed the criteria for eligibility to the NRHP as a model, since the NHPA provides the highest standard for

[44] Golden Gate National Recreation Area and Muir Woods National Monument General Management Plan/Environmental Impact Statement, Summary Edition, p. 24.

evaluating the significance of historic resources. A resource that meets the NRHP criteria is clearly significant. A resource that does not meet the NRHP standards may still be considered historically significant at a local or state level.

California Environmental Quality Act (CEQA)

The California Environmental Quality Act specifies that a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment (CEQA Guidelines § 15064.5 [b]). The significance of an historical resource is impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its significance and that justify its eligibility for the CR. If there is a substantial adverse change in the significance of a historical resource, the preparation of an environmental impact report may be required (CEQA Guidelines § 15065[a]).

For the purposes of CEQA, a resource shall be considered by a lead agency to be historically significant if the resource meets the criteria for listing in the CR. Codified in PRC Section 5024.1, the CR, recognizes buildings, structures, sites, districts, and objects, 45 years or older and which are significant in respect to American history, architecture, archaeology, engineering or culture, and at the local, state, or national level. Like the NRHP, resources must also retain integrity, although the level of integrity a resource must retain is less stringent for the CR than the NRHP. The CR also includes properties that are listed of have been formally determined eligible for listing on the NRHP or is a State Historic Landmark, or Historical Point of Interest.

Senate Bill 18

SB 18 states that prior to a local (city or county) government's adoption of any General Plan or Specific Plan, or amendment to General and Specific Plans, or a designation of open space land proposed on or after March 1, 2005, the city or county shall conduct consultations with California Native American tribes for the purpose of preserving or mitigating impacts to Cultural Places. A Cultural Place is defined as:

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC § 5097.9), or;
- Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historical Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, or any archaeological or historic site (PRC § 5097.995).

According to the Government Code (GC) Section 65352.4, "consultation" is defined as:

The meaningful and timely process of seeking, discussing, and carefully considering the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American Tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall

also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance.

Assembly Bill 52

Assembly Bill (AB) 52 was signed into law on September 25, 2014, and provides that any public or private "project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." Tribal cultural resources include "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources."

This law applies to any project that has a Notice of Preparation, a Notice of Negative Declaration, or Mitigated Negative Declaration pursuant to CEQA Guidelines filed on or after July 1, 2015. Under prior law, tribal cultural resources were typically addressed under the umbrella of "cultural resources," as discussed above. AB 52 formally added the category of "tribal cultural resources" to CEQA review and extended consultation and confidentiality requirements to all projects, whether they involve adoption of, or changes to, General Plans or Specific Plans.

The parties must consult in good faith, and consultation is deemed concluded when either party agrees to measures to mitigate or avoid a significant effect on a tribal cultural resource (if such a significant effect exists) or when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed upon during consultation must be recommended for inclusion in the environmental document. AB 52 also identifies mitigation measures that may be considered to avoid significant impacts if there is no agreement on appropriate mitigation. Recommended measures include:

- Preservation in place.
- Protecting the cultural character and integrity of the resource.
- Protecting the traditional use of the resource.
- Protecting the confidentiality of the resource.
- Permanent conservation easements with culturally appropriate management criteria.

California Historical Building Code, California Code of Regulations, Title 24, Part 8

The California Historic Building Code (CHBC) applies to all qualified historical buildings or properties in the State. Its intent is to protect California's architectural heritage by recognizing the unique construction concerns inherent in maintaining and reusing historic buildings. The CHBC allows for alternative building regulations for permitting necessary repairs and modifications to ensure the preservation, rehabilitation, relocation, and related construction of a building and structures that are deemed to be of importance to the history, architecture, or culture of an area by the relevant local or state governmental jurisdiction. The CHBC regulations are meant to facilitate the rehabilitation or change of occupancy in a manner that "preserves their original or restored elements and features, to encourage energy conservation and a cost

effective approach to preservation, and to provide for reasonable safety from fire, seismic forces or other hazards for occupants and users of such buildings, structures and properties and to provide reasonable availability and usability by the physically disabled."

The CHBC has been incorporated into the Sausalito Municipal Code in Chapter 8.44, which deals with building standards, and Chapter 10.46 that outlines polices for projects involving the Historic Overlay District and Local Register. Historic Preservation in the city is further enhanced through the creation and action of the Historic Landmarks Board as outlined in Sausalito Municipal Code Chapter 2.28, and the adoption of Historic Preservation Guidelines (2011) and Downtown Historic District Signage Guidelines (1998). The city also requires that new construction, demolition, and alteration projects involving properties of historical significance consider and respond to the Secretary of the Interior's Standards for Treatment of Historic Properties (Sausalito Municipal Code § 10.46.060.F).

Health and Safety Code Sections 7052 and 7050.5

Section 7052 of the Health and Safety Code dictates that the disturbance of Native American cemeteries is a felony. Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the county coroner can determine whether the remains are those of a Native American. If determined to be of Native American origin, the coroner must contact the California NAHC within 24 hours of this identification. A NAHC representative will then identify a Native American Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. In addition, CEQA Guidelines Section 15064.5 specifies the procedures to be followed in case of the discovery of human remains on non-federal land. The disposition of Native American burials falls within the jurisdiction of the NAHC.

Public Resources Code Section 5097

PRC Section 5097 specifies the procedures to be followed in the event of the unexpected discovery of human remains on non-federal public lands. The disposition of Native American burials falls within the jurisdiction of the NAHC, which prohibits willfully damaging any historical, archaeological, or vertebrate paleontological site or feature on public lands.

California Native American Graves Protection and Repatriation Act, Health and Safety Code Section 8010 through 8030

In the California Health and Safety Code, Division 7, Part 2, Chapter 5, contains provisions designed to protect Native American cultural resources. The Act sets the State policy to ensure that all California Native American human remains and cultural items are treated with due respect and dignity. The Act also provides the mechanism for disclosure and return of human remains and cultural items held by publicly funded agencies and museums in California. Likewise, the Act outlines the mechanism with which California Native American tribes not recognized by the federal government may file claims to human remains and cultural items held in agencies or museums.

Native American Historic Resource Protection Act, Public Resources Code 5097

Section 5097 of the PRC addresses archaeological resources. Archaeological resources that are not "historical resources" may be "unique archaeological resources" as defined in PRC Section 21083.2, which also generally provides that "non-unique archaeological resources" are not analyzed under CEQA. PRC Section 21083.2, subdivision (g), defines "unique archaeological resource" as an archaeological artifact, object, or site that does not merely add to the current body of knowledge, but has a high probability of meeting any of the criteria identified in this section.

If an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on that resource will not be considered a significant effect on the environment. It is sufficient that the resource and the effects on it be noted in an EIR, but the resource need not be considered further in the CEQA process. Additional applicable sections of the PRC include:

Section 5097.5: Provides that any unauthorized removal or destruction of archaeological or paleontological resources on sites located on public lands is a misdemeanor. As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the State, or any city, county, district, authority, or public corporation, or any agency thereof.

Section 5097.98: Prohibits obtaining or possessing Native American artifacts or human remains taken from a grave or cairn and sets penalties for such acts.

Mills Act, 1972

The Mills Act provides economic incentives to private property owners to restore and preserve qualified historic buildings. This legislation allows local jurisdictions (cities and counties) to enter contracts with owners of qualified historic properties who are actively engaged in the restoration and maintenance of their historic properties while receiving property tax relief. A qualified historic property is defined as one that is "listed on any federal, state, county, or city register, including the National Register of Historic Places, California Register of Historical Resources, California Historical Landmarks, State Points of Historical Interest, and locally designated landmarks."[45]

Local

Sausalito General Plan

The proposed 2040 General Plan contains the following policies and programs that protect cultural and tribal cultural resources in Sausalito:

[45] California Office of Historic Preservation. Website: http://www.ohp.parks.ca.gov. Accessed May 29, 2020.

Housing Element

Policy 1.2: Historic Preservation. Support efforts to identify and preserve historic structures. Ensure the compatibility of infill development in the context of Sausalito's historic resources.

Waterfront Element

Policy W-5.1: Marinship History. Preserve and enhance the maritime history and character of the Marinship. This shall include giving, to the extent determined reasonable, development preference to marine uses and maritime industries.

Community Design, Historic and Cultural Preservation Element

Policy CD-1.1: Sausalito Identity. Enhance Sausalito's architectural quality and diversity, general City characteristics, and historical legacy through careful design review.

Policy CD-1.3: Construction Near Historic District or Landmarks. Enhance the historic quality of established districts and landmark structures by encouraging new construction or alterations to existing structures in the general vicinity to demonstrate compatibility with them.

Program CD-1.3.1: Historic Character Compatibility. Amend the zoning ordinance to require consideration of historic character compatibility as part of the design approval by the Historic Preservation Commission and Planning Commission.

Policy CD-4.1: Neighborhood Character. Maintain the uniqueness of Sausalito's neighborhoods by protecting and enhancing desired attributes.

Program CD-4.1.3: Historic Preservation Commission. Work with HPC to define neighborhood characteristics in Design Guidelines and standards for determining excessive change to historic structures.

Policy CD-6.1: Historic Character. Continue the City's effort to retain and enhance its historical legacy in the review of proposed projects in historic districts and of individual structures and sites with historic significance as shown on Figure 4-1 [of the General Plan].

Policy CD-6.2: Historic Preservation Committee. Clarify the responsibilities and authority of the Historic Preservation Committee in design and construction activities that impact historic properties and sites.

Program CD-6.2.6: Period Structures. Facilitate the preservation of any period structure regardless if it is on the list of noteworthy structures by preparing advisory historic preservation guidelines for owners, architects, and contractors.

Program CD-6.2.7: HPC Guidelines. Recommend the general guidelines for the preservation, restoration, and rehabilitation of Sausalito's historic properties as incorporated in "The Secretary of the Interior's Standards for Historic Preservation and Guidelines for Applying the Standards."

Program CD-6.2.9: Historical Guidelines. Incorporate Historic Design Guidelines into appropriate sub-area design guidelines.

Policy CD-6.5: Preservation and Resiliency. Consider historic preservation in the context of sustainability and resiliency.

Program CD-6.5.1: Adaptive Reuse. Promote adaptive reuse of existing historic structures and the salvage of discarded parts as a sustainable practice.

Environmental Quality Element

Policy EQ-1.6: Archeological Factors and History. Respect and be sensitive to the native and early history of the Southern Marin area.

Program EQ-1.6.2: Project Referral. Refer projects which propose new construction to the California Historic Resources Information System's Northwest Information Center to determine whether they are in a zone of archaeological and/or historical sensitivity.

Program EQ-1.6.3: Archaeological Surveys. Require archaeological surveys on properties near known archaeological sites prior to excavation to establish the limits of those sites, evaluate their importance, and include measures to protect archaeological resources.

Program EQ-1.6.4: Construction Mitigation. Halt all activity until the site is examined by a City-approved archaeologist and appropriate mitigation measures have been identified and implemented should an archaeological site be uncovered during any phase of construction.

Sausalito Municipal Code

Chapter 10.46 of the Sausalito Municipal Code (Historic Preservation) includes procedures for listing a site or structure on the Local Register, and city review procedures for demolishing or modifying a historical resource. The purpose of this chapter is to:

- Safeguard the character and history of the city which is reflected in its unique architectural, historic, and cultural heritage through the designation of properties to the local historic register;
- Provide a method for the identification and designation of properties to the local historic register;
- Deter the demolition, alteration, misuse or neglect of historic or architecturally significant structures and sites;
- Encourage preservation and adaptive reuse of properties on the local/State/National Historic Register and/or within a historic overlay district by allowing changes to accommodate new functions and uses;
- Provide a review process for alterations, modifications and additions to properties on the local/State/National Historic Register or within a historic overlay district including applying applicable adopted guidelines and policies as adopted by the city;
- Enhance property values, stabilize neighborhoods, and render city properties on the local/State/National Historic Register or within a historic overlay district eligible for benefits and incentives;

- Foster civic and neighborhood pride and a sense of identity based on the recognition of the city's past accomplishments as reflected through its buildings, structures, objects, landscape, natural features, infrastructure, and engineering;
- Strengthen the city's economy by protecting and enhancing the city's attraction to residents, tourists, visitors, and others, thereby serving as a stimulus and support to local business and industry; and
- Identify incentives that are intended to encourage owners to designate, maintain, reuse, rehabilitate, and improve properties on the local/State/National Historic Register or within a historic overlay district.

Sausalito Historic Preservation Commission

Chapter 10.46 of the Sausalito Municipal Code describes the Historic Preservation Commission (HPC). The HPC is concerned with maintaining the historic character and scale of the Historic District. While structures in the District may be renovated or modified in ways that enhance the area, the HPC encourages project proponents to incorporate the District's design elements. In evaluating applications for permits and entitlements within the Historic District, the HPC uses the United States Secretary of the Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" (GPO937-843).

The HPC is charged with the task of protection, enhancement, perpetuation, and use of sites and areas that are links to the city's past. In addition, the HPC ensures that future development does not conflict or impact with historically significant sites but enhances the value of surrounding areas and neighborhoods. Finally, the HPC is entrusted with fostering local knowledge of Sausalito's heritage.

Sausalito Historic Design Guidelines

The purpose of the Sausalito Historic Design Guidelines is to provide guidance to property owners, decision-makers, staff, and the public for the preservation of the architectural heritage and integrity of the city's resources.[46] The guidelines identify standards to ensure that changes to the built environment will be sensitive to the community's historical legacy. The Design Guidelines contains five chapters that describe: 1) how to use the guidelines for historic preservation, 2) the proper treatment of historic structures, 3) the treatment of special features, 4) new and infill construction, and 5) the Downtown Historic Overlay District.

Projects and work subject to the Design Guidelines include all exterior modifications to existing structures and sites within the Downtown Historic Overlay Zoning District or the Residential Arks Zoning District, as well as properties on the Local, State or National Registers require Historic Design Review in accordance with Zoning Ordinance requirements. Also, new construction and infill projects are reviewed.

[46] City of Sausalito Historic Design Guidelines. September 2011. Website: https://www.sausalito.gov/home/showdocument?id=25074. Accessed April 30, 2020.

The Historic Design Guidelines identify the Downtown Historic District as the downtown area that is centered around the intersection of Princess and Bridgeway Streets and that exhibits consistent architectural styles of the late 19th century. Historic District buildings are largely in commercial and mixed-use areas. The Historic Design Guidelines include goals and a vision of what improvements in the Historic Downtown District should achieve:

- Preserve the historic character of the District.
- Preserve the intimate scale of the District.
- Preserve the harbor community.
- Preserve access to the water.
- Preserve the architectural integrity of its historic resources.
- Preserve the scale of the streetscape.
- Preserve the historic stonework and pathways through the District.
- Design new infill to be compatible with the District.
- Preserve view corridors.

Downtown Historic Signage Guidelines

The 1998 Downtown Historic District Signage Guidelines apply to new, replacement, and modified signage on all properties within the Historic District. The Guidelines state that signs in the downtown area, especially within the Historic District, "establish to a great extent both its spirit and character."[47] The intention of the Signage Guidelines is to establish reasonable standards for business identification, strengthen historic qualities of the downtown area, encourage creativity, and promote economic strength.

A variety of signs are permitted by the Guidelines, including wall, window, and awning signs; projecting and hanging signs; menu signs; and directory signs. Illuminated, neon, and electronic signs; freestanding and banner signs; roof signs; and changeable letter signs are among those not permitted in the Downtown area. The Guidelines also specify allowable materials, colors, lighting, and size for signs.

Sausalito Local Historic Register

Pending review by the city HPC and recommendation to the City Council for approval, a structure or site may be approved for listing on the local historic register if all the following findings can be made (Sausalito Municipal Code § 10.46.050 G):

1. The structure or site proposed for the local historic register is significant to local, regional, State, or national history.
2. Listing the proposed structure or site on the local historic register has been subject to environmental review and the appropriate findings have been made.

[47] Sausalito Historic Landmarks Board and Planning Commission. 1998. Downtown Historic District Signage Guidelines. November.

3. Listing the proposed structure or site on the local historic register will preserve the historic character or integrity of the structure or site.
4. Structure or site proposed to be listed on the local historic register has a significant architectural or historic character that can be preserved or enhanced through appropriate controls and incentives on new development and alterations to existing structures and landscaping.

The city requires a certificate of appropriateness to demolish, remove, or otherwise change a national, State, or locally designated historic property, a property within a historic overlay district, or a property deemed a city historic resource. The review shall be conducted by the HPC.

The Commission may approve a certificate of appropriateness to allow for new construction or alterations to a property subject to a condition of approval if the Secretary of the Interior's Standards for the Treatment of Historic Properties and any applicable State or local ordinances and adopted guidelines or other policies have been used to review and consider the proposed work. Additional Findings are required for local historic register properties, properties in historic overlay districts, and sign, landscaping, and demolition applications (§ 10.46.060 F).

3.4.4 THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed 2040 General Plan is considered to have a significant impact on cultural resources if it would result in one or more of the following:

- Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines section 15064.5;
- Disturb any human remains, including those interred outside of formal cemeteries; or
- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC section 21074.

3.4.5 ANALYSIS, IMPACTS, AND MITIGATION MEASURES

Data to inform this section was obtained from the NWIC and city records. Information obtained at the NWIC included records for all cultural resources located within the city that are recorded on Department of Parks and Recreation (DPR) 523, as well as the City of Sausalito's Historic Resources Inventory List, and the Office of Historic Preservation Directory of Properties in the Historic Property Data File for Marin County. Ethnographic resources were also reviewed for information regarding reported Native American village sites located within the city.

In accordance with requirements promulgated by SB 18 and AB 52, the city notified the Federated Indians of Graton Rancheria and the Guidiville Indian Rancheria of the proposed 2040

General Plan and invited the tribes to participate in consultation (see Appendix D). The Federated Indians of Graton Rancheria submitted a request to consult on May 5, 2020.

Impact CUL-1 Development facilitated by the proposed 2040 General Plan would not result in a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.

A substantial adverse change in the significance of an historical resource is defined at Section 15064.5(b)(1) of the CEQA Guidelines as the "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." Known historic buildings, districts and resource sites are located throughout the city (see Exhibit 3.4-1). Additional undesignated sites, and potentially unidentified sites, exist within in the Planning Area as well.

While the proposed 2040 General Plan does not directly propose any adverse changes to any historical resources, future development allowed under the proposed 2040 General Plan could affect known resources, or previously unidentified or undesignated resources.

The proposed 2040 General Plan includes policies and programs intended to conserve and reduce impacts to historical resources. Policies W-5.1, CD-1.1, CD-1.3, CD-6.1, CD-6.5, and Housing Element Policy 1.2 ensure protection and preservation of historical resources within the city by supporting identification of potential historical structures, requiring compatibility of architectural styles, and requiring project review when appropriate. Policy CD-6.2 defines the Historic Preservation Committee and its roles.

Chapter 10.46 of the Sausalito Municipal Code includes city review procedures for applicants seeking to demolish or modify an historical resource. Section 10.46.060 (Property and Review Requirements) prohibits the rehabilitation, alteration, demolition, removal or other changes to the exterior appearance, including paint color, of structures or sites officially deemed a historical resource without first having undergone review for a certificate of appropriateness by the Historic Preservation Commission. Section 10.46.060 also details additional findings that must be made prior to the issuance of a certificate of appropriateness. Additional findings are required for Local Historic Register Properties, properties in historic overlay districts, landscaping applications, and demolition applications.

Future development under the proposed 2040 General Plan would comply with adopted State, federal, and local regulations for the protection of historical resources. In addition, future projects would comply with requirements of the Sausalito Municipal Code and the proposed 2040 General Plan policies and programs related to historical resources. Therefore, future development under the 2040 General Plan would not result in significant adverse effects to historical resources and impacts would be considered *less than significant* under this criterion.

Impact CUL-2 **Development facilitated by the proposed 2040 General Plan would not result in a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.**

Known prehistoric resource sites are located mostly in southern areas of the city near the waterfront (see Exhibit 3.4-1). Based on a review of information available at the NWIC, only a small portion of the Planning Area has been previously surveyed for archaeological resources. Therefore, it is expected that additional undiscovered sites exist in the Planning Area.

While the proposed 2040 General Plan does not directly propose any adverse changes to any archaeological resources, future development allowed under the proposed 2040 General Plan could affect known or previously unidentified resources.

Potential for additional archaeological sites to be present within the City of Sausalito exists, but varies by location. Prehistoric habitation sites, such as those known to be present within the city, tend to be situated along creeks and other areas with a reliable water supply, whereas task-specific sites or resource procurement sites can be situated in almost any environment conducive to human activity. Buried prehistoric archaeological sites tend to be found on Holocene-age landforms, particularly alluvial fans, floodplains, and areas along rivers and streams. As such, within the Sausalito Planning Area, the waterfront has the greatest potential for buried prehistoric archaeological resources to be present.

The proposed 2040 General Plan includes policies and programs intended to reduce impacts to and conserve cultural and archaeological resources. Policy EQ-1.6 requires the city to conserve archaeological resources through respect and sensitivity to the native and early history of the Southern Marin area. Program EQ 1.6.2 requires new development to conduct an NWIC search to determine whether a project site is in a zone of archaeological and/or historical sensitivity. Program EQ-1.6.3 requires an archaeological survey on properties near known archaeological sites prior to excavation. Program EQ-1.6.4 outlines the procedure for accidental discovery of an archaeological resource, including the halting of construction activity until the site is examined by a city-approved archaeologist.

Implementation of policies and programs in the proposed 2040 General Plan, as well as compliance with adopted state, federal and local regulations for the protection of archaeological resources, would ensure that future development under the proposed 2040 General Plan would not result in significant adverse effects to archaeological resources. Therefore, impacts would be considered ***less than significant*** under this topic.

Impact CUL-3	**Implementation of the proposed 2040 General Plan has the potential to result in disturbance of human remains, including those interred outside of formal cemeteries.**

Excavation and construction activities allowed under the proposed 2040 General Plan may uncover human remains that may not be marked in formal burial locations. Therefore, as future development and infrastructure projects are reviewed by the city, each project would be evaluated for conformance with the proposed 2040 General Plan, Sausalito Municipal Code, and other applicable State regulations. Under CEQA, human remains are protected under the definition of archaeological materials as being "any evidence of human activity."

PRC Section 5097 has specific stop-work and notification procedures to follow when Native American human remains are inadvertently discovered during excavation and construction activities. This requirement applies to all construction projects within the Sausalito Planning Area.

The proposed 2040 General Plan includes policies and programs intended to conserve and reduce impacts to cultural and archaeological resources, including human remains. Policy EQ-1.6 requires the city to conserve archaeological resources through respect and sensitivity to the native and early history of the Southern Marin area. Program EQ-1.6.4 outlines the procedure for accidental discovery of an archaeological resource, including halting construction activity until the site is examined by a city-approved archaeologist.

Implementation of policies and programs in the proposed 2040 General Plan, as well as compliance with adopted state, federal and local regulations for the protection of archaeological resources, would ensure that future development under the proposed 2040 General Plan would not result in significant adverse effects to human remains. Therefore, impacts would be considered ***less than significant*** under this topic.

Impact CUL-4	**Implementation of the proposed 2040 General Plan has the potential to cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code Section 5020.1(k).**

A NAHC Sacred Lands File search identified recorded tribal cultural resources within the Planning Area (see Appendix D). A records search conducted at the NWIC identified five listed prehistoric sites that meet the definition of a tribal cultural resource within the Planning Area. It is always possible that subsurface excavation activities may encounter previously undiscovered tribal cultural resources. Therefore, any unidentified resources could be adversely affected by development under the proposed 2040 General Plan and create a ***potentially significant*** impact.

While the proposed 2040 General Plan does not directly propose any adverse changes to any recorded tribal cultural resources, future development allowed under the proposed 2040 General Plan could affect known or previously unidentified resources. In addition, the potential for additional undiscovered eligible tribal cultural resources to be present within the Sausalito Planning Area exists but varies by location. As with prehistoric archaeological resources, the waterfront has the greatest potential for buried tribal cultural resources to be present (see Exhibit 3.4-1).

The proposed 2040 General Plan includes policies and programs intended to conserve and reduce impacts to cultural and archaeological resources, which can include tribal cultural resources. Policy EQ-1.6 requires the city to be respectful and sensitive to the native and early history of the Southern Marin area. Program EQ 1.6.2 requires new development to conduct NWIC searches to determine whether a project site is in a zone of archaeological and/or historical sensitivity. Program EQ-1.6.3 requires archaeological surveys on properties near known archaeological sites prior to excavation. Program EQ-1.6.4 outlines the procedure for accidental discovery of an archaeological resource, including halting construction activity until the site is examined by a city-approved archaeologist.

By adhering to the policies and programs in the proposed 2040 General Plan, as well as the provisions under SB 18 and AB 52, potential impacts to existing or undiscovered eligible tribal cultural resources within the Planning Area would be reduced to ***less than significant***.

Impact CUL-5	**Implementation of the proposed 2040 General Plan has the potential to cause a substantial adverse change in the significance of a tribal cultural 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.**

On February 27, 2020, a letter was sent to the NAHC to determine whether any sacred sites are listed on its Sacred Lands File for the project area. A response was received on February 28, 2020 indicating the search returned positive results for tribal cultural resources in the Planning Area, and recommended contacting tribal representatives from the Federated Indians of Graton Rancheria and the Guidiville Indian Rancheria for additional information.

In accordance with requirements promulgated by SB 18 and AB 52, the City of Sausalito notified the Federated Indians of Graton Rancheria and the Guidiville Indian Rancheria of the proposed 2040 General Plan and invited the tribes to participate in consultation (see Appendix D). The letters were sent to the Native American Tribes via certified mail on March 9, 2020. Pursuant to SB 18, all requests must be received within 90 days of the tribe's receipt of the invitation to consult, which is expected to be by approximately June 11, 2020.

At this time, the City of Sausalito, in its capacity as Lead Agency, has not identified or determined any known tribal cultural resources pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1 that will be adversely impacted by the proposed 2040 General Plan.

Nonetheless, as described under Impact CUL-4, future development allowed under the proposed 2040 General Plan could affect previously unidentified tribal cultural resources.

As discussed under Impact CUL-4, the proposed 2040 General Plan includes policies and programs intended to reduce impacts to and conserve cultural and archaeological resources, which can include tribal cultural resources, such as Policy EQ-1.6 and Programs EQ 1.6.2 through EQ-1.6.4. By adhering to the policies and programs in the proposed General Plan, as well as the provisions under SB 18 and AB 52, potential impacts to existing or undiscovered eligible tribal cultural resources within the Planning Area would be reduced to ***less than significant***.

Impact CUL-6	**Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to cultural or tribal cultural resources.**

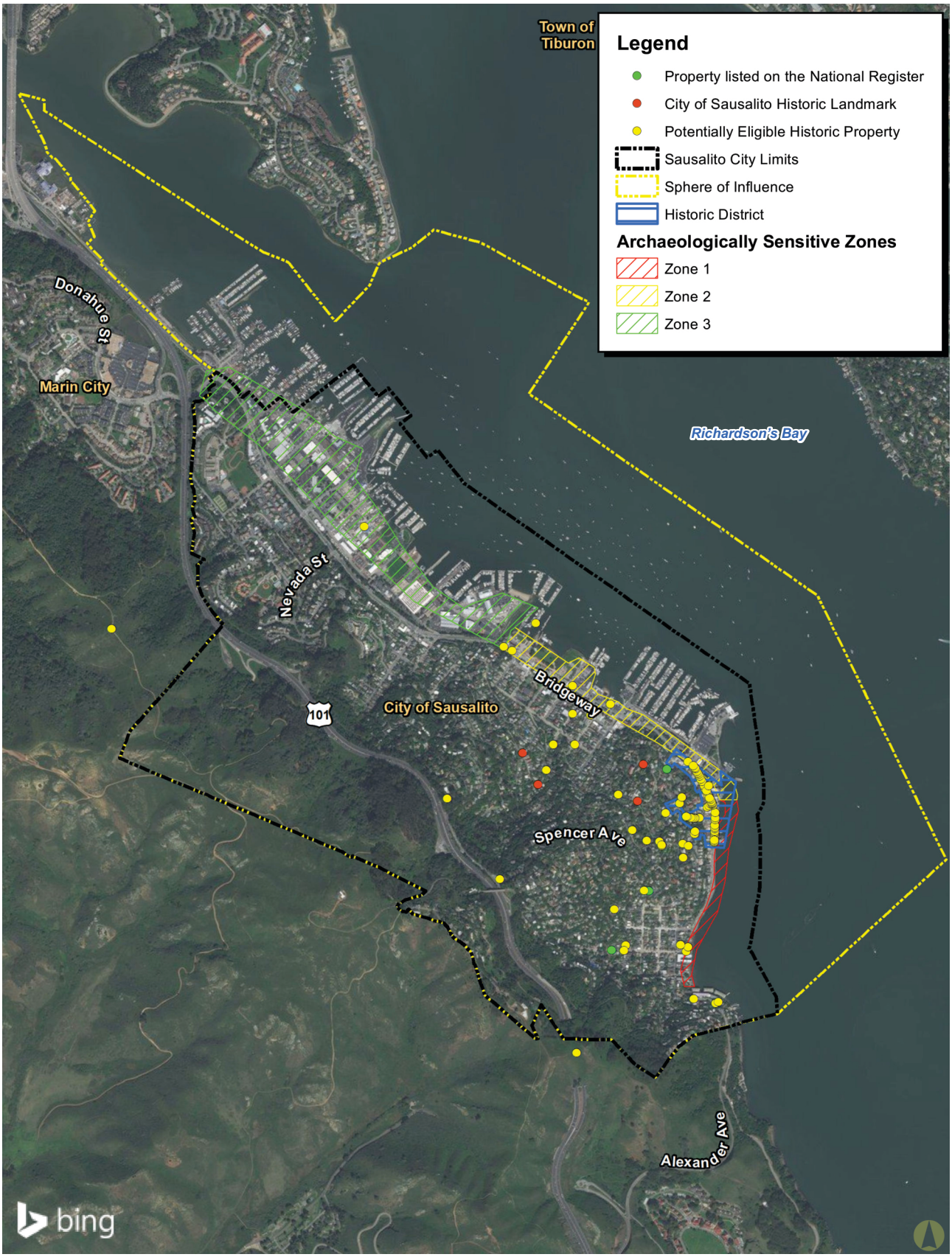
This analysis evaluates whether the impacts of the proposed 2040 General Plan, together with the impacts of cumulative development, could result in a cumulatively significant impact with respect to cultural and tribal cultural resources. This analysis then considers whether incremental contribution of impacts associated with the implementation of the proposed 2040 General Plan would be significant. Both conditions must apply for a project's cumulative effects to rise to the level of a significant impact.

The geographic context for this analysis includes the Sausalito Planning Area, Marin City, Mill Valley, and other adjacent unincorporated areas. Past, present, and future development projects contribute to impacts related to cultural or tribal cultural resources. If the project is determined to have a significant impact to cultural or tribal cultural resources, it is concluded that the impact is a cumulative impact

As previously discussed, development facilitated by the proposed 2040 General Plan would be required to comply with policies and programs of the proposed 2040 General Plan, the provisions of SB 18 and AB 52, the Sausalito Municipal Code historic preservation regulations, and other relevant federal, State, and local regulations. All cumulative projects would be subject to similar requirements and required to comply with proposed 2040 General Plan policies, the Municipal Code, and other federal, State, and local regulations including SB 18 and AB 52. For these reasons, impacts of the proposed 2040 General Plan on cultural and tribal cultural resources are not cumulatively considerable, and the cumulative impact would be ***less than significant***.

Future development permitted under the proposed 2040 General Plan, in conjunction with other development in unincorporated Marin County and the surrounding communities of Marin City and Mill Valley, have the potential to cumulatively impact cultural and tribal cultural resources. As previously discussed, development facilitated by the proposed 2040 General Plan would be required to conform with federal, State, and local policies that protect cultural and tribal cultural resources, including Section 15064.5 of the CEQA Guidelines and Sections 5024.1 and 5097 of

the PRC. New development within the Sausalito Planning Area would also comply with policies and programs in the proposed 2040 General Plan related to protection of historical and archaeological resources. All cumulative projects would be subject to similar requirements and required to comply with federal, State, and local policies related to the protection of cultural and tribal cultural resources. For these reasons, impacts of the proposed 2040 General Plan on cultural and tribal cultural resources are not cumulatively considerable, and the cumulative impact would be ***less than significant***.



Source: City of Sausalito.

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Exhibit 3.4-1
Historic Resources and Archeologically Sensitive Areas

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3.5 ENERGY

This section of the EIR is intended to provide an overall perspective on energy consumption to address the requirement in CEQA, PRC section 21100(b)(3) that an EIR include mitigation measures that are proposed to reduce the wasteful, inefficient, and unnecessary consumption of energy. This section contains an analysis of the potentially significant energy implications relevant and applicable to the proposed 2040 General Plan as outlined in CEQA Guidelines, Appendix F.

Energy resources include electricity, natural gas, and other fuels. The production of electricity and other usable energy often requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into usable energy. Energy production and use can each result in the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.) and emission of pollutants.

Energy usage related to the proposed 2040 General Plan includes direct consumption for heating and cooling, electric facilities, and lighting. Indirect energy consumption is associated with the generation of electricity at power plants. Transportation-related energy consumption includes the use of fuels and electricity to power cars, trucks, and public transportation. Energy is also consumed by equipment and vehicles used during project construction and routine maintenance activities. This analysis considers whether the proposed 2040 General Plan would result in inefficient, wasteful, and unnecessary consumption of energy.

This section provides background information on energy resources and contains an analysis of the impacts that the proposed 2040 General Plan may have on the consumption of energy, including but not limited to the measures proposed to minimize the environmental effects of the consumption of energy that is wasteful, inefficient, or unnecessary. Energy consumption as an environmental impact is also evaluated and discussed in other sections of the Draft EIR, including Section 3.2, Air Quality; Section 3.7, Greenhouse Gas Emissions; Section3.14, Transportation; and Section 3.15, Utilities and Service Systems. See Appendix B for supporting information.

Information in this section was developed based on data provided by the following documents/resources:

- Marin Clean Energy;
- Marin Climate & Energy Partnership;
- Pacific Gas & Electric (PG&E);
- California Energy Commission;
- California Public Utilities Commission (CPUC);
- City of Sausalito Climate Action Plan, Marin Climate & Energy Partnership, Adopted June 16, 2015;
- Traffic modeling and analysis prepared by Parisi Transportation Consulting (see Appendix F); and

3.5.1 EXISTING SETTING

Electricity

Electricity, a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves several system components, including substations and transformers that lower transmission line power (voltage) to a level appropriate for on-site distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Conveyance of electricity through transmission lines is typically responsive to market demands.

Energy capacity, or electrical power, is generally measured in watts while energy use is measured in watt-hours. For example, if a light bulb has a capacity rating of 100 watts, the energy required to keep the bulb on for 1 hour would be 100 watt-hours. If ten 100-watt bulbs were on for 1 hour, the energy required would be 1,000 watt-hours or 1 kilowatt-hour (kWh). On a utility scale, a generator's capacity is typically rated in megawatts, which is a million watts, while energy usage is measured in megawatt-hours or gigawatt-hours (GWh), which is one billion watt-hours.

PG&E's service area stretches from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to the Sierra Nevada Mountains in the east. PG&E owns and maintains 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines. Approximately 5.4 million electric customer accounts are served by PG&E.[1] In 2018, PG&E provided approximately 80,369 GWh of electricity to its customers. Electricity consumption within PG&E's service area by sector is displayed in Table 3.5-1.

TABLE 3.5-1: ELECTRICITY CONSUMPTION WITHIN PG&E'S SERVICE AREA (2018)

ENERGY USAGE CATEGORY	GWH	PERCENT
INDUSTRY	10,519	13.1%
COMMERCIAL	30,148	37.5%
RESIDENTIAL	27,700	34.5%
MINING AND CONSTRUCTION	1,594	2.0%
AGRICULTURE AND WATER PUMPING	5,832	7.3%
STREET LIGHTING	311	0.4%

Source: California Energy Commission. Electricity Consumption by Entity. Website: http://www.ecdms.energy.ca.gov/elecbyutil.aspx. Accessed April 20, 2020.

[1] Pacific Gas and Electric Company. 2020. Company Profile. Website: https://www.pge.com/en_US/about-pge/company-information/profile/profile.page. Accessed April 20, 2020.

Electricity consumption within Marin County for 2018 is displayed in Table 3.5-2.

TABLE 3.5-2: ELECTRICITY CONSUMPTION WITHIN MARIN COUNTY (2018)

SECTOR	GWH	PERCENT
NON-RESIDENTIAL	680	51.2%
RESIDENTIAL	649	48.8%
TOTAL	1,329	100.0%

Source: California Energy Commission, Electricity Consumption by County, http://www.ecdms.energy.ca.gov/elecbycounty.aspx, Accessed April 20,2020.

Account holders with PG&E within the City of Sausalito can choose to have 60% to 100% of their electricity supplied from clean, renewable sources – such as solar, wind, bioenergy, geothermal, and hydroelectric, through Marin Clean Energy (MCE), a public, not for profit electricity provider. MCE currently provides energy to residents and businesses within 34 member communities across four Bay Area counties, including Napa, Marin, Contra, Costa, and Solano. MCE has 678 megawatts of new, California renewable energy online and under development.[2]

Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs, mainly located outside the State, and delivered through high-pressure transmission pipelines. The natural gas transportation system is a nationwide network and, therefore, resource availability is typically not an issue. Natural gas is used in electricity generation, space heating, cooking, water heating, industrial processes, and as a transportation fuel.

Natural gas is provided to the City of Sausalito through PG&E. PG&E provides natural gas services within 48 counties in California with a total service area of approximately 70,000 square miles in northern and central California. PG&E provides services with 42,141 miles of natural gas distribution pipelines and 6,438 miles of transportation pipelines. PG&E serves approximately 4.3 million natural gas distribution customers.[3] One therm is approximately 100 cubic feet of natural gas. In 2018, PG&E provided and distributed approximately 4,794 million therms of natural gas to its customers. Natural gas consumption within PG&E's service area by sector is displayed in Table 3.5-3.

[2] MCE Company Profile. Website: https://www.mcecleanenergy.org/energy-suppliers/, Accessed April 20, 2020.

[3] Pacific Gas and Electric Company. 2020. Company Profile. Website: https://www.pge.com/en_US/about-pge/company-information/profile/profile.page. Accessed April 20, 2020.

TABLE 3.5-3: NATURAL GAS CONSUMPTION WITHIN PG&E'S SERVICE AREA (2018)

ENERGY USAGE CATEGORY	MILLION THERMS	PERCENT
INDUSTRY	1,776	37.0%
COMMERCIAL	958	20.0%
RESIDENTIAL	1,833	38.2%
MINING AND CONSTRUCTION	190	4.0%
AGRICULTURE AND WATER PUMPING	37	0.8%

Source: California Energy Commission. Gas Consumption by Entity. Website: http://www.ecdms.energy.ca.gov/gasbyutil.aspx. Accessed April 20, 2020.

Natural gas consumption within Marin County for 2018 is displayed in Table 3.5-4.

TABLE 3.5-4: NATURAL GAS CONSUMPTION WITHIN MARIN COUNTY (2018)

SECTOR	MILLION THERMS	PERCENT
NON-RESIDENTIAL	19	28.1%
RESIDENTIAL	49	71.9%
TOTAL	69	100.0%

Source: California Energy Commission. Gas Consumption by County. Website: http://www.ecdms.energy.ca.gov/gasbycounty.aspx. Accessed April 20, 2020.

California Energy Consumption

According to the CEC, total system electric generation for California in 2018 was 285,488 GWh.[4] California's in-State electric generation was 194,842 GWh and electricity imports were 90,647 GWh. California's non-CO_2 emitting electric generation categories (nuclear, large hydroelectric, and renewable generation), which generated 63,028 GWh, accounted for 32 percent of total in-State generation for 2018. The in-State renewable generation included 27,265 GWh from solar, 14,078 GWh from wind, 11,528 GWh from geothermal, 5,909 GWh from biomass, and 4,248 GWh from hydroelectric power plants.

According to the CEC, nearly 45 percent of the natural gas burned in California was used for electricity generation, with the remainder consumed in the residential (21 percent), industrial (25 percent), and commercial (nine percent) sectors. In 2012, total natural gas demand in California

[4] California Energy Commission. 2018. Total System Electric Generation. Website: https://ww2.energy.ca.gov/almanac/electricity_data/total_system_power.html. Accessed April 20, 2020.

for industrial, residential, commercial, and electric power generation was 2,313 billion cubic feet.[5]

According to the CEC, gasoline has remained the dominant fuel within the transportation sector, with diesel fuel and aviation fuels following. In 2015, California consumed approximately 15.1 billion gallons of gasoline and approximately 4.2 billion gallons of diesel fuel.[6,7] An increasing amount of electricity is being used for transportation energy, which is chiefly attributed to the acceleration of light-duty plug-in electric vehicles.

3.5.2 REGULATORY SETTING

Federal and State agencies regulate energy use and consumption through various programs. The Federal Energy Regulatory Commission (FERC) is an independent agency that regulates the transmission and sales of electricity, natural gas, and oil in interstate commerce, licensing of hydroelectric projects, and oversight of related environmental matters. The regulation and enforcement of interstate transmission sales is also regulated by FERC. The U.S. Department of Transportation, U.S. Department of Energy, and U.S. Environmental Protection Agency (EPA) are three agencies with substantial influence over energy policies and programs. Generally, federal agencies influence transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through federal taxes on fuel, through funding of energy-related research and development projects, and through funding for transportation infrastructure projects.

On the State level, the California Public Utilities Commission (CPUC) and CEC are the two agencies with authority over different aspects of energy. The CPUC regulates privately owned utilities in the energy, rail, telecommunications, and water fields. The CEC collects and analyzes energy-related data, prepares statewide energy policy recommendations and plans, promotes and funds energy efficiency programs, and regulates the power plant siting process.

At the local level, the City of Sausalito, through its regulatory and planning activities, directly influences how, and to what extent, energy is used in the city. Local regulations governing the design, construction and use of buildings affect operational energy needs. Transportation and land use policy decisions directly and indirectly affect petroleum-based fuel use (e.g., mixed use land uses and improved pedestrian systems) and can affect reliance on the private automobile.

Some of the more relevant federal, State, and local energy-related laws and plans are discussed below.

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[5] California Energy Commission. 2019. Supply and Demand of Natural Gas in California. Website: https://ww2.energy.ca.gov/almanac/naturalgas_data/overview.html. Accessed April 20, 2020.

[6] California Energy Commission. 2019. California Gasoline Data, Facts, and Statistics. Website: https://ww2.energy.ca.gov/almanac/transportation_data/gasoline/. Accessed April 20, 2020.

[7] California Energy Commission. 2019. Diesel Fuel Data, Facts, and Statistics. Website: https://ww2.energy.ca.gov/almanac/transportation_data/diesel.html. Accessed April 20, 2020.

Federal

Energy Policy and Conservation Act

The Energy Policy Act of 1975 was established in response to the oil crisis of 1973, which increased oil prices due to a shortage of reserves. The Act required that all vehicles sold in the U.S. meet certain fuel economy goals. Under this Act, Corporate Average Fuel Economy (CAFE) standards were established. The CAFE standards are fleet-wide averages that must be achieved by each automaker for its car and truck fleet, each year, since 1978. Since 1990, the fuel economy standard for new passenger cars has been 27.5 miles per gallon.[8] Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 to 23.5 miles per gallon.[9] Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not subject to fuel economy standards. This Act indirectly applies to the proposed 2040 General Plan due to its requirements for increased fuel economy standards particularly for the construction equipment to be used.

Energy Policy Act of 1992

The Energy Policy Act of 1992 set goals, created mandates, and amended utility laws to increase clean energy use and improve overall energy efficiency in the United States. The Act consists of twenty-seven titles detailing various measures designed to lessen the nation's dependence on imported energy, provide incentives for clean and renewable energy, and promote energy conservation in buildings.

Energy Star Program

In 1992, the EPA introduced Energy Star as a voluntary labeling program designed to identify and promote energy-efficient products to reduce greenhouse gas (GHG) emissions. The program applies to major household appliances, lighting, computers, and building components such as windows, doors, roofs, and heating and cooling systems. Under this program, appliances that meet specifications for maximum energy use established under the program are certified to display the Energy Star label. In 1996, the EPA joined with the U.S. Department of Energy to expand the program, which now also includes qualifying commercial, industrial and residential buildings. The Energy Star Most Efficient program was launched in May of 2011 to identify and advance highly efficient products in the marketplace. Its goal is to increase market awareness and promote innovation in these products. This program identifies the most efficient products among those that qualify for Energy Star in certain product categories on an annual basis.

Energy Policy Act of 2005

The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under the Act, consumers and businesses can attain federal tax credits for purchasing fuel-efficient appliances and products, buying hybrid vehicles, building energy efficient buildings, and improving the

[8] United States Department of Transportation. 2014. Summary of Fuel Economy Performance. December 15.
[9] Ibid.

energy efficiency of residential and commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary micro turbine power plants, and solar power equipment.

Energy Independence and Security Act

In 2007, the Energy Independence and Security Act was signed into law. The Energy Independence and Security Act aims to move the United States toward greater energy independence and security; increase the production of clean renewable fuels; increase the efficiency of buildings, products, and vehicles; promote research on and deploy GHG capture and storage options; and improve the energy performance of the federal government.

State

California Renewables Portfolio Standard (SB 1078, SB 107, SB 2, SB 350, SB 100)

The California Renewables Portfolio Standard was established in 2002 under SB 1078, accelerated in 2006 under SB 107, expanded in 2011 under SB 2, and enhanced in 2015 by SB 350. The Renewables Portfolio Standard program requires investor-owned utilities, publicly owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 50 percent of total procurement by 2030. In 2018, PG&E served approximately 39 percent of its retail electricity sales with renewable power.[10] SB 100, passed in September 2018, accelerates the Renewables Portfolio Standard to achieve a 50 percent renewable resources target by 2026, and contained a 60 percent target by 2030, along with a goal for zero-carbon electricity by 2045.

Reducing Dependence on Petroleum (AB 2076)

In response to AB 2076, the CEC and the ARB prepared and adopted a joint agency report in August 2003, Reducing California's Petroleum Dependence. The report addresses both near-term and mid- to long-term strategies to reduce the demand for petroleum fuels in California. The two agencies evaluated various demand reduction options and categorized them as fuel efficiency, fuel substitution, pricing, and other options.[11]

Senate Bill 1

Enacted in 2006, SB 1 is the culmination of Governor Schwarzenegger's "Million Solar Roofs Initiative" and builds on the CPUC's California Solar Initiative program, the CEC's New Solar Homes Partnership, and existing publicly owned utility solar energy system incentive programs. SB 1 directs total expenditures of up to $3,350,800,000 by 2017 with goals to install solar energy systems with a generation capacity equivalent of 3,000 megawatts, to establish a self-sufficient solar industry in 10 years so that solar energy systems are a viable mainstream option for homes and commercial buildings, and in 13 years to put solar energy systems on 50 percent of new

[10] California Public Utilities Commission. 2019. California Renewables Portfolio Standard - Annual Report. November.

[11] California Energy Commission and California Air Resources Board. 2003. Reducing California's Petroleum Dependence. August.

homes. The overall goal is to help build a self-sustaining solar electricity market combined with improved energy efficiency in the State's residential and non-residential buildings. In 2015, SB 83 extended the life of the New Solar Homes Partnership. In June 2016, the CPUC approved Decision 16-06-006, which approved the CEC's request to direct the investor owned utilities to collect additional ratepayer funds necessary to continue the New Solar Homes Partnership and achieve the $400 million in program funds originally authorized under SB 1 and designated the CEC as the program administrator of the continued New Solar Homes Partnership program.[12]

Energy Efficiency Act of 2006 (AB 2021)

This bill encourages all investor-owned and municipal utilities to aggressively invest in achievable, cost-effective, energy efficiency programs in their service territories. The results of this bill are expected to reduce forecasted electricity demand by 10 percent over 10 years from 2006 through 2016, offsetting the projected need to build 11 new major power plants. Since its inception, annual reports have been prepared by the CEC to track progress under AB 2021. The most recent report, "Achieving Cost-Effective Energy Efficiency in California: 2013 Status Update," presents an analysis of energy efficiency data compiled from investor-owned utilities' annual reports filed with the CPUC and from the California Municipal Utilities Association who, on behalf of publicly owned utilities, annually files reports with the CEC. As a group, publicly owned utilities achieved 64 percent of their combined annual electricity savings target that was established in 2007. Since 2006, publicly owned utilities have spent $737 million on energy efficiency, resulting in 2,705 g of reported electricity savings and 511 megawatts in peak demand reduction.[13]

Waste Heat and Carbon Emissions Reduction Act (AB 1613)

AB 1613, enacted in 2007 and amended by AB 2791 in 2008, directed the CEC, the CPUC, and the ARB to implement the Waste Heat and Carbon Emissions Reduction Act. The Act is designed to encourage the development of new combined heat and power systems in California with a generating capacity of not more than 20 megawatts. The Act directs the CPUC, publicly owned electric utilities, and the CEC to establish policies and procedures for the purchase of electricity from eligible combined heat and power systems. It also directs the ARB to report on the reduction in GHG emissions resulting from the increase of new electricity generation from combined heat and power systems.[14]

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[12] California Energy Commission, Guidelines for California's Solar Electric Incentive Programs (SB 1), Sixth Edition. Website: https://www.energy.ca.gov/2016publications/CEC-300-2016-008/CEC-300-2016-008-CMF.pdf, Accessed April 20, 2020.

[13] California Energy Commission. Achieving Cost-Effective Energy Efficiency in California: 2013 Status Update. Website: http://www.energy.ca.gov/2014publications/CEC-200-2014-002/CEC-200-2014-002.pdf. Accessed April 20, 2020.

[14] California Energy Commission. Waste Heat and Carbon Emissions Reduction Act. Website: http://www.energy.ca.gov/wasteheat/, Accessed April 20, 2020.

State Alternative Fuels Plan (AB 1007)

AB 1007 required the CEC to prepare a State plan to increase the use of alternative fuels in California. In December 2007, the CEC prepared the State Alternative Fuels Plan in partnership with the ARB and in consultation with the other state, federal, and local agencies. The plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-State production. The plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-State production of biofuels without causing a significant degradation of public health and environmental quality.

2008 Energy Action Plan Update

The State adopted the California Energy Action Plan in 2003, followed by the Energy Action Plan II in 2005. The current plan, the California 2008 Energy Action Plan Update, is California's principal energy planning and policy document. The updated document examines the State's ongoing actions in the context of global climate change, describes a coordinated implementation plan for State energy policies, and identifies specific action areas to ensure that California's energy resources are adequate, affordable, technologically advanced, and environmentally sound. The California 2008 Energy Action Plan Update establishes energy efficiency and demand response (i.e., reduction of customer energy usage during peak periods) as the first-priority actions to address California's increasing energy demands. Additional priorities include the use of renewable sources of power and distributed generation (i.e., the use of relatively small power plants near or at centers of high demand). To the extent that these actions are unable to satisfy the increasing energy demand and transmission capacity needs, clean and efficient fossil-fired generation is supported. The California 2008 Energy Action Plan Update examines policy changes in the areas of energy efficiency, demand response, renewable energy, electricity reliability and infrastructure, electricity market structure, natural gas supply and infrastructure, research and development, and climate change.[15]

2011 Energy Efficiency Strategic Plan

The Long-Term Energy Efficiency Strategic Plan sets forth a roadmap for energy efficiency in California through the year 2020 and beyond. It articulates a long-term vision and goals for each economic sector and identifies specific near-term, mid-term and long-term strategies to assist in achieving those goals. The plan was developed through a collaborative process involving the CPUC regulated utilities (PG&E, Southern California Edison Company, San Diego Gas & Electric Company, and Southern California Gas Company) and over 500 individuals and organizations.[16]

[15] California Energy Commission. 2008 Energy Action Plan Update. Website: http://www.energy.ca.gov/2008publications/CEC-100-2008-001/CEC-100-2008-001.PDF. Accessed April 20, 2020.

[16] California Energy Commission. 2011 Energy Efficiency Strategic Plan. Website: http://www.energy.ca.gov/ab758/documents/CAEnergyEfficiencyStrategicPlan_Jan2011.pdf. Accessed April 20, 2020.

2017 Integrated Energy Policy Report (SB 1389)

In 2002, the Legislature passed SB 1389, which required the CEC to develop an integrated energy plan biannually for electricity, natural gas, and transportation fuels, for the California Energy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for Zero Emission Vehicles and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access.

The 2017 Integrated Energy Policy Report,[17] was adopted by the CEC on April 16, 2018 and provides CEC's assessments of a wide variety of energy issues currently facing California. These issues include implementation of SB 350, integrated resource planning, distributed energy resources, transportation electrification, solutions to increase resiliency in the electricity sector, energy efficiency, barriers faced by disadvantaged communities, demand response, transmission and landscape-scale planning, the California Energy Demand Preliminary Forecast, the preliminary transportation energy demand forecast, renewable gas (in response to SB 1383), updates on Southern California electricity reliability, natural gas outlook, and climate adaptation and resiliency.

Clean Energy and Pollution Reduction Act (SB 350)

In October 2015, Governor Brown signed SB 350, the Clean Energy and Pollution Reduction Act, establishing new clean energy, clean air, and GHG reduction goals for 2030 and beyond. SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard eligible resources, including solar, wind, biomass, geothermal, and others. In addition, SB 350 requires the State to double statewide energy efficiency savings in electricity and natural gas end uses by 2030. To help ensure these goals are met and GHG emission reductions are realized, large utilities will be required to develop and submit Integrated Resource Plans. These Integrated Resource Plans will detail how each entity will meet their customers resource needs, reduce GHG emissions, and ramp up the deployment of clean energy resources.[18]

California Building Codes

California's Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) were first established in 1978 to reduce California's energy consumption. Energy efficient buildings require less electricity, natural gas, and other fuels, the use of which creates GHG emissions. The Title 24 standards are updated on a three-year schedule and since 2008 the standards have been incrementally moving to the 2020 goal of the zero-net-energy use. On

[17] California Energy Commission. 2017 Integrated Energy Policy Report, Publication Number: CEC-100-2017-001-CMF.

[18] California Energy Commission. Clean Energy & Pollution Act SB 350 Overview. Website: http://www.energy.ca.gov/sb350/. Accessed April 20, 2020.

January 1, 2020 the 2019 standards went into effect, that have been designed so that the average new home built in California will now use zero-net-energy and that non-residential buildings will use about 30 percent less energy than the 2016 standards due mainly to lighting upgrades. The 2019 standards also encourage the use of battery storage and heat pump water heaters, require the more widespread use of LED lighting, as well as improve the building's thermal envelope through high performance attics, walls, and windows. The 2019 standards also require improvements to ventilation systems by requiring highly efficient air filters to trap hazardous air particulates as well as improvements to kitchen ventilation systems.[19]

The Green Building Standards Code (also known as CALGreen), which requires all new buildings in the State to be more energy efficient and environmentally responsible, took effect in January 2011. CALGreen is also updated every three years and the current version is the 2019 CALGreen that become effective on January 1, 2020. The CALGreen Code contains requirements for construction site selection; stormwater control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency.

The CALGreen Code provides standards for bicycle parking, carpool/vanpool/electric vehicle spaces, light and glare reduction, grading and paving, energy efficient appliances, renewable energy, graywater systems, water efficient plumbing fixtures, recycling and recycled materials, pollutant controls (including moisture control and indoor air quality), acoustical controls, stormwater management, building design, insulation, flooring, and framing, among others. Implementation of the CALGreen Code measures reduces energy consumption and vehicle trips and encourages the use of alternative-fuel vehicles, which reduces pollutant emissions.

Some of the notable changes in the 2019 CALGreen Code over the prior 2016 CALGreen Code include: an alignment of building code engineering requirements with the national standards that include anchorage requirements for solar panels, provides design requirements for buildings in tsunami zones, increases the MERV for air filters from 8 to 13, increased electric vehicle charging requirements in parking areas, and sets minimum requirements for use of shade trees.

Regional

Marin Climate & Energy Partnership

Created in 2007, the mission of the Marin Climate & Energy Partnership (MCEP) is to reduce GHG emissions levels to the targets of Marin County and local municipalities, consistent with the

[19] California Energy Commission. 2018. Building Energy Efficiency Standards for Residential and Nonresidential Buildings for the 2019 Building Energy Efficiency Standards. December.

standards set by AB32. All eleven Marin Cities and towns, the Marin County Community Development Agency, the Transportation Authority of Marin, and the Marin Municipal Water District are members. In 2009, MCEP developed a green building strategic plan and green building policies which resulted in the Marin Green Building, Energy, Retrofit & Solar Transformation model ordinance. The Marin Community Foundation provided funding for this effort, as well as funds to develop climate action plans (CAPs) for six partner jurisdictions. Partner members have agreed to use their adopted CAPs to identify mutual measures to reduce community-wide GHG emissions and develop policies and programs to support priority measures. The city worked closely with the MCEP to complete its 2015 CAP and implement a coordinated approach to local and regional emissions reduction targets and climate action planning goals.

Local

Sausalito General Plan

The proposed 2040 General Plan includes the following relevant policies and programs that assist in reducing energy consumption:

Community Design, Historic, and Cultural Preservation Element

Program CD-2.1.3: Green Building Ordinance. Adopt a green building ordinance that requires green building strategies and provides targets for energy efficiency savings that are higher than state building and energy codes.

Circulation and Parking Element

Policy CP-3.1: Public Bus Service. Encourage the maintenance of a safe, efficient, and reliable bus service.

Policy CP-3.2: Alternative Transportation. Improve the efficiency of the existing transportation system and reduce the reliance on the private automobile by emphasizing alternative transportation modes.

Policy CP-3.3: Park and Ride. Support limited park and ride areas for commuters, which maximize safety and limit impacts on nearby residences or other uses.

Policy CP-3.4: First/Last Mile Programs. Expand first- and last-mile programs to connect transit to destinations, aligning with Metropolitan Transportation Commission goals.

Policy CP-5.1: Bicycle Master Plan. Plan, design, implement, and maintain bicycle infrastructure in Sausalito according to a Bicycle Master Plan.

Policy CP-5.6: Pedestrian Trails and Paths. Maintain, improve, and extend existing public paths and stairways for use by residents and establish new pathway connections to complete the system as shown on Figure 5-3 [of the General Plan].

Policy CP-5.13: Development Plan Review. New development and substantial remodels in the Marinship should give special attention to the establishment and enhancement of pedestrian and bicycle pathways.

Sustainability Element

Policy S-4.4: Natural Gas Replacement. Promote electrification, or evaluate alternative renewable energy sources, for building systems that currently use natural gas for heating.

Policy S-5.1: Energy-Conscious Developments. Promote and enforce development standards that minimize energy use.

Program S-5.1.1: Passive Solar Design. Encourage new development and major renovations to utilize passive solar energy methods that reduce energy consumption to the extent feasible consistent with other design considerations, such as view retention, glare, and other requirements.

Program S-5.1.2: Promote Home Generation Financing. Promote financing and loan programs for renewable energy generation in residential and non-residential projects.

Program S-5.1.3: Battery Storage. Encourage installation of battery storage in conjunction with renewable energy generation projects.

Program S-5.1.4: Streamline Home Generation Permits. Streamline permitting for home-based renewal energy generation (i.e. solar roofs).

Policy S-5.2: City Efficiency. Take actions to minimize City's energy usage and provide leadership in conservation.

Program S-5.2.1: Street Light Conversion. Consider a project to convert City incandescent streetlights to Light Emitting Diode (LED) or other less energy intensive fixtures to reduce energy consumption and costs during the Capital Improvement Program budget development process.

Program S-5.2.2: Advanced Community Energy Installation. Consider a project to install an Advanced Community Energy (ACE) system (with solar canopy, energy storage, and EV chargers), ideally at public parking areas near Ferry Landing during the Capital Improvement Program budget development process.

Program S-5.2.3: Efficiency Protocols. Establish energy efficiency protocols for City staff and services.

Program S-5.2.4: Marin Clean Energy. Promote Marin Clean Energy to residents and businesses, particularly MCE Deep Green, and purchase MCE Deep Green for all city facilities.

Program S-5.2.5: Energy Rebates. Promote utility, state, and federal rebate and incentive programs.

Program S-5.2.6: City Solar Energy. Consider a project to Install solar energy systems at all suitable city facilities during the Capital Improvement Program budget development process.

Program S-5.2.7: Drawdown Marin. Continue implementing Drawdown Marin with partners, including working with PG&E to implement a rate structure that encourages efficient usage while meeting state legal requirements of basing rates on cost of service.

Program S-5.2.9: Off-Peak Shift. Where practical, move City electrical load off peak usage hours.

Program S-5.2.10: State Alignment. Link efficiency to California Long-Term Energy Efficiency Strategic Plan.

Program S-5.2.11: Emergency Generator Usage. Develop a policy for use of generators during a recognized electrical shutdown.

Policy S-6.3: Efficiency Collaboration. Work with county and regional energy efficiency programs to promote energy efficient programs and actions.

Program S-6.3.1: Opt-out Efficiency Programs. Make energy efficiency programs opt-out rather than opt-in.

Program S-6.3.2: City Efficiency. Collaborate with Marin Energy Management Team to identify and implement energy efficiency projects in municipal facilities.

Program S-6.3.3: Energy Efficiency Rebates. Promote utility, state, and federal rebate and incentive programs at the planning counter to those applying for permits.

Sausalito Municipal Code

Article 8.18 of the Sausalito Municipal Code (Energy Code) adopts the 2019 California Energy Code, Title 24, Part 6.

Chapter 8.52 (Water Conserving Landscaping) contains regulations to support water conservation. All landscaping proposed for review and/or approval by the City shall comply with the provisions of the Water conservation Ordinance 326 adopted by the Marin Municipal Water District.

Chapter 8.54 (Construction and Demolition Waste Recovery) promotes the redirection of recyclable materials generated during construction away from landfills. All project applicants are required to complete and submit a recycling management plan to estimate the volume of debris to be generated during construction and the estimated amount of debris that would be sent to the landfill. The intent of Chapter 8.54 is to divert at least 50 percent of all debris waste from most construction, demolition, and renovation projects away from local landfills.

Sausalito Climate Action Plan

The City CAP was adopted in 2015.[20] The City's CAP includes strategies and actions related to energy conservation and efficiency in the following areas:

[20] City of Sausalito. 2015. City of Sausalito Climate Action Plan. June 16. Website: https://www.sausalito.gov/home/showdocument?id=17750. Accessed April 24, 2020.

CAP 1-1: Residential Green Building Ordinance. Update building codes to mandate higher building energy performance in newly constructed residential buildings.

CAP 1-2: Commercial Green Building Ordinance. Update building codes to mandate higher building energy performance in newly constructed non-residential buildings.

CAP 1-3: Solar Energy. Encourage residents and business to install solar energy systems.

CAP 1-4: Residential Energy Efficiency. Participate in rebate and incentive programs such as Energy Upgrade California and promote existing rebates and programs offered through the Marin Energy Watch Partnership, Marin Clean Energy, and PG&E.

CAP 1-5: Commercial Energy Efficiency. Promote commercial and industrial energy efficiency and demand response programs provided through the Marin Energy Watch Partnership and Marin Clean Energy.

CAP 1-7: Residential Electricity. Encourage homeowners to purchase 100 percent renewable electricity, such as Marin Clean Energy's Deep Green energy program.

CAP 1-8: Public Lighting. Replace all streetlights, traffic signals, and park lighting with energy-efficient LED lighting.

CAP 1-9: Municipal Energy Efficiency Projects. Identify and complete energy-efficiency projects, such as those identified by the Marin Energy Management Team.

CAP 1-10: Municipal Energy Efficiency Protocols and Equipment. Install energy management software and implement energy efficiency protocols such as turning off lights and computers when not in use and reducing energy use through thermostat control. Adopt a sustainable purchasing policy that emphasizes recycled materials and Energy Star-certified appliances and office equipment.

CAP 1-11: Municipal Solar. Complete a feasibility study on the installation of solar or other renewable energy projects at select City facilities, such as the Martin Luther King School facilities and City parking lots, and install where feasible. Work with Marin Clean Energy to identify and construct a solar energy site.

CAP 1-12: Municipal Electricity. Purchase 100 percent renewable electricity for all City facilities, such as Marin Clean Energy's Deep Green energy program.

CAP 2-1: Bicycle and Pedestrian Transportation. Encourage bicycling and walking as a safe and efficient means to travel around Sausalito.

CAP 2-2: School Transportation. Encourage bicycling, walking, carpooling, and taking public transit to school.

CAP 2-3: Carpooling. Support and promote ride sharing programs.

CAP 2-4: Public Transportation. Support and promote public transportation.

CAP 2-5: Teleworking. Support and encourage employers to implement green commute alternatives including teleworking, as outlined by the Transportation Authority of Marin.

CAP 2-6: Electric Vehicles. Increase ownership of electric vehicles.

CAP 2-7: Market Price Parking. Establish market price parking at metered parking spaces to eliminate cruising for available spaces.

CAP 2-8: High-Efficiency City Vehicles. Purchase or lease low or zero-emissions vehicles and the most fuel efficient models possible for the city fleet, including construction vehicles.

CAP 2-9: City Employee Commute. Provide city employees with incentives to use alternatives to single occupant auto commuting, such as transit incentives, bicycle facilities, ridesharing services and subsidies, flexible schedules, and telecommuting when practical.

CAP 4-1: Indoor Water Efficiency and Conservation.

CAP 4-2: Outdoor Water Efficiency and Conservation. Work with Marin Municipal Water district to promote existing and new rebates for water-efficient landscaping and irrigation systems and controllers. Support additional water-efficient landscape requirements if needed to meet water conservation targets.

CAP 4-3: Rainwater Catchment. Promote existing and new rebates for water storage facilities. Review existing building and zoning codes and permitting procedures and revise as necessary to encourage cisterns and other rainwater storage facilities.

CAP 4-4: Greywater. Review existing building and zoning codes and permitting procedures and revise as necessary to encourage cisterns and other rainwater storage facilities.

CAP 4-5: Energy Production from Wastewater. Work with the Sausalito-Marin City Sanitation District to implement methane capture for energy production at the wastewater treatment plant.

CAP 4-6: Municipal Water Conservation. Assess, maintain and repair existing plumbing fixtures, pipes, and irrigation systems in all City buildings, facilities and landscaping to minimize water use.

CAP 4-7: Municipal Wastewater Pumps. Evaluate the City's wastewater pumping stations and replace inefficient motors and pumps with more efficient units.

3.5.3 THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines Appendix G, the proposed project would have a significant impact related to energy resources if it would:

- Result in the wasteful, inefficient, or unnecessary consumption of energy during project construction or operation, including transportation energy; or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

3.5.4 ANALYSIS, IMPACTS, AND MITIGATION MEASURES

Impacts related to energy resources resulting from implementation of the proposed 2040 General Plan are discussed below. This analysis is based on operational energy demand that would result from projected future growth at buildout of the proposed 2040 General Plan. The California Emissions Estimator Model (CalEEMod Version 2016.3.2) was used to compute energy demand (see Appendix B).

Impact ENER-1 **Development facilitated by the proposed 2040 General Plan would not result in the wasteful, inefficient, or unnecessary consumption of energy during project construction or operation, including transportation energy.**

Implementation of the proposed 2040 General Plan would utilize energy resources during construction and operational activities. Energy resources that would be potentially impacted include electricity, natural gas, and petroleum-based fuel supplies and distribution systems.

Construction Energy Usage

Construction activities associated with individual development projects under the proposed 2040 General Plan would consume energy in the form of petroleum fuel for heavy equipment, as well as from worker trips and material delivery trips to the construction sites. Temporary electrical grid power may also be provided to construction sites. It is too speculative at this time to calculate energy usage associated with construction activities because the details regarding future construction activities are not known, including phasing, construction duration, and construction equipment. It should be noted that subsequent environmental review of future development projects would be required to assess potential construction-related energy consumption impacts.

New development would be subject to energy conservation requirements in the California Energy Code (Title 24, Part 6, of the CCR, California's Energy Efficiency Standards for Residential and Nonresidential Buildings) and CALGreen (Title 24, Part 11 of the CCR). The City of Sausalito also requires submittal of a CALGreen checklist for projects subject to design review to ensure energy conservation.

The Sausalito Municipal Code contains rules and regulations to reduce energy usage during construction. Chapter 8.54 promotes the redirection of recyclable materials generated during construction away from landfills. All project applicants are required to complete and submit a recycling management plan to estimate the volume of debris to be generated during construction and the estimated amount of debris that would be sent to the landfill. The intent of Chapter 8.54 is to divert at least 50 percent of all debris waste from most construction, demolition, and renovation projects away from local landfills.

Based on standards for new construction established by the State and the BAAQMD, and adherence to the development standards in the Sausalito Municipal Code, construction activities associated with implementation of the proposed 2040 General Plan would not result in wasteful,

inefficient, or unnecessary consumption of energy. Therefore, implementation of the proposed 2040 General Plan will have a ***less than significant*** impact under this criterion.

Operational Energy Usage

Implementation of the proposed 2040 General Plan may result in development of up to 304 new residential units, 587,961 new square feet of commercial uses and 146,124 new square feet of industrial uses within the Sausalito Planning Area. Operation of the potential new development in the city would consume natural gas and electricity for building heating and power, lighting, and water conveyance, among other operational requirements. The electrical consumption and natural gas usage associated with the potential development have been calculated in the CalEEMod model, which found that the potential development would consume 7,801,000 kWh of electricity per year and 9,110,000 kilo-British Thermal Units of natural gas per year.

The electricity and natural gas consumption rates are based on implementation of the proposed 2040 General Plan policies, including Policy S-4.4, which promotes the use of electricity for appliances that currently use natural gas, and Policy S-5.1, which encourages energy-conscious developments that minimize energy use. In addition, the 2019 CCR Title 24 Part 6 standards require all homes built in California to have zero-net-energy use, which is achieved through energy-efficiency measures as well required rooftop solar photovoltaic systems. The 2019 CCR Title 24 Part 6 standards also apply to non-residential buildings and require a variety of energy efficiency measures to be implemented during construction of the structures that will reduce energy as usage as well as air emissions. It is anticipated that the future development within the city will be designed and built to minimize electricity and natural gas usage.

Operation of the potential new development that may occur from implementation of the proposed 2040 General Plan would also generate new vehicle trips that would consume petroleum fuel. The VMT created from implementation of the proposed 2040 General Plan has been analyzed in Section 3.14, Transportation, which found that the total annual VMT would increase from the existing 623,781 annual VMT to 785,940 annual VMT with buildout of the proposed 2040 General Plan, an increase of 162,159 annual VMT. Due to the recent passage of the SAFE Vehicles Rule, which removed the waiver allowing California to set its own vehicle emissions standard, the State is now reliant on the EPA to set vehicle efficiency standards. As such, the most recent national miles per gallon rate of 22.3 miles per gallon for light-duty vehicles has been utilized from Bureau of Transportation Statistics,[21] resulting in the estimated consumption of an additional 7,272 gallons of petroleum fuel per year with implementation of the proposed 2040 General Plan.

The Circulation and Parking Element of the proposed 2040 General Plan contains several policies and programs that assist in reducing petroleum fuel use. Policy CP-3.1 encourages the maintenance of a safe, efficient, and reliable bus service. Policy CP-3.2 seeks to promote

[21] Bureau of Transportation Statistics. 2019. Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles. October 22. Website: https://www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles. Accessed April 22, 2020.

alternative transportation modes to reduce the reliance on private automobiles. Policy CP-3.3 supports park and ride areas within the city and Policy CP-3.4 expands the first- and last-mile programs to connect transit to destinations. Policy CP-5.1 calls for the city to implement and maintain bicycle infrastructure in Sausalito according to the Bicycle Master Plan. Policy CP-5.6 seeks to maintain, improve, and extend pedestrian trails. Policy CP-5.13 requires that new development and substantial remodels in the Marinship give special attention to the establishment and enhancement of pedestrian and bicycle pathways. Therefore, potential new development that may occur from implementation of the proposed 2040 General Plan would be designed and built to minimize transportation energy through the promotion of the use of alternative transportation modes.

Based on compliance with the proposed 2040 General Plan policies and programs, and adherence to the development standards in the Sausalito Municipal Code, operations associated with implementation of the proposed 2040 General Plan would not result in wasteful, inefficient, or unnecessary consumption of energy. Therefore, implementation of the proposed 2040 General Plan will have a ***less than significant*** impact under this criterion.

Impact ENER-2 Implementation of the proposed 2040 General Plan would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Development envisioned by the proposed 2040 General Plan could result in an incremental increase in new residential, industrial, and commercial uses. Potential new development that may occur from implementation of the proposed 2040 General Plan would be required to comply with the proposed 2040 General Plan policies and programs and adherence to the development standards within Article 8, 9 and 10 in the Sausalito Municipal Code.

The City of Sausalito adopted its CAP in June 2015, which addresses potential impacts related to climate change through the implementation of several energy efficiency measures that are listed in Section 3.5.2, Regulatory Setting. All future development from buildout of the proposed 2040 General Plan would be required to implement all applicable energy-efficiency measures listed in the CAP. In addition, all future development would be required to adhere to the Sausalito Municipal Code, which contains rules and regulations regarding energy efficiency. Chapter 8.18 adopts the 2019 California Energy Code, Title 24, Part 6, and incorporates the code into the Sausalito Municipal Code. Chapter 8.54 promotes the redirection of recyclable materials generated during construction away from landfills. Chapter 8.52 contains regulations to support water conservation.

In addition, the programs and policies provided in the proposed 2040 General Plan would not conflict with applicable State or regional plans for renewable energy or energy efficiency that include Plan Bay Area 2040, BAAQMD 2017 Clean Air Plan, 2007 State Alternative Fuels Plan, 2008 Energy Action Plan Update, and 2011 Energy Efficiency Strategic Plan. On the contrary, the programs and policies in the proposed 2040 General Plan support State and regional plans for renewable energy and energy efficiency (see Section, 3.5.2 Regulatory Setting).

Development envisioned by the proposed 2040 General Plan could result in an incremental increase in new residential, industrial, and commercial uses. However, compliance with the CAP policies, proposed 2040 General Plan policies and programs, and adherence to the development standards in the Sausalito Municipal Code, would ensure that potential new development associated with implementation of the proposed 2040 General Plan will not conflict with or obstruct State or local plans for renewable energy or energy efficiency. Therefore, implementation of the proposed 2040 General Plan will have a ***less than significant impact*** under this criterion.

Impact ENER-3 **Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to energy resources.**

This analysis evaluates whether the impacts of the proposed 2040 General Plan, together with the impacts of cumulative development, could result in a cumulatively significant impact with respect to energy resources. This analysis then considers whether the incremental contribution of the impacts associated with the implementation of the proposed 2040 General Plan would be significant. Both conditions must apply for a project's cumulative effects to rise to the level of a significant impact.

The geographic context for this analysis includes the Sausalito Planning Area, Marin City, Mill Valley, Tiburon, Belvedere, and other adjacent unincorporated areas. Past, present, and future development projects contribute to energy impacts. If the project is determined to have a significant energy impact, it is concluded that the impact is a cumulative impact

Development envisioned by the proposed 2040 General Plan would contribute to an incremental cumulative increase in energy demand. However, as discussed under Impacts ENER-1 and ENER-2, development facilitated by the proposed 2040 General Plan would not result in the wasteful, inefficient, or unnecessary consumption of energy. As such, development anticipated under the proposed 2040 General Plan would not create substantial impacts related to energy resources.

Regional growth within unincorporated Marin County and in the surrounding communities of Marin City, Mill Valley, Tiburon, and Belvedere, would result in an increased demand for energy resources. All cumulative projects would be required to comply with city ordinances and General Plan policies that address energy conservation and energy efficiency, such as complying with the latest California Energy Code. Further, since MCE is the official electricity provider for the communities of Marin City, Mill Valley, Tiburon, Belvedere, and Unincorporated Marin County, cumulative projects would be automatically enrolled in MCE. Therefore, impacts of the proposed 2040 General Plan on energy resources are not cumulatively considerable and the cumulative impact would be ***less than significant***.

3.6 GEOLOGY, SOILS, AND SEISMICITY

This section of the EIR addresses potential physical environmental effects related to seismic hazards, underlying soil characteristics, slope stability, erosion, and paleontological resources within the Sausalito Planning Area from implementation of the proposed 2040 General Plan.

Information in this section is based on statements, data, and figures provided by the following reference materials:

- Sausalito 2040 General Plan;
- Sausalito Municipal Code;
- United States Department of Agricultural (USDA) Natural Resource Conservation Service (NRCS) Web Soil Survey;
- United States Geological Survey (USGS) interactive fault map; and
- Paleontological Records Search for City of Sausalito General Plan by Dr. Kenneth Finger, Consulting Paleontologist.

3.6.1 EXISTING SETTING

This section includes a discussion of existing geologic, soil, and seismic conditions in the Sausalito Planning Area. This section also describes seismic and other geologic hazards and paleontological resources as they relate to the Planning Area.

Geology

The City of Sausalito is located within the central portion of the Coast Range Geomorphic Province of California, at the base of foothills southeast of Mount Tamalpais in the north San Francisco Bay Area. This geomorphic unit is characterized by northwest-trending valleys and mountain ranges, which are generally parallel to major geological structures such as the San Andreas system of active faults.

Underlying bedrock in the city is of the Franciscan Assemblage bedrock unit, which is of upper Jurassic to Cretaceous age (140 to 65 million years old). Three bedrock units are exposed within the city: Franciscan greenstone in the southwest, chert in the south in elevation above approximately 100 feet, and mélange in the northern half.

Soils

Based on a review of the USDA's Soil Conservation Survey, there are six different soil types throughout the Sausalito Planning Area.[1] The following describes the more predominant soil

[1] United States Department of Agriculture, Natural Resources Conservation Service. 2019. Soil Map – Marin County, California. September 16. Website: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed March 18, 2020.

types. Site-specific geotechnical surveys conducted during the environmental review process for a subsequent project would determine accurate soil types that underlay each specific project area.

Colluvium soil, found in many hillside swales and small valleys in the city, is a thick soil deposit formed via erosion. It may include some deposits of alluvium—stream sediments—in flat-lying valley bottoms. Natural mud and man-made fill are present in the relatively flat area along the water, a few large fills can be found along Highway 101, and many small fills are found in developed hillsides throughout the city.

Most of the city's coast is underlain by the Urban land-Xerorthents complex, with slopes ranging from zero to nine percent. The central, southern, and western portions of the Sausalito Planning Area are underlain by Tamalpais-Barnabe variant very gravelly loams, with slopes ranging from 30-50 percent in the western and central areas and 50-75 percent in the southern areas. A large portion of the Planning Area, generally bound by Easterby Street to the north and Bridgeway/Sausalito Boulevard to the south, contains soils that are predominantly comprised of the Tocaloma-McMullin-Urban land complex, with 30 to 50 percent slopes.[2]

Regional Faulting

The San Andreas Fault Zone is a dominant geologic feature within the State of California. This fault zone is the boundary between the Pacific and North American Tectonic Plates, which has played a crucial role in California's geologic history.

The Sausalito Planning Area, like much of the San Francisco Bay Area, is vulnerable to seismic activity due to the several active faults in the region. As shown on Exhibit 3.6-1, the closest and most prominent active fault in the vicinity of the Planning Area is the San Andreas Fault, located approximately seven miles to the west.[3] An "active" fault is one that has experienced displacement within the last 11,000 years and is expected to move again.[4] Other active faults in the vicinity of the Planning Area include the San Gregorio Fault, approximately eight miles southwest and the Hayward Fault, approximately 12 miles east.

Seismic Hazards

Earthquake hazards in the City of Sausalito can be categorized as primary hazards, which include fault rupture, ground shaking, and secondary hazards. Secondary hazards may include liquefaction, seismically induced landslides, subsidence, and seismically induced water inundation. Both hazard categories can result in extensive property damage, personal injury,

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[2] United States Department of Agriculture, Natural Resources Conservation Service. 2019. Soil Map – Marin County, California. September 16. Website: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed March 18, 2020.

[3] United States Geological Survey. U.S. Quaternary Faults. Website: https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf. Accessed January 13, 2020.

[4] California Department of Conservation. 2003. Note 31: Faults and Earthquakes in California. January.

and/or death. Seismically induced water inundation is described in Section 3.9, Hydrology and Water Quality.

Ground Shaking

The most widespread effect of an earthquake is ground shaking, or movement of the Earth's surface in response to seismic activity. Ground shaking is often the greatest cause of physical damage. Buildings and utility facilities may suffer severe damage or collapse if not properly designed to withstand shaking.

California has a long history of strong earthquakes that have affected communities in the San Francisco Bay Area. The largest earthquake to occur within 10 miles of the city was the 1906 San Francisco Earthquake (7.8 magnitude) that occurred along the San Andreas Fault. The city's proximity to fault zones and other potentially active faults suggests a high probability that a strong earthquake will occur in the future in the city's vicinity.

As depicted on Exhibit 3.6-2, the Sausalito Planning Area is located within Zone IV (violent) and Zone VIII (very strong) of the Modified Mercalli Intensity (MMI) Shaking Severity Level. The MMI estimates the intensity of shaking from an earthquake at a specific location or over a specific area by considering its effects on people, objects, and buildings. At high intensities (MMI ≥ 6), earthquake shaking damages buildings. The severity of the damage depends on the building type, the age of the building, and the quality of the construction. Masonry and non-ductile concrete buildings can be more severely damaged than wood-frame or engineered buildings. Buildings built to older building codes can be more severely damaged than recently constructed buildings using newer codes.[5]

The major threat to people in the city is structural failure of buildings or failure of soil on slopes. Because of the steep slopes above the city and the San Francisco Bay Area's network of faults, it is essential to enforce strict earthquake construction and soil engineering standards to select the most stable building sites and compensate for soil instabilities.

A key factor affecting the extent of damage a building might sustain from an earthquake are subsurface conditions. Areas underlain by soft sediment, such as Bay Mud, are most susceptible to amplified ground shaking and damage to structures. As part of the development of several areas along the city's coastline, fill has been placed over Bay Mud, making these areas more likely to experience substantially stronger ground shaking than nearby areas underlain by bedrock at a shallow depth. An estimate of the amount of ground shaking amplification can be reached via careful geotechnical analysis.

In the 1990s, the city conducted an inventory of unreinforced masonry (URM) buildings that could become a significant public safety risk in the event of an earthquake, and identified the need for a structural analysis of such buildings to define the extent of work needed to strengthen them. The inventory identified 10 URM buildings within the City of Sausalito, all in

[5] Association of Bay Area Governments Resilience Program. Modified Mercalli Intensity Scale. Website: http://resilience.abag.ca.gov/shaking/mmipopup/. Accessed March 19, 2020.

the Downtown and Caledonia Street areas. As of October 2017, not all recommended structural analysis and seismic retrofitting work has been completed.

Surface Rupture

Surface rupture, or a break in the ground's surface and associated displacement caused by fault movement, is directly correlated to earthquake magnitude. Earthquakes having a magnitude of 5.5 or greater are generally required for such events to occur. During the 1906 San Francisco Earthquake, ground rupture occurred along the San Andreas Fault. No fault zones underlie city limits, so the present risk of structural damage due to fault rupture is minimal.

Ground Failure

Ground failure is a secondary effect of earthquake shaking that can be potentially dangerous and damaging. Ground failure effects include landslides, rock falls, subsidence, liquefaction, and ground lurching in areas not actually ruptured by a fault. These activities involve ground surface displacement due to loss of strength or failure of underlying materials during earthquake shaking. Moisture content and groundwater levels are important in assessment of ground failure potential, as are soil type and slope instability.

Subsidence / Liquefaction

Subsidence is the sinking of the ground surface caused by compression of soil layers. Seismically induced subsidence occurs in loose to medium density unconsolidated soils above groundwater. Subsidence can be exacerbated by increased loading from structures. This hazard can be mitigated prior to development through removal and re-compaction of loose or poorly consolidated soils.

Liquefaction occurs when loose sand and silt that is saturated with water behaves like a liquid when shaken by an earthquake, removing structural support. As such, liquefaction is more likely to occur in areas with a shallow water table.

Liquefaction Susceptibility within the Sausalito Planning Area is shown in Exhibit 3.6-3. In the event of an earthquake, the areas in the vicinity of Bridgeway in low-lying coastal areas have a very high probability of experiencing subsidence and/or liquefaction due to loosely compacted soil. The area bound by Stanford Way to the north and Nevada Street to the south, also has a very high susceptibility to liquefaction. The risk for liquefaction within the remaining portions of the Planning Area is low and very low.

Lateral Spreading

Liquefaction-induced lateral spreading generally occurs on gentle slopes of 0.3 to 5 percent underlain by loose sands and a shallow water table. If liquefaction occurs because of an earthquake, unsaturated topsoil can slide as an intact block over a lower, liquefied layer. Displaced soil proceeds down-slope or toward a steep free-face, such as a stream bank or road cutting. Geologic conditions conducive to lateral spreading are frequently found along streams and other waterfronts. Within the City of Sausalito, the risk of lateral spreading is moderate to low in low-lying, coastal areas and very low in upland areas.

Landslides and Slope Instability

Seismic ground shaking can also result in landslides and other slope instability. Slope stability is affected by several interrelated factors, such as steepness, weak unconsolidated soil units, high clay content formations, water saturation, vegetation removal, and seismic activity.

Landslides occur when slopes become unstable and masses of material move downslope. Landslides are usually rapid and can be triggered by earthquakes. Mudslides and slumps are a shallower type of slope failure. They typically affect upper soil horizons rather than bedrock features and are more common.

Landslide hazard within city limits is primarily concentrated in one area in the northwest portion of the city near Sacramento Avenue, as shown on Exhibit 3.6-4. Mapped slope failures that began near or within city limits were generally the result of rainfall that caused slow-moving slump or earthflow movement; however, landslides can also be caused by movement during large earthquakes and excavation into hillsides, which has caused several landslides along Highway 101 in Marin County. A landslide in February 2017 occurred on San Carlos Avenue near Bridgeway and caused power outages. Another landslide occurred on Alexander Avenue just south of the city and closed the road. The most recent landslide in the city occurred on February 14, 2019 near the 400 block of Sausalito Boulevard. This slide originated downslope of Highway 101 and destroyed a duplex and a single-family home.[6] In response to this landslide and additional minor slides that occurred in 2019, the City Council established the Landslide Task Force on June 11, 2019. The purpose of the Landslide Task Force was to identify the needs of the city for an update and assessment of its vulnerability to future landslide disasters causing harm to the residents and property. The Landslide Task Force also assessed the contributing factors to identify early warning signs and proactive measures as part of a preventive program to help mitigate potential slides in vulnerable areas using modern methods and technologies. Finally, the Landslide Task Force developed a plan for residents to report changed conditions in their neighborhood and develop a program to attempt to minimize risks from mudslides, landslides, and water invasion.[7]

Other Geologic Hazards

Soil Creep

Soil creep is the slow, down slope movement of near-surface materials. Soil creep is possible on the city's hillside slopes. The rate of soil creep is a function of slope angle, soil thickness and texture. It can be regarded as a continuous process, and may cause retaining walls, foundations, and paved roads to fail over time without any obvious signs of slope failure.

[6] California Geological Survey. Reported California Landslides. Website: https://www.conservation.ca.gov/cgs/landslides. Accessed April 23, 2020.

[7] Landslide Task Force. 2019. Landslide Task Force Report and Recommendation to Sausalito City Council. September 24.

Expansive Soils

Expansive soils contain high proportions of clay and alternately absorb and release large amounts of water across wet and dry cycles. When structures are built on expansive soil, foundations may rise during the wet season, resulting in cracked foundations, distorted frameworks, and warped windows and doors. These adverse effects can be eliminated by recognition of expansive soils and application of remedial measures for site development and foundation design.

The following description of linear extensibility (also known as shrink-swell potential or expansive potential) is provided by the NRCS on the Web Soil Survey:

> Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $^{1}/_{3}$- or $^{1}/_{10}$-bar tension and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.[8]

In the City of Sausalito, there is generally a low to moderate risk of damage from expansive soils throughout most of the city, though the risk of damage is moderate to high in low-lying areas along Richardson's Bay.

Soil Erosion

Erosion refers to soil removal by water or wind. Factors that influence the potential for erosion include amount of rainfall and wind, length and steepness of slopes, and amount and type of vegetative cover. While coastal erosion can be a significant factor for development in waterfront areas, the City of Sausalito coastline has been generally protected from large ocean waves by surrounding peninsulas, and the resulting potential for coastal erosion is considered moderate to low. However, over time, projected sea level rise is likely to exacerbate coastal erosion and reduce the effectiveness of the city's existing coastal erosion protection.

Paleontological Resources

Paleontological resources refer to fossilized evidence of past life found in the geologic record. Paleontological resource localities are sites where fossilized remains of plants or animals are concentrated. Although there remains a large volume of sedimentary rock deposits in soil and an extraordinary number of organisms that have lived over time, intact fossils are very rare. The

[8] United States Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey Glossary. Website: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed January 14, 2020.

relative rarity of paleontological resources, coupled with the scientific insight they can provide, means they are significant and valuable records of past life.

A paleontological records search of the University of California Museum of Paleontology (UCMP) was performed Dr. Kenneth Finger on September 11, 2017.[9] The information that follows is from that records search, which indicated a low potential for encountering fossiliferous geologic units.

According to the Blake et al. (2000) geologic map, the Sausalito Planning Area includes five geologic units: Artificial fill (Qmf), Quaternary alluvium (Qal), and Franciscan Complex consisting of Chert (KJfch), Greenstone (Jfmgs), and Mélange (fsr). Artificial fill (Qmf) is disturbed sediment that has no paleontological potential or sensitivity. Quaternary alluvium (Qal) is an undifferentiated Pleistocene-Holocene geologic unit. If the unit is Holocene, it is too young to be considered fossiliferous; if the unit is Pleistocene, it has a low potential but high sensitivity for significant paleontological resources.

Vertebrate fossils are extremely rare in the Franciscan Complex, so it is ranked as having a very low paleontological potential and sensitivity. Franciscan Mélange (fsr) is characterized by its lack of continuous bedding, and it includes rock fragments of all sizes, including large blocks of different lithologies in a fine-grained deformed matrix. Although blocks in mélange have the potential of containing fossils, its paleontological potential also appears to be very low. The adjacent floor of San Francisco Bay consists mostly of Holocene deposits and is therefore unlikely to yield any significant paleontological resources.

The UCMP database lists 35 vertebrate localities in Marin County: 5 Pleistocene, 8 Pliocene, and 22 Miocene. None are in Mesozoic units, such as the Franciscan Complex that are mapped in Sausalito. The only unit of concern is the Quaternary alluvium, which may yield Pleistocene vertebrates. The Pleistocene fauna collected from Marin County is represented by 13 specimens in the UCMP collection, including Osteichthyes (boney fish), Aves (birds), *Glossotherium harlani* (Harlan's ground sloth), *Mammuthus primigenius* (wooly mammoth), *Mamut americanum* (American mastodon) *Bison* (bison), *Equus* (horse), and *Odocoileus* (deer). None, however, are from the Sausalito Planning Area.

3.6.2 REGULATORY SETTING

Federal

Earthquake Hazards Reduction Act

Congress passed the Earthquake Hazards Reduction Act in 1977 to reduce risks to life and property from future earthquakes in the United States through establishment and maintenance of an effective earthquake hazards reduction program. To accomplish this goal, the Act established the National Earthquake Hazards Reduction Program. This program was substantially amended in November 1990 by the National Earthquake Hazards Reduction

[9] Finger, Kenneth L. 2017. Paleontological Records Search for City of Sausalito General Plan. September 11.

Program Act, which refined the description of agency responsibilities, program goals, and objectives.

Paleontological Resources Preservation Act

The Paleontological Resources Preservation Act of 2002 codifies the generally accepted practice of limited vertebrate fossil collection and limited collection of other rare and scientifically significant fossils by qualified researchers. Researchers must obtain a permit from the appropriate State or federal agency and agree to donate any materials recovered to recognized public institutions, where they would remain accessible to the public and other researchers.

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (PRC Division 2, Chapter 7.5, commencing with Section 2621) was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Alquist-Priolo Earthquake Fault Zoning Act's main purpose is to prevent construction of buildings used for human occupancy on the surface trace of active faults. The legislation only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (PRC Division 2, Chapter 7.8, commencing with Section 2690) was passed in 1990 and requires the State Geologist to designate Seismic Hazard Zones. These zones assist cities and counties in fulfilling their responsibilities for protecting the public from effects of non-surface fault rupture earthquake hazards, such as strong ground shaking, earthquake-induced landslides, liquefaction, or other ground failures. The California Geological Survey has issued one Seismic Hazards Map for Landslide and Liquefaction Zones for the San Francisco North Quadrangle that encompasses part of the Sausalito Planning Area. However, the accompanying Seismic Hazard Zone Report is for the City and County of San Francisco and does not apply to the City of Sausalito.

California and Uniform Building Codes

The California Building Standards Code (CBC) is another name for the body of regulations known as the CCR, Title 24, Part 2. Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating building standards.

Published by the International Conference of Building Officials, the Uniform Building Code (UBC) is a widely adopted model building code in the United States. The CBC incorporates the UBC by reference and includes necessary California amendments. These amendments include criteria for seismic design. About one-third of the text within the CBC has been tailored for California earthquake conditions.

California Public Resources Code

Section 5097 of the PRC specifies procedures for unexpected discovery of paleontological resources. Section 5097.5 of the Code states that no person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other paleontological feature, situated on public lands, except with express permission of the public agency having jurisdiction over such lands.

Regional

Marin County Municipal Code

Section 22.16.030 of the County Municipal Code prohibits construction on identified seismic or geologic hazard areas unless approved by the Department of Public Works.

Marin County Multi-Jurisdiction Local Hazard Mitigation Plan

The Marin County Multi-Jurisdiction Local Hazard Mitigation Plan (MCM LHMP) was developed to reduce risks from natural disasters in unincorporated portions of the county and all incorporated cities in Marin County. The MCM LHMP, last adopted by the City of Sausalito on May 14, 2019, is required to be updated every five years to maintain eligibility for Hazard Mitigation Assistance grant programs administered by the Federal Emergency Management Agency (FEMA) pursuant to the Disaster Mitigation Act of 2000. The MCM LHMP identifies hazards within the city, such as earthquakes, liquefaction, severe storms, debris flow (landslides), flooding, wind, tsunamis, wildfire, and post-fire landslides. The MCM LHMP also contains a vulnerability analysis highlighting specific facilities at risk to natural hazards and outlines mitigation strategies for reducing risk of identified hazards.[10]

Local

Sausalito General Plan

The proposed 2040 General Plan includes the following relevant policies and programs that assist in reducing or avoiding hazards related to geology and soils, and potential impacts to paleontological resources:

Community Design, Historic and Cultural Preservation Element

Policy CD-2.2: Steep Sloping Sites. Give special attention to the design considerations for proposed development on steeply sloped sites.

Program CD-2.2.2: Design Guidelines. Develop illustrative design guidelines to provide general guidance for construction on steep slopes.

[10] Marin County. 2018. Marin County Multi-Jurisdictional Local Hazard Mitigation Plan.

Environmental Quality Element

Program EQ-4.2.1: Stormwater Pollution Prevention Program. Continue to participate in the Marin County Stormwater Pollution Prevention Program (MCSTOPPP).

Program EQ-4.2.3: Richardson's Bay Regional Agency. Coordinate with the Richardson's Bay Regional Agency (RBRA) or successor agency in implementing the adopted water pollution control program contained in the Richardson Bay Special Area Plan.

Health, Safety, and Community Resilience Element

Policy HS-1.1: Seismic Hazards. Protect existing and new buildings and their occupants from seismic hazards.

Program HS-1.1.1: Building Code (Earthquake Standards). Regularly update the City's Building Code as necessary to address current standards of earthquake safety.

Program HS-1.1.2: Unreinforced Masonry (URM) Buildings Ordinance. Periodically update the Unreinforced Masonry Buildings Ordinance as necessary to address current standards of earthquake safety.

Program HS-1.1.3: Seismic Safety Pamphlet. Distribute the ''Homeowners Guide to Earthquake Safety" and the "Commercial Property Owners Guide to Earthquake Safety" pamphlets published by the California Seismic Safety Commission.

Program HS-1.1.4: Geologic Hazard Maps. Update the current Geological Hazard Mapping of the City and develop a GIS system for readily review the mapping.

Policy HS-1.2: Other Geological Hazards. Require that all geologic hazards be adequately addressed and mitigated through the city.

Program HS-1.2.1: Local Hazard Mitigation and Adaption Plan. Continue to collaborate with the Marin County on the Multi-Jurisdiction Local Hazard Mitigation Plan (MCM LHMP).

Program HS-1.2.2: Geologic Feasibility Reports. Amend the Zoning Ordinance to specifically require the submittal of (1) geologic and/or geotechnical feasibility reports (submitted by a geotechnical engineer for properties in Zone mu, and by an engineering geologist in Zones 1 to 4) and (2) subsurface investigation reports (within Zones 3 and 4) for development of new buildings or significant additions to existing buildings requiring discretionary approval.

Program HS-1.2.3: Reports. Continue to require geotechnical reports for appropriate grading and building permits.

Program HS-1.2.4: Design Guidelines. In coordination with CD-2.2.2, identify areas where mitigation measures should be implemented to increase safety on hillside development sites.

Program HS-1.2.5: Steep Slopes Risk Assessment. Maintain, and update as necessary, regulations controlling and stipulating a threshold for development restrictions on steep slopes.

Program HS-1.2.6: Detailed Geologic Map and Report. Maintain a detailed geologic map and geotechnical Hazards report on geologic conditions and hazards in the City, including all landslides when possible, to provide a more detailed data base for planning and evaluation of individual projects that can be utilized through a GIS system maintained by the City.

Program HS-1.2.7: Erosion Mapping. Develop a citywide GIS layer that maps the City's drainage and erosion hot spots related to geologic weathering.

Program HS-1.2.8: Geologic Hazard Abatement District. Consider creating a Geologic Hazard Abatement District (GHAD) and explore other methods of funding hazard abatement.

Program HS-1.2.9: Hazard Collaboration. Work with regional, state, and federal agencies to share resources and collaborate on hazard abatement projects.

Program HS-1.2.10: Hazard Reporting. Create a reporting mechanism specifically for geologic events which utilizes a GIS system to graphically represent potential instabilities.

Program HS-1.2.12: Steep Slopes Mediation Projects. Consider creation of a community benefit organization to perform slope stabilization projects in coordination with City guidance.

Policy HS-2.2: Public Facilities. Locate and design emergency buildings, vital utilities, communication systems, and other public facilities so that they remain operational during and after a major earthquake or other disaster.

Sausalito Municipal Code

Chapter 8.43 (Earthquake Hazard Analysis of Existing Buildings) of the Sausalito Municipal Code intends to ensure that seismic strengthening of existing URM buildings is completed when a property owner conducts significant remodeling. In such cases, a structural engineering analysis of the building by a licensed professional is required, and a structural analysis report must be submitted to the city.

Chapter 8.08 (California Building Code) incorporates the most recent CBC.

Chapter 9.15 (Improvements) sets forth requirements and standards for subdivisions in the city.

Chapter 10.40 (General Development Regulations) lists development regulations.

Chapter 11.17 (Urban Runoff Pollution Prevention Ordinance) contains discharge regulations that set uniform requirements for discharges into the storm drain system and enable the agency to comply with administrative provisions of the water quality requirements and applicable effluent standards set by the Regional Water Quality Control Board, and any other discharge criteria which are required or authorized by State or federal law, and to ensure public welfare by regulating quality and quantity of discharges into those systems.

Chapter 17.08 (Excavations Generally) sets forth rules and regulations to control excavation, grading, and earthwork construction on land to safeguard public health, safety, and welfare.

Chapter 18.12 (Sewers) addresses requirements for sanitary sewers. As stated in Section 18.12.100, new buildings must install new sewer service laterals to connect to the existing sanitary sewer system.

Chapter 18.14 adopts Marin County Code Chapter 18.06 (Individual Sewage Disposal Systems) with some modifications and additional penalties. This allows and sets requirements for disposal of sanitary sewage by septic tank and other methods not connected to a sanitary sewer system.

3.6.3 THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines Appendix G, the proposed 2040 General Plan would have a significant impact related to geology, soils, and/or seismicity if it would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

- 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.
- Strong seismic ground shaking;
- Seismic-related ground failure, including liquefaction; or
- Landslides.

In addition, the proposed 2040 General Plan would have a significant impact related to geology, soils, or paleontological resources if it would:

- Result in substantial soil erosion or the loss of topsoil;
- 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;
- Be located on expansive soil, as defined in the Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems where sewers are not available for the disposal of wastewater; or
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

3.6.4 ANALYSIS, IMPACTS, AND MITIGATION MEASURES

Impacts related to geology, soils, and paleontological resources resulting from implementation of the proposed 2040 General Plan are discussed below. The following impact analysis is based on a review of published information, surveys, and reports regarding regional geology and soils. Information was obtained from private and governmental agencies and Internet websites, including the California Geological Survey and USGS.

Impact GEO-1 **Development facilitated by the proposed 2040 General Plan would not directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death from seismic events.**

Given the city's proximity to the San Andreas Fault Zone as well as other active faults, it is likely that the Sausalito Planning Area will experience periodic minor to strong earthquake motion. Within the Planning Area, the primary hazard associated with earthquakes is seismic ground shaking; secondary hazards may include liquefaction, seismically induced landslides, and subsidence. The intensity of seismic ground shaking within the Planning Area will depend upon characteristics of the generating fault, distance to the earthquake epicenter and rupture zone, the magnitude and duration of the earthquake, and site-specific geologic conditions.

Development under the proposed 2040 General Plan would result in additional residential and nonresidential development within the city. As such, additional residents and employees would be potentially exposed to the effects of fault rupture, seismic ground shaking, liquefaction, subsidence, and landslides from local and regional earthquakes. Structures that would be built on steep slopes could be exposed to an existing risk of landslide or, if improperly constructed, could exacerbate existing landslide conditions. New structures built under the proposed 2040 General Plan could also experience substantial damage during seismic events.

The proposed 2040 General Plan would encourage infill development, which in many cases would replace older buildings subject to seismic damage, with newer structures built to current seismic standards that could better withstand the adverse effects of strong ground shaking.

In addition, the proposed 2040 General Plan includes policies and programs to protect residents of the city and surrounding areas from seismically induced hazards. To mitigate dangers of earthquake damage, Programs HS-1.1.1 and 1.1.2 require the city to update its Building Code and URM Buildings Ordinance, respectively, to reflect current standards of earthquake safety. Additionally, Program HS-1.2.1 requires the city to continue to collaborate with the County on the MCM LHMP, which addresses hazards related to earthquakes. Lastly, Program HS-1.2.2 requires submittal of geologic and/or geotechnical feasibility reports for development of new buildings or significant additions to existing buildings requiring discretionary approval, and Program HS-1.2.3 requires geotechnical reports for appropriate grading and building permits.

Potential structural damage and exposure of people to risk of injury or death from structural failure would be further minimized by compliance with CBC engineering design and construction measures. Foundations and other structural support features would be designed to resist or absorb damaging forces from strong ground shaking, liquefaction, and subsidence according to Chapter 8.08 of the Sausalito Municipal Code, which incorporates the most recent CBC.

In conclusion, compliance with mandatory CBC requirements and implementation of proposed 2040 General Plan policies and programs, would reduce potential for loss, injury, or death in the event of a seismic event. As such, potential impacts would be reduced to ***less than significant*** levels.

Impact GEO-2 **Development facilitated by the proposed 2040 General Plan would not result in a significant impact related to development on unstable geologic units or soil, or result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse.**

Certain geologic units present in the Sausalito Planning Area could have the potential for landslides, slope instability, and liquefaction. Other geologic hazards, such as subsidence, lateral spreading, or collapse, could also be present in the Planning Area. Development allowed under the proposed 2040 General Plan could occur within areas containing unstable geologic units.

The Landslide Task Force made recommendations to the Sausalito City Council regarding unstable geologic units, some of which have been incorporated into the proposed 2040 General Plan. One of the recommendations was to map local geology and geologic hazards for both slope stability and seismic hazards. The hazard maps would assist the city in identifying public drainage systems that need updates and repairs. The maps are also likely to identify open space areas upslope of city infrastructure or residential structures that have a potential for failure. Such areas could then be prioritized for stabilization measures to minimize or eliminate future failures. Other task force recommendations included creating a mechanism for residents to report emerging landslide risks, the development of new building and remodeling guidelines, and the formation of a GHAD.[11]

The proposed 2040 General Plan includes policies and programs specifically designed to protect residents from injuries and minimize property damage resulting from land instability and geologic hazards. Program HS-1.2.1 requires the city to continue to collaborate with the County on the MCM LHMP, which addresses hazards related to liquefaction and landslides. Program HS-1.2.2 requires submittal of geologic and/or geotechnical feasibility reports for development of new buildings or significant additions to existing buildings requiring discretionary approval, and Program HS-1.2.3 requires geotechnical reports for appropriate grading and building permits. As such, development facilitated by the proposed 2040 General Plan would be analyzed in a geologic report in which recommendations could be made regarding unstable soil concerns.

The proposed 2040 General Plan also includes programs to delineate geologic hazards and mitigation plans for those hazards. Program HS-1.2.8 requires the city to consider creating a GHAD and explore other methods of funding hazard abatement.

The Sausalito Municipal Code also contains rules and regulations to address development on unstable geologic units. Chapter 17.08 (Excavations Generally) sets forth rules and regulations to control excavation, grading, and earthwork construction on land to safeguard public health, safety, and welfare. Section 17.08.010 requires that a permit be obtained for any excavation under or on the surface of any land, public or private, to ensure that appropriate construction techniques are utilized to address development on unstable geologic units.

[11] Landslide Task Force. 2019. Landslide Task Force Report and Recommendation to Sausalito City Council. September 24.

With the implementation of the policies and programs in the proposed 2040 General Plan, as well as applicable State and local codes, potential impacts as associated ground instability or failure would be ***less than significant***.

Impact GEO-3 **Development facilitated by the proposed 2040 General Plan would not result in the construction of structures on expansive soils (soils with shrink-swell potential), creating substantial direct or indirect risks to life or property.**

New development constructed on expansive soils could be subject to damage or become unstable when underlying soil shrinks or swells. There is generally a low to moderate risk of damage from expansive soils throughout most of the city, though risk of damage is moderate to high in low-lying areas along Richardson's Bay. The CBC includes requirements to address soil-related hazards, such as expansive soils. Typical measures to treat hazardous soil conditions involve removal, proper fill selection, and compaction. In cases where soil remediation is not feasible, the CBC requires structural reinforcement of foundations to resist expansive soil forces. Compliance with requirements of the CBC would reduce impacts related to expansive soils to a ***less than significant*** level.

Impact GEO-4 **Development facilitated by the proposed 2040 General Plan would not result in substantial soil erosion or the loss of topsoil.**

Development under the proposed 2040 General Plan would involve construction activities such as stockpiling, grading, excavation, paving, and other earth-disturbing activities. Loose and disturbed soils are more prone to erosion and loss of topsoil by wind and water. As such, soil erosion is dependent on individual site locations and conditions onsite during construction.

Construction activities that disturb one or more acre of land surface are subject to the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board (State Water Board). Compliance with the permit requires each qualifying development project to file a Notice of Intent with the State Water Board. Permit conditions require development of a stormwater pollution prevention plan (SWPPP), which must describe the site, facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Inspection of construction sites before and after storms is also required to identify stormwater discharge from construction activity and to identify and implement erosion controls, where necessary.

The proposed 2040 General Plan includes policies and programs to map areas with high susceptibility to erosion and protect water quality, which also address soil erosion. Program HS-1.2.7 requires the city to develop a citywide GIS layer that maps the city's drainage and erosion hot spots related to geologic weathering. Program EQ-4.2.1 requires the city to continue to participate in the MCSTOPPP. Program EQ-4.2.3 requires the city to coordinate with the RBRA in

implementing the adopted water pollution control program contained in the Richardson's Bay Special Area Plan.

Chapter 17.08 of the Sausalito Municipal Code sets forth rules and regulations to control excavation, grading, and earthwork construction on land to safeguard public health, safety, and welfare. The city's Urban Runoff Pollution Prevention Ordinance (Chapter 11.17) requires the implementation of construction best management practices, including erosion and sediment control plan requirements.

In addition to compliance with mandatory NPDES permit and Sausalito Municipal Code requirements, implementation of proposed 2040 General Plan policies and programs would further reduce the potential erosion and loss of topsoil from construction-related soil disturbance. As such, potential impacts related to erosion and loss of topsoil would be reduced to ***less than significant*** levels.

Impact GEO-5 **Development facilitated by the proposed 2040 General Plan would not place septic tanks or alternative wastewater disposal systems in areas where soils are not capable of supporting such uses.**

The proposed 2040 General Plan encourages growth management and development within city limits. Under the proposed 2040 General Plan, the location and timing of growth in the city will be planned, considering infrastructure capacity, public service availability, and fiscal impacts. Development facilitated by the proposed 2040 General Plan would be served by the existing sewer system, and most new development would be required to connect to existing sewer laterals.

However, should any new development require the installation of septic tanks or alternative wastewater disposal systems, the proposed 2040 General Plan includes policies and programs to ensure that any new development can be feasibly constructed according to soil conditions. Program HS-1.2.2 requires submittal of geologic and/or geotechnical feasibility reports for development of new buildings or significant additions to existing buildings requiring discretionary approval, and Program HS-1.2.3 requires geotechnical reports for appropriate grading and building permits. As such, any proposed septic tanks or alternative wastewater disposal systems facilitated by the proposed 2040 General Plan would be analyzed in a geologic report in which recommendations could be made regarding unstable soil concerns.

Chapter 18.12 of the Sausalito Municipal Code addresses requirements for sanitary sewers and prohibits alternative wastewater disposal systems. As stated in Section 18.12.100, new buildings must install new sewer service laterals to connect to the existing sanitary sewer system. Chapter 18.14 adopts Marin County Code Chapter 18.06 with some modifications and additional penalties. This allows and sets requirements for disposal of sanitary sewage by septic tank and other methods not connected to a sanitary sewer system.

Implementation of policies and programs in the proposed 2040 General Plan, as well as applicable local codes, would ensure that new septic tanks or alternative wastewater disposal

systems are constructed on soils that can support such systems. Therefore, impacts would be ***less than significant***.

Impact GEO-6 **Development facilitated by the proposed 2040 General Plan would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.**

Any project involving earth-moving activity could potentially result in inadvertent discovery and disturbance of paleontological resources during grading and excavation work. However, based on the Paleontological Records Search conducted for the proposed 2040 General Plan, the Sausalito Planning Area is predominately located on non-fossiliferous geologic units; does not contain any identified paleontological resources; and the likelihood of encountering paleontological resources is low.

As discussed in the Paleontological Records Search, the only potentially fossiliferous units are the Quaternary alluvium (if it is Pleistocene) mapped over a relatively small land area, and the Cretaceous-Jurassic mélange that has a very low paleontological potential. Nonetheless, in the unlikely event that any earth-disturbing construction-related activities uncover any significant fossils (i.e., bones or teeth), those activities should be diverted away from the discovery until a professional paleontologist assesses the find for possible salvage. The construction crew should not attempt to remove such finds as they could be quite fragile, in which case they would require special treatment to for their intact recovery.

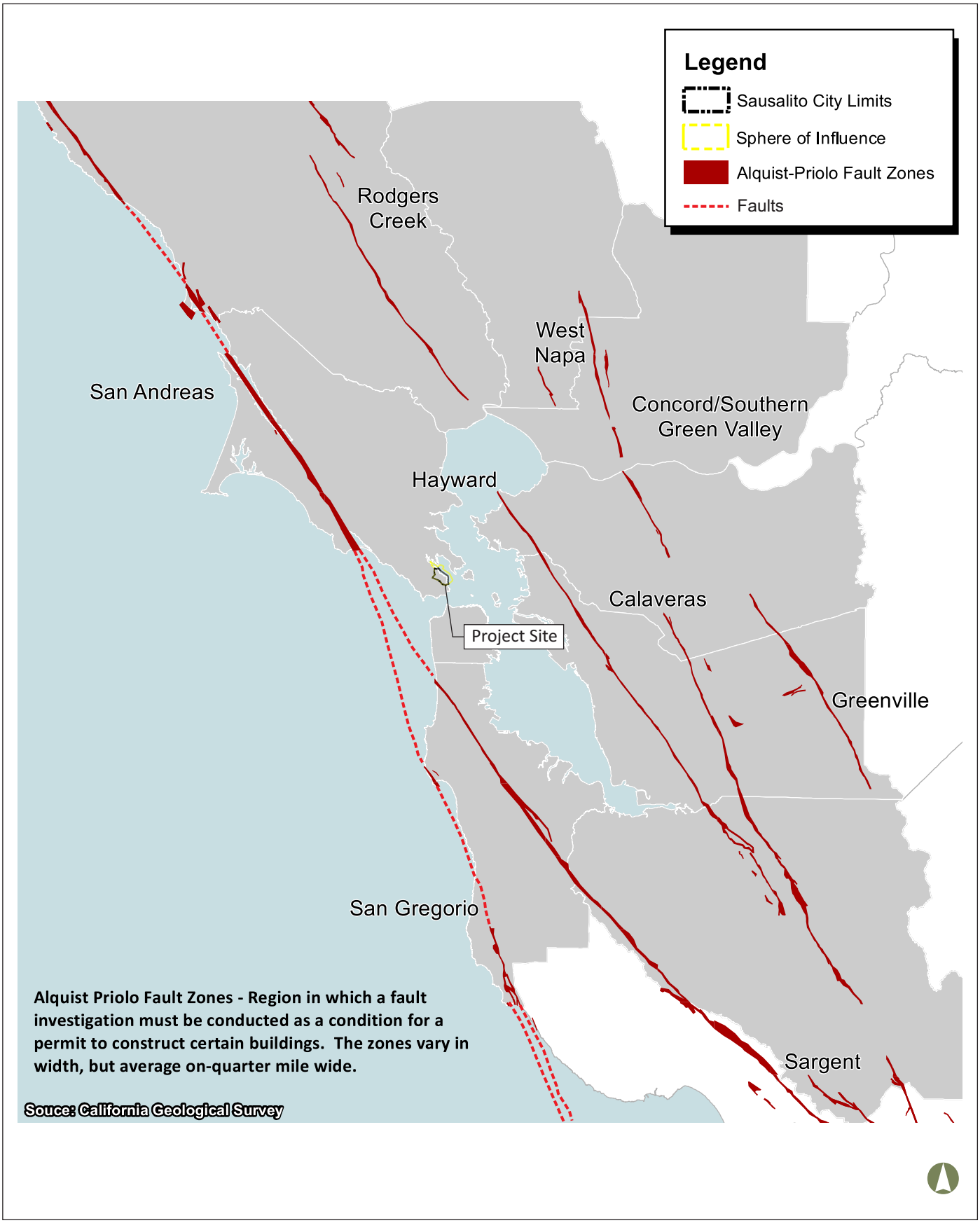
Potential impacts to paleontological resources would be minimized through compliance with federal and State laws that protect paleontological resources. Section 5097 of the PRC specifies procedures to be followed in the event of unexpected discovery of paleontological resources. Compliance would minimize the potential to impact paleontological resources directly and indirectly. Therefore, impacts to paleontological resources would be considered ***less than significant***.

Impact GEO-7 **Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to geology, soils, seismicity, or paleontological resources.**

The geographic context for analysis of cumulative impacts related to geology, soils, and seismicity includes the incorporated and unincorporated lands comprising the Sausalito Planning Area. The geographic context for paleontological resources includes Marin County. This analysis evaluates whether impacts of the proposed 2040 General Plan, together with impacts of cumulative development, could result in a cumulatively significant impact to geology, soils, seismicity, or paleontological resources. This analysis then considers whether incremental contribution of impacts associated with implementation of the proposed 2040 General Plan would be significant. Both conditions must apply for a project's cumulative effects to rise to the level of significance.

Potentially adverse environmental effects associated with seismic hazards, as well as those associated with expansive soils, topographic alteration, and erosion, usually are site-specific and generally do not result in cumulative effects. As previously discussed, development facilitated by the proposed 2040 General Plan would be required to comply with provisions of the CBC, excavation and grading requirements of the Sausalito Municipal Code, and mandatory NPDES permit requirements to ensure that potential impacts related to site-specific geotechnical conditions remain at less than significant levels. All cumulative projects would be subject to similar requirements and required to comply with the CBC, Sausalito Municipal Code, General Plan policies, and NPDES permit requirements. For these reasons, impacts of the proposed 2040 General Plan on geology, soils, and seismicity are not cumulatively considerable and the cumulative impact would be ***less than significant***.

Future development permitted under the proposed 2040 General Plan, in conjunction with other development in Marin County, has potential to cumulatively impact paleontological resources. As previously discussed, development facilitated by the proposed 2040 General Plan would be required to conform to federal and State policies that protect paleontological resources, including Section 5097 of the PRC. All cumulative projects would be subject to similar requirements and required to comply with federal and State policies related to protection of paleontological resources. For these reasons, impacts of the proposed 2040 General Plan on paleontological resources are not cumulatively considerable and the cumulative impact would be ***less than significant***.



Source: City of Sausalito.

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Exhibit 3.6-1
Alquist-Priolo Fault Zones

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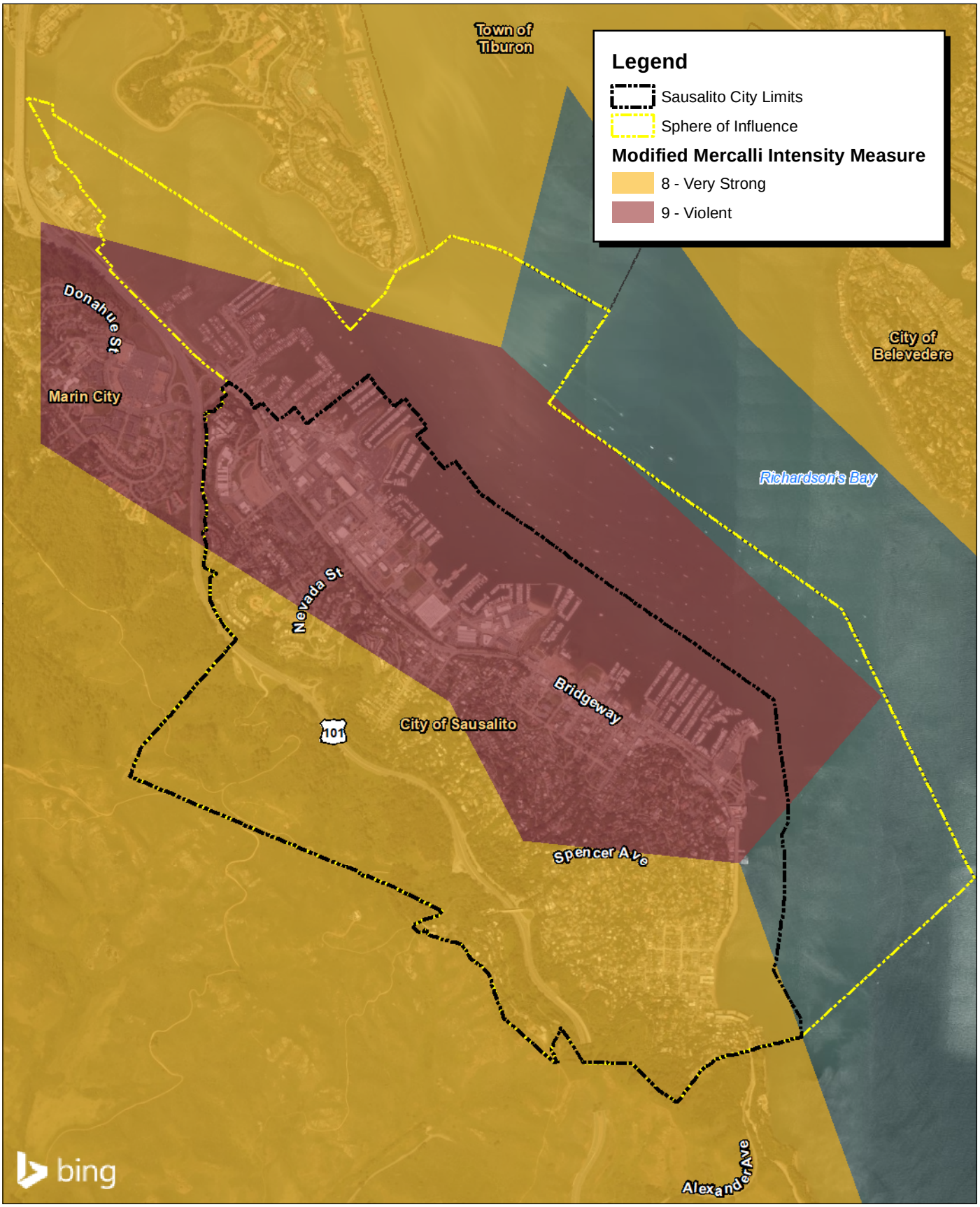

Source: Bing Aerial Imagery. ABAG.

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Exhibit 3.6-2
Shaking Hazard

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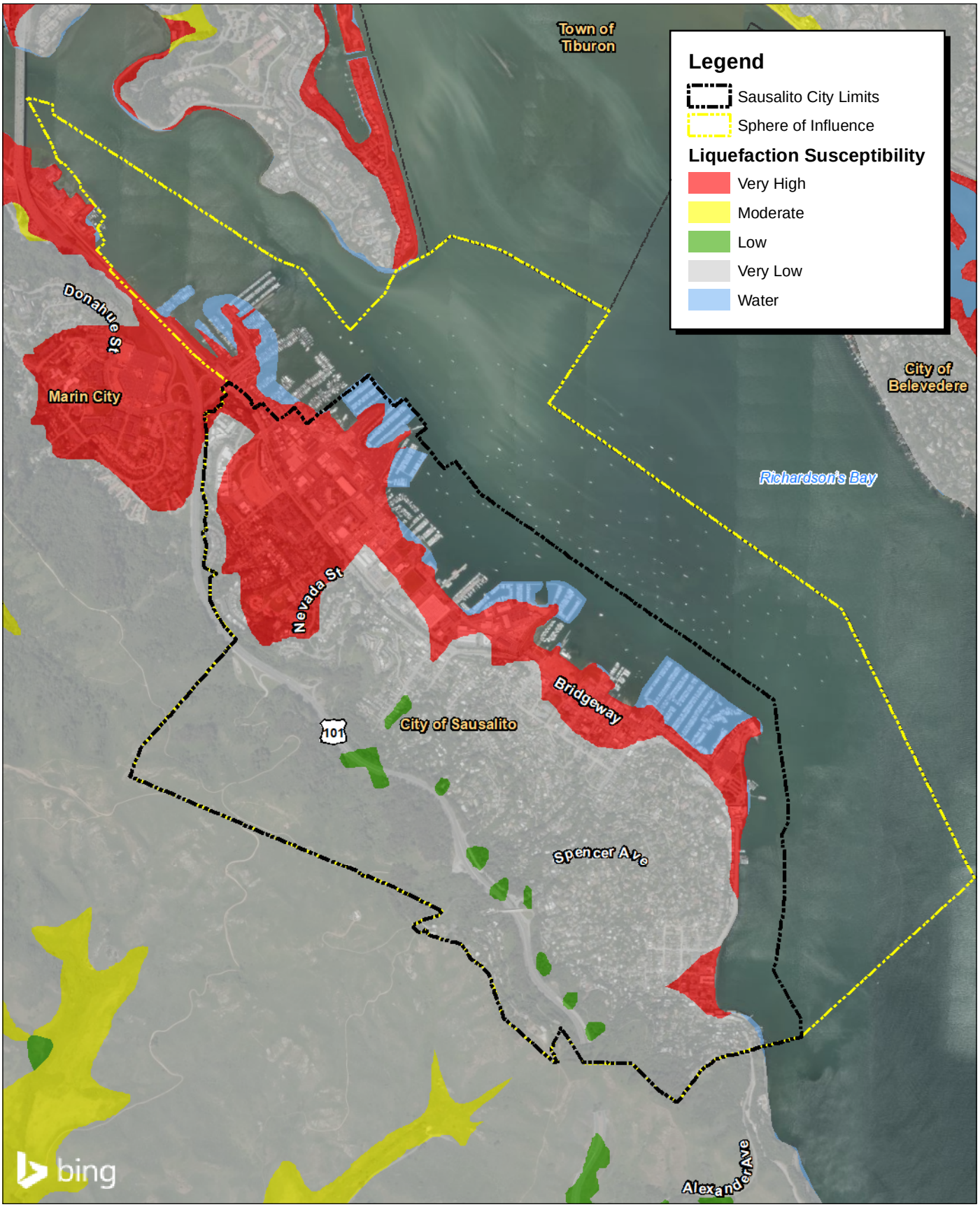

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Exhibit 3.6-3
Liquefaction Hazard

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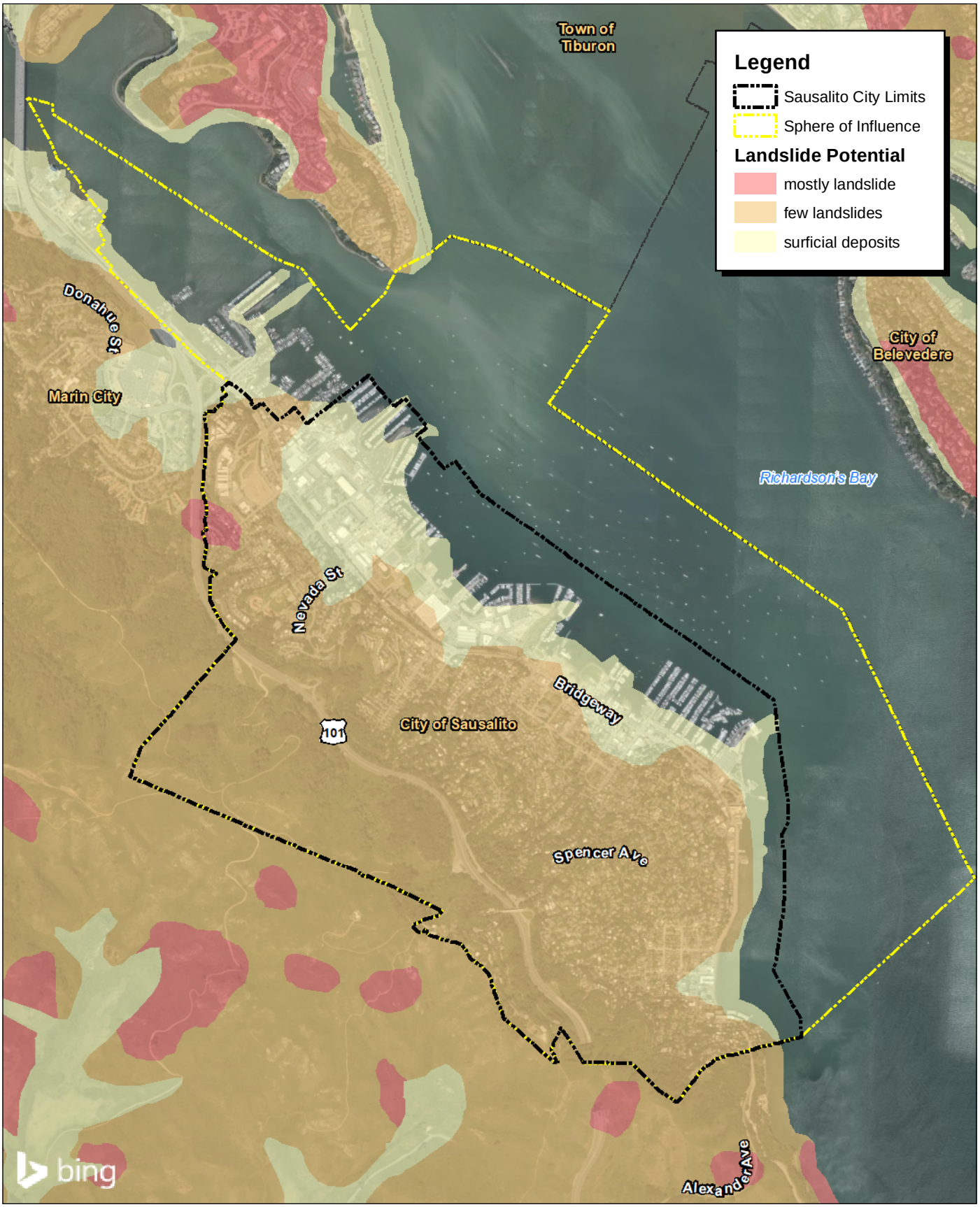

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Exhibit 3.6-4
Landslide Hazard

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3.7 GREENHOUSE GAS EMISSIONS

This section of the EIR discusses regional GHG emissions and climate change impacts that could result from implementation of the proposed 2040 General Plan. The Existing Setting section provides background on greenhouse gases (GHGs) and climate change and the effects of global climate change in California.

As described in greater detail below, GHG emissions have the potential to affect the environment adversely and cumulatively. The emissions from a single project are not likely cause global climate change. However, GHG emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change. Therefore, the analysis of GHGs and climate change is presented in terms of the proposed 2040 General Plan's contribution to cumulative impacts related to GHGs and climate change.

The analysis and discussion in this section also focuses on the proposed 2040 General Plan's consistency with local, regional, and statewide climate change planning efforts and discusses the context of these planning efforts as they relate to buildout of the proposed 2040 General Plan. GHG emissions modeling is included in Appendix B.

The information in this section is based on statements, data, tables, and figures provided by the following reference materials:

- California's 2017 Climate Change Scoping Plan, California Air Resources Board, November 2017;
- Plan Bay Area 2040, Metropolitan Transportation Commission and Association of Bay Area Governments, Adopted July 26, 2017;
- 2017 Clean Air Plan, Bay Area Air Quality Management District, April 2017;
- CEQA Air Quality Guidelines, BAAQMD, May 2017;
- City of Sausalito Climate Action Plan, Marin Climate & Energy Partnership, Adopted June 16, 2015;
- City of Sausalito Community and Government Operations Greenhouse Gas Inventory for 2016, adopted December 2018; and
- Traffic modeling and analysis prepared by Parisi Transportation Consulting (see Appendix F).

3.7.1 EXISTING SETTING

Greenhouse Gases and Climate Change

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. Human activities are responsible for most of the increase in GHGs in the atmosphere over the last 150 years, mostly from changes in land cover and emissions of air pollutants associated with the industrial revolution and the generation of electricity. The largest source of GHG emissions from

human activities in the United States is from burning fossil fuels for electricity, heat, and transportation. The four main GHGs emitted by human activities at the global scale are:[1]

- **Carbon dioxide (CO_2)** is primarily emitted from fossil fuel use. Carbon dioxide can also be emitted from direct human-induced impacts on forestry and other land use, such as through deforestation, land clearing for agriculture, and degradation of soils. Carbon dioxide can be removed from the atmosphere through reforestation, improvement of soils, and other activities.
- **Methane (CH_4)** is emitted from agricultural activities (livestock and other agricultural practices), waste management (decay of organic waste in municipal landfills and water treatment facilities), energy use, and biomass burning.
- **Nitrous oxide** is emitted during agricultural activities (e.g., fertilizer use), industrial activities, and during the combustion of fossil fuels and solid waste.
- **Fluorinated gases** are synthetic GHGs that are emitted from industrial processes, refrigeration, and the use of a variety of consumer products. Fluorinated gases include hydrofluorocarbons (HFCs), perfluorocarbons, sulfur hexafluoride, and nitrogen fluoride.

These GHGs have different global warming potential. The global warming potential of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO_2e), and is the amount of a GHG emitted multiplied by its global warming potential. Carbon dioxide has a 100-year global warming potential of one. By contrast, CH_4 has a global warming potential of 28 over 100 years,[2] meaning its global warming effect is 28 times greater than carbon dioxide on a molecule per molecule basis. Nitrous oxide has a global warming potential of 265 over 100 years and HFC-152a has a global warming potential of 506 over 100 years.[3]

Indicators of Climate Change in California

The California Environmental Protection Agency (CalEPA) released a report on May 9, 2018 detailing the indicators of climate change in California.[4] Indicators are scientifically based measurements that track trends in various aspects of climate change. The report presents 36 indicators that show how climate change is affecting California, which are grouped into four

[1] United States Environmental Protection Agency. Greenhouse Gas Emissions. Website: https://www.epa.gov/ghgemissions, Accessed April 28, 2020.

[2] Intergovernmental Panel on Climate Change, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp.

[3] Ibid.

[4] California Environmental Protection Agency. 2018. Indicators of Climate Change in California. May. Website: https://oehha.ca.gov/media/downloads/climate-change/report/2018caindicatorsreportmay2018.pdf, Accessed April 17, 2020.

categories: human-influenced drivers of climate change; changes in the State's climate; impacts of climate change on physical systems (oceans, lakes, snowpack); and impacts of climate change on biological systems (humans, vegetation, wildlife). A summary of the report is presented below followed by a table that summarizes the indicators of climate change in California.

Annual average air temperatures have increased throughout the State since 1895, with temperatures increasing at a consistently faster rate beginning in the 1980s. The last several years have seen record breaking temperatures due to climate change. Temperatures at night have increased even more than the daytime temperatures. Minimum temperatures (which generally occur at night) increased at a rate of 2.3 degrees Fahrenheit (°F) per century as compared to 1.3°F per century for maximum (daytime) temperatures.

Temperature is a basic physical factor that affects many natural processes and human activities. Warmer air temperatures alter precipitation and runoff patterns, affecting the availability of fresh water supplies. Temperature changes can also increase the risk of severe weather events such as heat waves and more intense storms. A wide range of impacts on ecosystems and on human health and well-being are associated with increased temperatures.

Warming temperatures and changing precipitation patterns have altered California's "physical systems" including the ocean, lakes, rivers, and snowpack. Winter snowpack and spring snowmelt runoff from the Sierra Nevada and southern Cascade Mountains provide approximately one-third of the State's annual water supply. Less snowpack accumulates when winter temperatures are warmer because more precipitation falls as rain instead of snow. As a result, the fraction of snowmelt runoff reaching the Sacramento River between April and July has decreased by about 9 percent since 1906. With less spring runoff, less water is available during summer months to meet the State's domestic and agricultural water demands. These reductions also affect the generation of hydroelectricity, impair cold-water habitat for certain fishes, and stress forest vegetation. The latter has consequences for long-term forest health and an associated increase in the risk of wildland fires.

Warming temperatures have also affected some of the largest glaciers in the Sierra Nevada, which have lost an average of about 70 percent of their area from the beginning of the 20th century to the present day. Glacier shrinkage worldwide is an important contributor to global sea level rise. Along the California coast, sea levels have generally risen since 1900. Sea level rise threatens existing or planned infrastructure, development, and ecosystems along California's coast.

Warming temperatures have affected terrestrial, marine, and freshwater ecosystems in California. Species responses include elevational or latitudinal shifts in range; changes in the timing of key plant and animal life cycle events (known as "phenology"); and changes in the abundance of species and in community composition. With continued climate change, many species may be unable to adapt or to migrate to suitable climates, particularly given the influence of other factors such as land use, habitat alteration, and emissions of pollutants.

Climate change can impact human well-being in many ways, including injuries and fatalities from extreme climatic events (e.g., heat waves and intense storms) and respiratory stress from poor air quality (e.g., asthma). Vector-borne pathogen transmission and disease patterns in California have also been altered; West Nile Virus poses the greatest mosquito-borne disease threat.

Warmer temperatures, declining snowpack, and earlier spring snowmelt runoff have created conditions for extreme, high severity wildfires that spread rapidly, as evidenced by the largest recorded wildfire in the State (Camp Fire) that occurred in November 2018. In parts of the Central Valley, certain fruits and nuts (specifically prunes and at least one variety of walnut) are maturing more quickly with warming temperatures, leading to earlier harvests. Shorter maturation times generally lead to smaller fruits and nuts, potentially causing a significant loss of revenue for growers and suppliers.

Table 3.7-1 provides and overview of the four indicators described in the CalEPA report.

TABLE 3.7-1: INDICATORS OF CLIMATE CHANGE IN CALIFORNIA

CLIMATE CHANGE DRIVERS	
	GHG emissions
	Atmospheric GHG concentrations
	Atmospheric black carbon concentrations
	Acidification of coastal waters
CHANGES IN CLIMATE	
	Annual air temperature
	Extreme heat events
	Winter Chill
	Cooling and heating degree days
	Precipitation
	Drought
IMPACTS OF CLIMATE CHANGE ON PHYSICAL SYSTEMS	
	Snowmelt runoff
	Snow-water content
	Glacier change
	Lake water temperature
	Coastal ocean temperature
	Sea level rise
	Dissolved oxygen in coastal waters
IMPACTS OF CLIMATE CHANGE ON BIOLOGICAL SYSTEMS	
ON HUMANS	Vector-borne diseases

	Heat-related mortality and morbidity
ON VEGETATION	Forest tree mortality
	Wildfires
	Ponderosa pine forest retreat
	Vegetation distribution shifts
	Changes in forests and woodlands
	Subalpine forest density
	Fruit and nut maturation time
ON WILDLIFE	Spring flight of Central Valley butterflies
	Migratory bird arrivals
	Bird wintering ranges
	Small mammal and avian range shifts
	Effects of ocean acidification on marine organisms (Type III)
	Nudibranch range shifts
	Copepod populations
	Sacramento River fall-run Chinook salmon abundance
	Cassin's auklet breeding success
	California sea lion pup demography

Note:
A "Type III" indicator is conceptual; no ongoing monitoring or data collection is in place for California.
Source: Indicators of Climate Change in California, California Environmental Protection Agency, May 2018.

Statewide Summary Report

The Statewide Summary Report presents an overview of the main findings from California's Fourth Climate Change Assessment.[5] The Summary Report aims to translate climate science into useful information for decision-makers and practitioners to catalyze action that will benefit regions, the ocean and coast, frontline communities, and tribal and indigenous communities. The Statewide Summary Report presents findings in the context of existing climate science, including strategies to adapt to climate impacts and key research gaps needed to spur additional progress on safeguarding California from climate change.

The Fourth Climate Change Assessment uses global climate models and Representative Concentration Pathways, as described in the Summary Report, to describe climate outcomes**.** Table 3.7-2 provides a qualitative description of the current understanding of historical and expected climate impacts in California

[5] Governor's Office of Planning and Research, California Energy Commission, and California Natural Resources Agency. 2019. California's Fourth Climate Change Assessment: Statewide Summary Report. January 16.

TABLE 3.7-2: HISTORICAL AND EXPECTED CLIMATE IMPACTS IN CALIFORNIA

CLIMATE IMPACT	HISTORIC TRENDS	FUTURE DIRECTION OF CHANGE	CONFIDENCE FOR FUTURE CHANGE
TEMPERATURE	Warming (last 100+ years)	Warming	Very High
SEA LEVELS	Rising (last 100+ years)	Rising	Very High
SNOWPACK	Declining (past 60+ years)	Declining	Very High
ANNUAL PRECIPITATION	No significant trends (last 100+ years)	Unknown	Low
INTENSITY OF HEAVY PRECIPITATION EVENTS	No significant trends (last 100 years)	Increasing	Medium-High
FREQUENCY OF DROUGHT	No significant trends (last 100+ years)	Increasing	Medium-High
FREQUENCY AND INTENSITY OF SANTA ANA WINDS	No significant trends (last 60+ years)	Unknown	Low
MARINE LAYER CLOUDS	Some downward trends; mostly not significant (last 60+ years)	Unknown	Low
ACRES BURNED BY WILDFIRE	Increasing (last 30+ years)	Increasing	Medium-High

Source: Statewide Summary Report, Table 3. Website: https://www.energy.ca.gov/sites/default/files/2019-07/Statewide%20Reports-%20SUM-CCCA4-2018-013%20Statewide%20Summary%20Report.pdf. Published January 16, 2019.

3.7.2 REGULATORY SETTING

Federal

The U.S. Supreme Court in *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 U.S. 05-1120) held that the EPA has the authority to regulate motor-vehicle GHG emissions under the federal Clean Air Act. The EPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the EPA issued a Final Rule that establishes the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities.

In 2014, the U.S. Supreme Court in *Utility Air Regulatory Group v. EPA* (134 S. Ct. 2427 [2014]) held that EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

On August 3, 2015, the EPA announced the Clean Power Plan, emissions guidelines for U.S. states to follow in developing plans to reduce GHG emissions from existing fossil fuel-fired

power plants (Federal Register Vol. 80, No. 205, October 23, 2015). On February 9, 2016 the Supreme Court stayed implementation of the Clean Power Plan due to a legal challenge from 29 states and in April 2017, the Supreme Court put the case on a 60-day hold and directed both sides to make arguments for whether it should keep the case on hold indefinitely or close it and remand the issue to the EPA. On October 11, 2017, the EPA issued a formal proposal to repeal the Clean Power Plan and on June 19, 2019, the EPA issued the Affordable Clean Energy Rule that replaces the Clean Power Plan.

On September 27, 2019, the EPA and the National Highway Safety Administration published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks (SAFE Vehicles Rule). Part One of the SAFE Vehicles Rule revokes California's authority to set its own GHG emissions standards and zero-emission vehicle mandates in California, which results in one emission standard to be used nationally for all passenger cars and light trucks that is set by the USEPA.

State

California Code of Regulations Title 24, Part 6

The CEC is responsible for implementing the California Code of Regulations (CCR) Title 24, Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings that were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. In 2008 the State set an energy-use reduction goal of zero-net-energy use of all new homes by 2020 and the CEC was mandated to meet this goal through revisions to the Title 24, Part 6 regulations.

The Title 24 standards are updated on a three-year schedule and since 2008 the standards have been incrementally moving to the 2020 goal of the zero-net-energy use. On January 1, 2020, the 2019 standards went into effect, which have been designed so that the average new home built in California will now result in zero-net-energy demand. The regulations are also designed to ensure that non-residential buildings will use about 30 percent less energy than the 2016 standards, due mainly to lighting upgrades. The 2019 standards encourage the use of battery storage, the use of heat pump water heaters, and also require more widespread use of LED lighting, as well as improvements to the thermal envelope of buildings through high performance attics, walls and windows. Finally, the 2019 standards require improvements to ventilation systems by requiring highly efficient air filters to trap hazardous air particulates as well as improvements to kitchen ventilation systems.

California Code of Regulations Title 24, Part 11

CCR Title 24, Part 11 (CALGreen) was developed in response to continued efforts to reduce GHG emissions associated with energy consumption. CALGreen is also updated every three years and the current version is the 2019 CALGreen that become effective on January 1, 2020.

The CALGreen Code contains requirements for construction site selection; stormwater control during construction; construction waste reduction; indoor water use reduction; material

selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency.

The CALGreen Code provides standards for bicycle parking, carpool/vanpool/electric vehicle spaces, light and glare reduction, grading and paving, energy efficient appliances, renewable energy, graywater systems, water efficient plumbing fixtures, recycling and recycled materials, pollutant controls (including moisture control and indoor air quality), acoustical controls, stormwater management, building design, insulation, flooring, and framing, among others. Implementation of the CALGreen Code measures reduces energy consumption and vehicle trips and encourages the use of alternative-fuel vehicles, which reduces pollutant emissions.

Some of the notable changes in the 2019 CALGreen Code over the prior 2016 CALGreen Code include an alignment of building code engineering requirements with the national standards that include anchorage requirements for solar panels; provision of design requirements for buildings in tsunami zones; an increase in available MERV for air filters from 8 to 13; an increase in electric vehicle charging requirements in parking areas; and the establishment of minimum requirements for use of shade trees.

California Advanced Clean Cars Program

On September 27, 2019, the EPA and the National Highway Safety Administration published the SAFE Vehicles Rule Part One: One National Program. The Part One Rule revokes California's authority to set its own GHG emissions standards and sets zero-emission vehicle mandates in California. To account for the effects of the Part One Rule, ARB released off-model adjustment factors on November 20, 2019 to adjust criteria air pollutant emissions outputs from the EMFAC model. These off-model adjustment factors are to be applied by multiplying the emissions calculated for light- and medium-duty vehicles by the adjustment factor. With the incorporation of these adjustment factors, operational emissions generated by light-duty automobiles, light-duty trucks, and medium-duty trucks associated with project-related vehicle trips at the year 2030 (a conservative year to use as the project buildout is year 2026) would be approximately 0.5 percent greater for ROG, 1.4 percent greater for particulate matter, 0.5 percent greater for NOX, and 1.6 percent greater for CO.

Executive Order B-30-15, Senate Bill 32, and Assembly Bill 197

The California Governor issued Executive Order B-30-15 on April 29, 2015 that aims to reduce California's GHG emissions 40 percent below 1990 levels by 2030. This executive order aligns California's GHG reduction targets with those of other international governments, such as the European Union that set the same target for 2030 in October 2014. This target will make it possible to reach the ultimate goal of reducing GHG emissions 80 percent under 1990 levels by 2050 that is based on scientifically established levels needed in the U.S.A to limit global warming below 2 degrees Celsius – the warming threshold at which scientists say there will likely be major climate disruptions such as super droughts and rising sea levels. AB 197 (September 8, 2016)

and SB 32 (September 8, 2016) codified into statute the GHG emissions reduction targets of at least 40 percent below 1990 levels by 2030 as detailed in Executive Order B-30-15. AB 197 also requires additional GHG emissions reporting that is broken down to sub-county levels and requires ARB to consider the social costs of emissions impacting disadvantaged communities.

Executive Order B-29-15

The California Governor issued Executive Order B-29-15 on April 1, 2015 and directed the State Water Resources Control Board to impose restrictions to achieve a statewide 25 percent reduction in urban water usage and directed the Department of Water Resources to replace 50 million square feet of lawn with drought tolerant landscaping through an update to the State's Model Water Efficient Landscape Ordinance. The Ordinance also requires installation of more efficient irrigation systems, promotion of greywater usage and onsite stormwater capture, and limits the turf planted in new residential landscapes to 25 percent of the total area and restricts turf from being planted in median strips or in parkways unless the parkway is next to a parking strip and a flat surface is required to enter and exit vehicles. Executive Order B-29-15 would reduce GHG emissions associated with the energy used to transport and filter water.

Executive Order B-48-18 and Assembly Bill 2127

The California Governor issued Executive Order B-48-18 on January 26, 2018 that orders all state entities to work with the private sector to put at least five million zero-emission vehicles on California roads by 2030 and to install 200 hydrogen fueling stations and 250,000 electric vehicle chargers by 2025. Currently there are approximately 350,000 electric vehicles operating in California, which represents approximately 1.5 percent of the 24 million vehicles total currently operating in California. Implementation of Executive Order B-48-18 would result in approximately 20 percent of all vehicles in California to be zero emission electric vehicles. AB 2127 was codified on September 13, 2018 and requires the CEC to work with the ARB to determine Statewide electric vehicle charging infrastructure needs to meet the State goal of at least five million zero emission vehicles in use by 2030.

Assembly Bill 1493

AB 1493 (also known as the Pavley Bill named after its author Fran Pavley) was enacted on July 22, 2002 and required ARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. In 2004, ARB approved the "Pavley I" regulations limiting the amount of GHGs that may be released from new passenger automobiles that are being phased in between model years 2009 through 2016. By 2016, these regulations reduced GHG emissions by 30 percent from 2002 levels. In June 2009, the EPA granted California the authority to implement GHG emission reduction standards for light duty vehicles, and in September 2009, amendments to the Pavley I regulations were adopted by ARB and implementation of the "Pavley I" regulations started in 2009.

The second set of regulations "Pavley II" was developed in 2010 and is being phased in between model years 2017 through 2025 with the goal of reducing GHG emissions by 45 percent by 2020

as compared to the 2002 fleet. The 2020 goal was met early in 2016.[6] The Pavley II standards were developed by linking the GHG emissions and formerly separate toxic tailpipe emissions standards previously known as the "LEV III" (third stage of the Low Emission Vehicle standards) into a single regulatory framework. The new rules reduce emissions from gasoline-powered cars as well as promote zero-emissions auto technologies such as electricity and hydrogen, and through increasing the infrastructure for fueling hydrogen vehicles. In 2009, the EPA granted California the authority to implement the GHG standards for passenger cars, pickup trucks, and sport utility vehicles and these GHG emissions standards are currently being implemented nationwide. However, EPA has performed a midterm evaluation of the longer-term standards for model years 2022-2025, and based on the findings of this midterm evaluation, the EPA has proposed to amend the corporate average fuel economy and GHG emissions standards for light vehicles for model years 2021 through 2026. The EPA's proposed amendments do not include any extension of the legal waiver granted to California by the 1970 Clean Air Act and which has allowed the State to set tighter standards for vehicle pipe emissions than the EPA standards. On September 20, 2019, California filed suit over the EPA decision to revoke California's legal waiver that has been joined by 22 other states.

California Executive Orders S-3-05 and S-20-06, Assembly Bill 32

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to 1) 2000 levels by 2010; 2) 1990 levels by the 2020; and 3) 80 percent below the 1990 levels by the year 2050.

In 2006, this goal was further reinforced with the passage of AB 32, the Global Warming Solutions Act of 2006, which created a comprehensive, multi-year program to reduce GHG emissions in California. AB 32 required the ARB to develop a Climate Change Scoping Plan that describes the approach California will take to reduce GHGs to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan was first approved by the ARB in 2008 and must be updated every five years. The First Update to the Climate Change Scoping Plan was approved by the Board on May 22, 2014.

In 2016, the Legislature passed SB 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation AB 197, which provides additional direction for developing the Scoping Plan. The second update to the Scoping Plan was published by ARB in November 2017. The 2017 Climate Change Scoping Plan identifies how the State can reach the 2030 climate target to reduce GHG emissions by 40 percent from 1990 levels, as set by Executive Order B-30-15 and codified by SB 32. The 2017 Climate Change Scoping Plan also describes how the State can substantially advance toward the 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

[6] California Office of the Governor. 2019. Governor Newsom Announces Climate Pollution Continues to Drop Below 2020 Target While State's Economy Grows. August 12. Website: https://www.gov.ca.gov/2019/08/12/governor-newsom-announces-climate-pollution-continues-to-drop-below-2020-target-while-states-economy-grows/. Accessed May 29, 2020.

Senate Bill 375

SB 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing ARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles for 2020 and 2035. In addition, SB 375 directs each of the State's 18 major Metropolitan Planning Organizations to prepare a "sustainable communities strategy" that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan. On September 23, 2010, ARB adopted final regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. In 2018, the State was not on track to meet the 2020 goal.[7] At time of writing of this EIR, there has not been an update on whether the 2020 goal has yet been met.

Senate Bill 1383

Signed September 19, 2016, SB 1383 is a supplement the GHG reduction strategies in the Scoping Plan to consider short-lived climate pollutants, including black carbon and CH_4. Black carbon is the light-absorbing component of fine particulate matter produced during incomplete combustion of fuels (e.g., on-and off-road transportation, residential wood burning, charbroiling, and industrial processes). SB 1383 required ARB, no later than January 1, 2018, to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve the following reductions below 2013 levels by 2030, including CH_4 by 40 percent, hydrofluorocarbon gases by 40 percent, and black carbon by 50 percent. This Bill also establishes targets for reducing organic waste in landfills (see Section 3.15, Utilities and Service Systems). In response to SB 1383, ARB adopted the Final Proposed Short-Lived Climate Pollutant Strategy on March 14, 2017.

California Renewables Portfolio Standard (SB 1078, SB 107, SB 2, SB 350, SB 100)

The California Renewables Portfolio Standard was established in 2002 under SB 1078, accelerated in 2006 under SB 107, expanded in 2011 under SB 2, and enhanced in 2015 by SB 350. The Renewables Portfolio Standard program requires investor-owned utilities, publicly owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 50 percent of total procurement by 2030.[8] SB 100, passed in September 2018, accelerates the Renewables Portfolio Standard to achieve a 50 percent renewable resources target by 2026, a 60 percent target by 2030, and set a standard for zero-carbon electricity by 2045.

California Environmental Quality Act, SB-97

Pursuant to the requirements of SB 97, the Resources Agency has adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted CEQA Guidelines provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and

[7] California Air Resources Board. 2018. 2018 Progress Report: California's Sustainable Communities and Climate Protection Act. November.

[8] California Public Utilities Commission. California Renewables Portfolio Standard. Website: http://www.cpuc.ca.gov/rps/. Accessed April 28, 2020.

climate change impacts. To date, a variety of air districts have adopted quantitative significance thresholds for GHGs.

Regional

Plan Bay Area 2040: Strategy for a Sustainable Region

On July 18, 2013, the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) adopted Plan Bay Area 2040, an integrated transportation and land-use strategy through 2040 that marks the nine-county region's first long-range plan to meet the requirements of SB 375. Working in collaboration with cities and counties, the Plan Bay Area 2040 advances initiatives to expand housing and transportation choices, create healthier communities, and build a stronger regional economy. Plan Bay Area 2040 remains on track to meet a 16 percent per capita reduction of GHG emissions by 2035 and a 10 percent per capita reduction by 2020 from 2005 conditions.[9]

BAAQMD 2050 Climate Resolution Goals

In 2013, the BAAQMD Board of Directors approved a Resolution (No. 2013-11) adopted a GHG goal and a commitment to developing a regional climate protection strategy that commits to the following.

- Setting a goal for the Bay Area region to reduce GHG emissions to 80 percent below 1990 levels by 2050.
- Developing a Regional Climate Protection Strategy to make progress toward the 2050 goal and to complement existing climate action efforts at the State, regional, and local levels.
- Preparing a work program to guide the BAAQMD climate protection activities in the near term.

BAAQMD 2017 Clean Air Plan

BAAQMD adopted the 2017 Clean Air Plan on April 19, 2017 to comply with State air quality planning requirements set forth in the California Health & Safety Code. The 2017 Clean Air Plan includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as PM, ozone, and TACs, to reduce emissions of methane and other "super-greenhouse gases" that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

The proposed control strategy for the 2017 Clean Air Plan consists of 85 specific control measures targeting a variety of local, regional, and global pollutants. The control measures have been developed for stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants. Implementation of some of the control measures could involve retrofitting, replacing, or installing new air pollution

[9] Metropolitan Transportation Commission and Association of Bay Area Governments. 2017. Plan Bay Area 2040. July 26.

control equipment, changes in product formulations, or construction of infrastructure that have the potential to create air quality impacts.

The BAAQMD CEQA Guidelines set forth criteria for determining consistency with the Clean Air Plan. In general, a project is considered consistent if 1) the project supports the primary goals of the Clean Air Plan, 2) includes control measures and 3) does not interfere with implementation of the Clean Air Plan measures.

BAAQMD 2017 CEQA Air Quality Guidelines

The purpose of the CEQA Air Quality Guidelines is to assist lead agencies in evaluating air quality impacts of projects and plans proposed in the San Francisco Bay Area Air Basin. The Guidelines contain instructions on how to evaluate, measure, and mitigate air quality impacts generated from land development construction and operation activities. The Guidelines focus on criteria air pollutant, GHG, toxic air contaminant, and odor emissions generated from plans or projects and are intended to help lead agencies navigate through the CEQA process. The Guidelines for implementation of the Thresholds are for information purposes only to assist local agencies. Recommendations in the Guidelines are advisory and should be followed by local governments at their own discretion.

The most recent version of the CEQA Air Quality Guidelines were published May 2017, and includes revisions made to address the Supreme Court's opinion (*California Building Industry Association v. Bay Area Air Quality Management District*, December 2015).[10] The May 2017 Guidelines update does not address outdated references, links, analytical methodologies or other technical information that may be in the Guidelines or Thresholds Justification Report. The BAAQMD is currently working to update any outdated information in the Guidelines.

Local

Sausalito 2040 General Plan

The proposed 2040 General Plan includes the following relevant policies and programs that assist in reducing GHG emissions:

[10] In March 2012, the Alameda County Superior Court ordered BAAQMD to set aside use of the significance thresholds within the BAAQMD 2010 CEQA Guidelines and cease dissemination until they complete an assessment of the environmental effects of the thresholds in accordance with CEQA. The Court found that the thresholds, themselves, constitute a "project" for which environmental review is required. In August 2013, the First District Court of Appeal reversed the Alameda County Superior Court's decision. The Court held that adoption of the thresholds was not a "project" subject to CEQA because environmental changes that might result from their adoption were too speculative to be considered "reasonably foreseeable" under CEQA. In December 2015, the California Supreme Court reversed the Court of Appeal's decision and remanded the matter back to the appellate court to reconsider the case in light of the Supreme Court's opinion.

Environmental Quality Element

Policy EQ-5.1: Implement Research. Incorporate the growing body of climate change research to improve air quality in Sausalito due to emissions' negative impact on both local air quality and global climate.

Program EQ-5.1.1: Update CAP. Continue to update Sausalito's Climate Action Plan (CAP) with new data as well as updated policies and programs.

Program EQ-5.1.2: Update LEAP. Continue to update Sausalito's Low Emissions Action Plan (LEAP) with new data as well as updated policies and programs.

Program EQ-5.1.3: Emissions Targets. Update City targets for Greenhouse Gas emissions to align with the most ambitious County, State, or Federal targets.

Program EQ-5.1.4: Urban Form. Encourage land use policies that promote pedestrian and bicycle uses to reduce automobile use, improve air quality, and reduce impacts of climate change.

Program EQ-5.1.5: Clean-Burning Fuels. Encourage business and residential use of clean-burning fuels.

Program EQ-5.1.6: City Vehicles. Require vehicles purchased by the City to have low emissions and do routine maintenance to ensure low emissions.

Program EQ-5.2.2: Circulation and Parking Element Programs. Implement programs identified in the Circulation and Parking Element which could reduce vehicular emissions.

Program EQ-5.2.5: Electrify Equipment. Require city usage and promote resident usage of electric landscape equipment where possible, for example replacing gasoline-powered leaf blowers with electric blowers.

Program EQ-5.2.6: Reduced-Emission Equipment. Give preference to contractors and contracts for services to firms that use reduced-emission equipment and/or practice sustainable operations.

Program EQ-5.2.7: Climate Change Education. Promote local, county, State, and federal standards among Sausalito residents and businesses, informing them of the short- and long-term effects of reducing emissions and improving air quality.

Sustainability Element

Policy S-2.1: Climate Action Plan. Pursue programs recommended by City's Climate Action Plan (CAP) and continue to update and revise document.

Policy S-2.2: Low Emissions Action Plan. Pursue programs recommended by City's Low Emissions Action Plan (LEAP) and continue to update and revise document.

Program S-2.3.1: Street Light Conversion. Consider converting City incandescent streetlights to Light Emitting Diode (LED) or other less energy intensive fixtures in order to reduce energy consumption and costs.

Program S-2.3.2: Passive Solar Design. Encourage new development to utilize passive solar energy methods to reduce energy consumption to the extent feasible consistent with other design considerations, such as view retention, glare, and other requirements.

Program S-2.3.3: Advanced Community Energy installation. Install an Advanced Community Energy (ACE) system (with solar canopy, energy storage, and EV chargers), ideally at public parking area near Ferry Landing.

Program S-2.3.5: Promote home generation financing. Promote financing and loan programs for renewable energy generation in residential and nonresidential projects.

Program S-2.3.7: Marin Clean Energy. Promote Marin Clean Energy to residents and businesses, particularly MCE Deep Green, and purchase MCE Deep Green for all city facilities.

Program S-2.3.9: Streamline Home Generation Permits. Streamline permitting for home-based renewal energy generation (i.e. solar roofs).

Program S-2.3.10: City Solar Energy. Install solar energy systems at all suitable city facilities.

Program S-2.3.11: Leadership Culture. Assemble a climate-focused City committee to recommend creative and cutting-edge projects that will cost-effectively reduce greenhouse gases and other emissions in the City.

Program S-2.3.13: Promote Local Trips. Work with the Business Advisory Committee, Hospitality Business Development Committee, and other City committees and commissions to identify policies that would promote local economic opportunity and reduce the number and length of automobile trips. These policies should be linked to economic sustainability, land use and transportation investments.

Program S-2.3.14: Alternative Fuels. Promote implementation of alternative fuel sources by design, such as exterior electrical outlets or solar chargers.

Program S-2.3.15: Maintain Database. Continue to track community-wide and City operation greenhouse gas and other emissions, as well as solid waste, energy, environmental, and economic data. Periodically update and incorporate new methodologies as available. Ensure compatibility with Marin County databases.

Policy S-4.2. Solid Waste Disposal. Strive to reduce the amount of solid waste generated in Sausalito in accordance with State law and Zero Waste Marin goals.

Policy S-4.3. Sustainable Landscapes. Promote landscapes and hardscapes that follow sustainable practices.

Policy S-4.4: Natural Gas Replacement. Promote electrification, or evaluate alternative renewable energy sources, for building systems that currently use natural gas for heating.

Policy S-5.1: Energy-Conscious Developments. Promote and enforce development standards that minimize energy use.

Policy S-5.2: City Efficiency. Take actions to minimize City's energy usage and provide leadership in conservation.

Program S-6.2.1: Recovered Wood. Increase outreach to marinas and those applying for landscaping or demolition permits of Zero Waste Marin's wood recycling programs to maximize building salvage.

Circulation and Parking Element

CP-2.1.9: Electric Vehicle Plan. Implement the Electric Vehicle sections of the Low Emissions Action Plan and the Climate Action Plan, including installation of Electric Vehicle charging stations where appropriate.

CP-2.3.3: Charging Station Mandate. Update the Zoning Ordinance to require the provision of charging stations and bike parking at new commercial buildings.

Sausalito Municipal Code

Chapter 8.18 of the Municipal Code (Energy Code) adopts the 2019 California Energy Code, Title 24, Part 6, and incorporates the code into the Sausalito Municipal Code.

Chapter 8.52 (Water Conserving Landscaping) contains regulations to support water conservation. All landscaping proposed for review and/or approval by the City shall comply with the provisions of the Water conservation Ordinance 326 adopted by the Marin Municipal Water District.

Chapter 8.54 (Construction and Demolition Waste Recovery) promotes the redirection of recyclable materials generated during construction away from landfills. All project applicants are required to complete and submit a recycling management plan to estimate the volume of debris to be generated during construction and the estimated amount of debris that would be sent to the landfill. The intent of Chapter 8.54 is to divert at least 50 percent of all debris waste from most construction, demolition, and renovation projects away from local landfills.

Chapter 11.12 (Preservation of Trees and Views) acknowledges the contribution of trees to the character and beauty of the city and provides guidelines to address potential conflicts between preservation of trees and view-related values. This chapter also encourages and promotes the planting and proper husbandry of trees throughout the city.

Chapter 11.30 (Single Use Carryout Bags) is intended to reduce the amount of plastic bag pollution in the environment, reduce the impacts of paper bags which cause other forms of pollution and greenhouse gas emissions, and encourage reusable bags by consumers and retailers.

Chapter 17.28 (Trees, Shrubs and Plants) describes protections for trees in the public realm, including prohibitions against cutting, pruning, injuring, removing or spraying public trees, as well as prohibitions against attaching appurtenances or interfering with work on trees by city employees.

Sausalito Climate Action Plan

The purpose of the city Climate Action Plan (CAP) is to compile existing and potential strategies (i.e., actions, projects, and programs) that the city's government and the community can use to address climate change. The CAP incorporates the city's 2005 and 2010 Greenhouse Gas Emission Inventories, which identified sources of greenhouse gas emissions generated by the community and the local government; estimates how these emissions may change over time under a business-as-usual forecast and provides energy use, transportation, land use, waste, water, wastewater, and natural system strategies necessary to minimize Sausalito's impacts on climate change and meet the city's adopted greenhouse gas emissions reduction target of 15 percent below 2005 levels by 2020 (Resolution 5365). Per discussion in Section 3.7.3 below, the city has already demonstrated a reduction of 16 percent from 2005 levels. The CAP includes the following strategies and actions to reduce greenhouse gas emissions:

CAP 1-1: Residential Green Building Ordinance. Update building codes to mandate higher building energy performance in newly constructed residential buildings.

CAP 1-2: Commercial Green Building Ordinance. Update building codes to mandate higher building energy performance in newly constructed non-residential buildings.

CAP 1-3: Solar Energy. Encourage residents and business to install solar energy systems.

CAP 1-4: Residential Energy Efficiency. Participate in rebate and incentive programs such as Energy Upgrade California and promote existing rebates and programs offered through the Marin Energy Watch Partnership, Marin Clean Energy, and PG&E.

CAP 1-5: Commercial Energy Efficiency. Promote commercial and industrial energy efficiency and demand response programs provided through the Marin Energy Watch Partnership and Marin Clean Energy.

CAP 1-6: Energy Audits. Require energy audits for residential and commercial buildings prior to completion of sale or within a specified period of time after sale is transacted.

CAP 1-7: Residential Electricity. Encourage homeowners to purchase 100 percent renewable electricity, such as Marin Clean Energy's Deep Green energy program.

CAP 1-8: Public Lighting. Consider replacing all streetlights, traffic signals, and park lighting with energy-efficient LED lighting.

CAP 1-9: Municipal Energy Efficiency Projects. Identify and consider complete energy-efficiency projects, such as those identified by the Marin Energy Management Team.

CAP 1-10: Municipal Energy Efficiency Protocols and Equipment. Consider installation of energy management software and implement energy efficiency protocols such as turning off lights and computers when not in use and reducing energy use through thermostat control. Consider amending the city's purchasing ordinance to include a sustainable purchasing policy that emphasizes recycled materials and Energy Star-certified appliances and office equipment.

CAP 1-11: Municipal Solar. Consider a feasibility study on the installation of solar or other renewable energy projects at select City facilities, such as the Martin Luther King School facilities and City parking lots, and consider installation when feasible funds are budgeted by the city council where feasible. Work with Marin Clean Energy to identify and consider construction of a solar energy site when funds are budgeted by the city council.

CAP 1-12: Municipal Electricity. Purchase 100 percent renewable electricity for all City facilities, such as Marin Clean Energy's Deep Green energy program.

CAP 2-1: Bicycle and Pedestrian Transportation. Encourage bicycling and walking as a safe and efficient means to travel around Sausalito.

CAP 2-2: School Transportation. Encourage bicycling, walking, carpooling, and taking public transit to school.

CAP 2-3. Carpooling. Support and promote ride sharing programs.

CAP 2-4: Public Transportation. Support and promote public transportation.

CAP 2-5: Teleworking. Support and encourage employers to implement green commute alternatives including teleworking, as outlined by the Transportation Authority of Marin.

CAP 2-6 Electric Vehicles. Increase ownership of electric vehicles.

CAP 2-7: Market Price Parking. Establish market price parking at metered parking spaces to eliminate cruising for available spaces.

CAP 2-8: High-Efficiency City Vehicles. Consider the purchase or lease of low or zero-emissions vehicles and the most fuel efficient models possible for the city fleet, including construction vehicles.

CAP 2-9: City Employee Commute. Provide city employees with incentives to use alternatives to single occupant auto commuting, such as transit incentives, bicycle facilities, ridesharing services and subsidies, flexible schedules, and telecommuting when practical.

CAP 3-1: Zero Waste. Increase the waste diversion rate to 86 percent by the year 2020.

CAP 3-2: Zero Waste in Government Operations. Increase diversion of waste produced by government operations to 86 percent by the year 2020.

CAP 4-1: Indoor Water Efficiency and Conservation.

CAP 4-2: Outdoor Water Efficiency and Conservation. Work with Marin Municipal Water district to promote existing and new rebates for water-efficient landscaping and irrigation systems and controllers. Support additional water-efficient landscape requirements if needed to meet water conservation targets.

CAP 4-3: Rainwater Catchment. Promote existing and new rebates for water storage facilities. Review existing building and zoning codes and permitting procedures and revise as necessary to encourage cisterns and other rainwater storage facilities.

CAP 4-4: Greywater. Review existing building and zoning codes and permitting procedures and revise as necessary to encourage cisterns and other rainwater storage facilities.

CAP 4-5: Energy Production from Wastewater. Work with the Sausalito-Marin City Sanitation District to implement methane capture for energy production at the wastewater treatment plant.

CAP 4-6: Municipal Water Conservation. Assess, maintain and repair existing plumbing fixtures, pipes, and irrigation systems in all City buildings, facilities and landscaping to minimize water use.

CAP 4-7: Municipal Wastewater Pumps. Evaluate the City's wastewater pumping stations and replace inefficient motors and pumps with more efficient units.

CAP 5-1: Tree Cover. Increase Sausalito's tree cover.

CAP 5-2: Tree Planting. Increase the number of City, park and street trees.

3.7.3 GREENHOUSE GAS INVENTORIES

State of California Inventory

Based on the ARB annual Statewide GHG emission inventory, in 2017, emissions Statewide were 424.1 million metric tons (MMT) of CO_2e, 17.3 MMT CO_2e lower than 2015 levels, and just below the 2020 target of 431 MMT CO_2e.[11] The largest source of GHG emissions in California is the transportation sector. Direct emissions from the tailpipe of cars, trucks, off-road transportation sources, intrastate aviation, and other sources, accounted for 40 percent of the inventory in 2017. Emissions from the remaining sectors in the 2017 inventory are as follows: industrial sector (21 percent); electricity sector (15 percent); commercial and residential fuel combustion (10 percent); agricultural sector (eight percent); high global warming potential (five percent); and recycling and waste (2 percent).

Bay Area Inventory

The BAAQMD estimated that in 2011, 86.6 MMT of CO_2e GHGs were emitted by the San Francisco Bay Area (83.9 MMT of CO_2e were emitted within the Bay Area Air District and 2.7 MMT of CO_2e were indirect emissions from imported electricity).[12] In the Bay Area, fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of the Bay Area's GHG emissions, accounting for 39.7 percent of the Bay Area's 86.6 MMT of GHG emissions in 2011. Industrial and commercial sources were the second largest contributors of GHG emissions with about 35.7 percent of total

[11] California Air Resources Board. 2019. California's 2000-2017 Greenhouse Gas Emissions Inventory, 2019 Edition. 2000-2017 Trends Figure Data. August.

[12] Bay Area Air Quality Management District. 2015. Bay Area Emissions Inventory Summary Report: Greenhouse Gases Base Year 2011. January. Website: http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/Emission%20Inventory/BY2011_GHGSummary.ashx?la=en, Accessed April 19, 2020.

emissions. Domestic sources (e.g., home water heaters, furnaces, etc.) account for about 7.7 percent of the Bay Area's GHG emissions, and energy production accounted for 14.0 percent. Off-road equipment and agriculture make up the remainder with approximately 1.5 percent and 1.5 percent, respectively, of the total Bay Area 2011 GHG emissions, respectively. The inventory is broken down by county, where Marin County emissions accounted for approximately 2.77 percent of total emissions within the Bay Area (2.4 MMT of CO_2e). As in many Bay Area counties, most Marin County emissions are from transportation (cars and trucking), accounting for approximately 56.3 percent of the county's emissions. About 40 percent of the entire Bay Area inventory is attributable to transportation.

City of Sausalito

The GHG emissions generated by activities taking place in Sausalito have been quantified in the City of Sausalito Community and Government Operations Greenhouse Inventory for 2016.[13] In 2005, the activities taking place by the Sausalito community resulted in approximately 72,316 metric tons of CO_2e ($MTCO_2e$). In 2016, those activities resulted in approximately 60,659 $MTCO_2e$, which equates to a reduction of 16 percent from 2005 levels. This means that the City has met the State goal to reduce emissions 15 percent below the 2005 baseline by 2020.

Dividing the 2016 community-wide GHG emissions (60,659 $MTCO_2e$) by the 2016 service population (residents plus jobs, i.e., 12,787 persons[14]) yields a result of 4.74 $MTCO_2e$ per capita for Sausalito in 2016.

The community inventory tracks emissions in seven sectors:

- The **Residential** sector includes emissions generated by the use of electricity, natural gas, and propane in homes.
- The **Commercial & Industrial** sector includes emissions generated by the use of electricity and natural gas in commercial and industrial buildings. Emissions generated by schools, governments, and public agencies are included in this sector.
- The **Transportation** sector includes emissions from on-road vehicles travelling on local roads within the city limits and a portion of emissions generated by vehicular travel on State highways within Marin County.
- The **Waste** sector includes emissions generated by the decomposition of solid waste deposited in landfills located outside the city's borders.
- The **Off-Road Vehicles & Equipment** sector includes emissions from vehicles and equipment used for construction and lawn and garden activities.

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[13] City of Sausalito. 2018. Community and Government Operations Greenhouse Gas Inventory for 2016. December. Website: https://marinclimate.org/wp-content/uploads/2019/09/Sausalito-2016-GHG-Inventory-Report.pdf. Accessed April 21, 2020.

[14] Population of 7,227 in 2016 (California Department of Finance) + 5,560 Jobs in 2016 (United States Census Bureau, Center for Economic Studies. OnTheMap Version 6.7: Work Area Profile Analysis. Website: https://onthemap.ces.census.gov/. Accessed April 28, 2020.)

- The **Water** sector inventories emissions generated by the use of electricity in treating, conveying, and distributing water from the water source to water users in the community.
- The **Wastewater** sector includes emissions generated by the treatment of wastewater as well as electricity used to convey and treat wastewater.

3.7.4 THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines Appendix G, the proposed project will have a significant impact related to GHG emissions if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

Most individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence on climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even when individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects per CEQA Guidelines Section 15064(h)(1).

The BAAQMD CEQA Guidelines have identified emissions-based thresholds that apply to the evaluation of General Plans. These thresholds are based on meeting the AB 32 GHG emissions reductions targets. BAAQMD adopted an efficiency measurement that can be applied to the evaluation of plans in Bay Area jurisdictions. For General Plans, BAAQMD provides two approaches to determining significance of GHG emissions for plans. The two approaches are as follows:

1. Consistency with a qualified GHG reduction plan; or
2. Meets the efficiency plan threshold of 6.6 $MTCO_2e$ per service population per year.

Regarding approach 1, according to the BAAQMD Guidelines, a qualified GHG reduction plan is one that includes the following elements: quantifying communitywide GHG emissions for an existing baseline level and projected GHG emissions from a business-as-usual, no-plan, forecast scenario of the horizon year. The baseline year is based on the existing growth pattern defined by an existing General Plan. The projected GHG emissions are based on the emissions from the existing growth pattern or General Plan through Year 2020, and if different, the year used for the forecast. If the forecast year is beyond 2020, BAAQMD recommends doing a forecast for 2020 to establish a trend. The forecast does not include new growth estimates based on a new or draft General Plan. Since the CAP did not analyze the forecast year 2040 for the proposed 2040

General Plan, nor did it analyze the proposed land use development assumptions provided in the proposed 2040 General Plan, it does not meet the BAAQMD Guidelines for a qualified GHG reduction plan.

Regarding approach 2, the 6.6 $MTCO_2e$ per service population was based on the reduction goals codified in AB 32, which call for a reduction of GHG emissions to 1990 levels by 2020, but do not account for SB 32 and AB 197 that codified the goal of reducing GHG emissions 40 percent below 1990 levels by 2030. This target is an interim target in support of the goal of reducing GHG emissions 80 percent under 1990 levels by 2050. As such, the second approach is not appropriate to analyze the proposed 2040 General Plan, which has a buildout year of 2040.

The 2017 Scoping Plan was prepared to address implementation of the GHG emissions reduction targets provided in SB 32 and AB 197.[15] The Plan recommends that local governments utilize GHG reduction goals of six $MTCO_2e$ per service population for the year 2030 and two $MTCO_2e$ per service population for the year 2050. Based on linear interpolation of these two GHG reduction goals, this would result in a GHG reduction goal of four $MTCO_2e$ per service population for the year 2040. Utilization of the thresholds provided in the 2017 Scoping Plan represent the rate of emission reductions necessary for the City to achieve a fair share of statewide GHG reductions necessary to meet the State's long-term GHG reduction targets.

Therefore, the threshold of significance for the purpose of this analysis is whether buildout of the proposed 2040 General Plan would exceed 4 $MTCO_2e$ per service population for the year 2040.

3.7.5 ANALYSIS, IMPACTS, AND MITIGATION MEASURES

Impacts related to GHG emissions resulting from implementation of the proposed 2040 General Plan are discussed below. The California Emissions Estimator Model (CalEEMod Version 2016.3.2) was used to compute GHG emissions for the project buildout year of 2040 (see Appendix B).

Impact GHG-1 **Development facilitated by the proposed 2040 General Plan would not directly or indirectly generate GHG emissions that may have a significant impact on the environment.**

This impact discussion addresses the generation of GHG emissions from construction and operational emissions related to implementation of the proposed 2040 General Plan.

Construction Emissions

Construction activities associated with future development under the proposed 2040 General Plan would generate temporary short-term GHG emissions from heavy-duty construction equipment, worker trips, and material delivery and hauling. On-site activities would consist of the operation of off-road construction equipment, as well as on-site truck travel (e.g., haul

[15] California Air Resources Board. 2017. California's 2017 Climate Change Scoping Plan. November. Website: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed April 21, 2020.

trucks, dump trucks, and concrete trucks). Off-site sources would include emissions from construction vehicles used for hauling materials and worker vehicle trips.

The BAAQMD has not established thresholds of significance for GHG emissions resulting from construction activities at the General Plan level. Rather, BAAQMD encourages the incorporation of best management practices to reduce GHG emissions during construction. As discussed in Section 3.2, Air Quality, new development facilitated by the proposed 2040 General Plan would be required to comply with BAAQMD's best management practices for reducing construction emissions of PM_{10} and $PM_{2.5}$. The provisions to limit idling set forth in BAAQMD's best management practices would also reduce GHG emissions during construction.

The proposed 2040 General Plan includes policies and programs specifically designed to address GHG emissions during project construction activities. Program S-6.2.1 calls for the City to increase outreach to marinas and those applying for landscaping or demolition permits of Zero Waste Marin's wood recycling programs to maximize building salvage. Program EQ-5.2.6 requires the City to give preference to contractors and contracts for services to firms that use reduced-emission equipment and/or practice sustainable operations.

The Sausalito Municipal Code contains rules and regulations to reduce GHG emissions during construction. Chapter 8.54 promotes the redirection of recyclable materials generated during construction away from landfills. All project applicants are required to complete and submit a recycling management plan to estimate the volume of debris to be generated during construction and the estimated amount of debris that would be sent to the landfill. The intent of Chapter 8.54 is to divert at least 50 percent of all debris waste from most construction, demolition, and renovation projects away from local landfills.

Future development under the proposed 2040 General Plan would comply with the requirements of the proposed 2040 General Plan policies and programs related to GHG emissions as well as applicable BAAQMD regulations and standards in the Sausalito Municipal Code. Therefore, future development under the proposed 2040 General Plan at construction would not result in significant adverse effects related to GHG emissions. As such, implementation of the proposed 2040 General Plan would result in a ***less than significant*** impact relative to this topic.

Operational Emissions

The operational GHG emissions from buildout of the proposed 2040 General Plan have been calculated through use of the CalEEMod model (see Appendix B). The operational GHG emissions are based on proposed 2040 General Plan Buildout conditions within the Sausalito Planning Area at 2040: 5,134 dwelling units, 1,265,960 square feet of industrial, and 1,595,484 square feet of commercial uses (see Section 2, Project Description). The GHG emissions forecast assumes that several State and local GHG reduction measures will be implemented by 2040, including the following actions:

- Implementation of the Renewable Portfolio Standard, which requires electricity providers to increase the portion of energy that comes from renewable sources to 60 percent by 2030 and zero-carbon by 2045;
- Implement of the most current Title 24 building energy use standards;
- Reduction of indoor residential and indoor/outdoor commercial lighting energy usage as detailed in AB 1109;
- Implementation of light and heavy-duty vehicle fleet regulations, including Pavley standards;
- Adoption of Complete Streets standards to expand pedestrian and bicycle infrastructure; and
- Improvements to public transit and ridesharing programs.

As detailed in Section 2, Project Description, the City is anticipated to have a population of 7,883 persons by 2040 and 7,421 total jobs,[16] which results in a total service population of 15,304 in the year 2040.

Table 3.7-3 shows the GHG emissions generated from the entire city for the year 2040. As detailed above in Section 3.7.4, the 2017 Scoping Plan was utilized to develop the GHG emissions threshold of 4.0 $MTCO_2e$ per service population per year.

As shown in Table 3.7-3, the Citywide GHG emissions per service population are projected to be 3.8 $MTCO_2e$ in 2040 with implementation of all potential development that may occur in the proposed 2040 General Plan. The GHG emissions per service population for the proposed 2040 General Plan buildout conditions would not exceed the 4.0 $MTCO_2e$ per service population threshold. The threshold was calculated based on GHG emissions thresholds provided in the Scoping Plan. The threshold represents the rate of emission reductions necessary for the city to achieve a fair share of statewide GHG reductions necessary to meet the State's long-term GHG reduction targets.

TABLE 3.7-3: CITYWIDE GHG EMISSIONS FORECAST, YEAR 2040 GENERAL PLAN BUILDOUT

CATEGORY	YEAR 2040 CITYWIDE WITH PROPOSED 2040 GENERAL PLAN (MTCO2E)
Area Sources	683
Energy Usage	16,056
Transportation	37,981
Solid Waste	1,410
Water and Wastewater	1,662
ANNUAL TOTAL	**57,791**

[16] 5,659 Jobs in 2017 (California Department of Finance) + 1,762 new employees from Buildout of the General Plan.

CATEGORY	YEAR 2040 CITYWIDE WITH PROPOSED 2040 GENERAL PLAN (MTCO2E)
SERVICE POPULATION (POPULATION+JOBS)	15,304
EMISSIONS PER SERVICE POPULATION	3.8
THRESHOLD	4.0
THRESHOLD EXCEEDED?	**No**

Source: CALEEMOD Model Version 2016.3.2 (see Appendix B).

Furthermore, the proposed 2040 General Plan includes policies and programs specifically designed to address GHG emissions during operation. Program EQ-5.1.5 requires the city to encourage business and residential use of clean-burning fuels. Program EQ-5.2.6 requires the city to give preference to contractors and contracts for services to firms that use reduced-emission equipment and/or practice sustainable operations. Program S-2.3.2 requires the city to encourage new development to utilize passive solar energy methods to reduce energy consumption to the extent feasible consistent with other design considerations, such as view retention, glare, and other requirements. Policy S-4.3 requires the installation of sustainable landscapes. Policy S-4.4 promotes the use of electricity for appliances that currently use natural gas. Policy S-5.1 encourages energy-conscious developments that minimize energy use.

In addition, the 2019 CCR Title 24 Part 6 standards also now require that all homes built in California shall have zero-net-energy use, which is achieved through energy-efficiency measures as well as required rooftop solar photovoltaic systems. The 2019 CCR Title 24 Part 6 standards also apply to nonresidential buildings and require a variety of energy efficiency measures to be implemented during construction of the structures to reduce energy as usage as well as air emissions.

Therefore, impacts related to operational GHG emissions would be ***less than significant***.

Impact GHG-2 **Development facilitated by the proposed 2040 General Plan would not conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions.**

The following plans have been adopted and are applicable to development in the Sausalito Planning Area:

ARB 2017 Climate Change Scoping Plan

In the 2017 Climate Change Scoping Plan, ARB recommends local plan-level targets of no more than 6.0 $MTCO_2e$ per capita by 2030 and no more than 2.0 $MTCO_2e$ per capita by 2050. Based on a linear interpolation of these two GHG reduction goals, the proposed target for the proposed 2040 General Plan would be no more than 4.0 $MTCO_2e$ per service population by 2040.

Table 3.7-3 quantifies operational GHG emissions from implementation of the proposed 2040 General Plan, as adjusted to reflect reductions of emissions that are expected to occur from implementation of the Renewable Portfolio Standard, most current Title 24 building energy use standards, reduction in lighting (AB 1109), Light and Heavy-Duty Vehicle Regulation, adoption of Complete Streets standards, and improvements to public transit and ridesharing programs. As identified in Table 3.7-3, the city is projected to emit 3.8 $MTCO_2e$ per capita at buildout of the proposed 2040 General Plan. As such, the city is projected to achieve the GHG reduction target numbers provided in the 2017 Climate Change Scoping Plan.

The 2017 Climate Change Scoping Plan also includes examples of plan-level GHG reduction actions that could be implemented by local governments to support the State's climate goals. The examples include local municipal code changes, zoning changes, or policy directions that could apply broadly to the community within the General Plan or CAP area. The examples also include mitigation measures that could be required of individual projects under CEQA, if feasible, when the local jurisdiction is the lead agency.

The proposed 2040 General Plan contains the following policies and programs to support the State's climate goals. Policy S-4.2 requires solid waste disposal from all activities, including construction to redirect as much as possible from landfills. Policy S-4.3 requires the installation of sustainable landscapes. Policy S-4.4 promotes the use of electricity for building systems that currently use natural gas. Policy S-5.1 encourages energy-conscious developments that minimize energy use. In addition, the 2019 CCR Title 24 Part 6 standards also now require that all homes built in California shall have zero-net-energy use, which is achieved through energy-efficiency measures as well as required rooftop solar photovoltaic systems. The 2019 CCR Title 24 Part 6 standards also apply to nonresidential buildings and require a variety of energy efficiency measures to be implemented during construction of the structures to reduce energy as usage as well as air emissions.

Additionally, as stated in the city CAP, the City Council adopted a goal to reduce community emissions 15 percent below 2005 levels by the year 2020 (Resolution 5365). As detailed above in Section 3.7.3, the Greenhouse Gas Inventory for 2016 found that activities in the city generated approximately 60,659 $MTCO_2e$, which equates to a reduction of 16 percent from 2005 levels, indicating that by the year 2016 the city had already met the State goal to reduce emissions 15 percent below the 2005 baseline by 2020, and had achieved compliance with the requirements of Resolution 5365. It should be noted that all strategies and actions from the CAP are still in effect and will continue to reduce GHG emissions within the city.

As described above, the proposed 2040 General Plan and city CAP include GHG reduction actions similar to those recommended in the 2017 Climate Change Scoping Plan. Future projects would be required to comply with State standards for new construction as well as policies and programs of the proposed 2040 General Plan that aim to reduce GHG emissions. Therefore, development facilitated by the proposed 2040 General Plan would not conflict with the 2017 Climate Change Scoping Plan, and impacts would be ***less than significant***.

Plan Bay Area 2040: Strategy for a Sustainable Region

To achieve ABAG's and MTC's sustainable vision for the San Francisco Bay Area, the Plan Bay Area 2040 land use concept plan concentrates most new population and employment growth in and around Priority Development Areas (PDAs). Under this Plan, PDAs are described as transit-oriented, infill development opportunity areas within existing communities. Two-thirds of all regional growth by 2040 is allocated within PDAs. The PDAs are also expected to accommodate 80 percent (or over 525,570 units) of new housing and 66 percent (or about 744,230) of new jobs. The City of Sausalito is located within the Bayside Subregion that is forecasted to have an increase of 272,000 housing units between the baseline year of 2010 and the proposed plan year of 2040. Buildout of the proposed 2040 General Plan could yield up to 304 new residential units. As such, the proposed 2040 General Plan would promote implementation of the Plan Bay Area 2040. In addition, as described above, the policies and programs of the proposed 2040 General Plan encourage the use of alternative modes of travel and reduce dependence on auto use, consistent with Plan Bay Area's vision. Therefore, implementation of the proposed 2040 General Plan would not conflict with Plan Bay Area 2040, and impacts would be ***less than significant***.

BAAQMD 2017 Clean Air Plan

The BAAQMD 2017 Clean Air Plan contains control measures the focus primarily on reducing GHG emissions across the following sectors: stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants. Table 3.7-4 identifies the control measures from the 2017 Clean Air Plan that are relevant to the City of Sausalito and the proposed 2040 General Plan's consistency with those measures.

TABLE 3.7-4: SAUSALITO PROPOSED 2040 GENERAL PLAN CONSISTENCY WITH 2017 CLEAN AIR PLAN

2017 BAY AREA CLEAN AIR PLAN CONTROL MEASURE	CONSISTENT WITH CONTROL MEASURE?	DISCUSSION
TR2 (TRIP REDUCTION PROGRAMS): ENCOURAGE TRIP REDUCTION POLICIES AND PROGRAMS IN LOCAL PLANS. ENCOURAGE LOCAL GOVERNMENTS TO REQUIRE MITIGATION OF VEHICLE TRAVEL AS PART OF NEW DEVELOPMENT APPROVAL, TO ADOPT TRANSIT BENEFITS ORDINANCES IN ORDER TO REDUCE TRANSIT COSTS TO EMPLOYEES, AND TO DEVELOP INNOVATIVE WAYS TO ENCOURAGE RIDESHARE, TRANSIT, CYCLING, AND WALKING FOR WORK TRIPS.	Yes	The proposed 2040 General Plan includes the following policies to reduce vehicle miles traveled: • Policy CP-2.4. Cooperation with Local Businesses. Work cooperatively with local business interests in developing programs to reduce traffic, emissions, vehicle miles traveled, and parking impacts. Programs: • CP-2.4.1. Employee Parking Program. Consider feasibility of employee parking program in worker-rich areas of the City (Downtown and the Marinship) to reduce employee parking impacts on neighboring residential and commercial areas. • CP-2.4.2. Employer Outreach. Develop a list of commuter VMT reduction strategies and work with City business groups to inform businesses of them. • CP-2.4.3. Trip Reduction Ordinance. Continue to

2017 BAY AREA CLEAN AIR PLAN CONTROL MEASURE	CONSISTENT WITH CONTROL MEASURE?	DISCUSSION
		update and enforce the adopted Trip Reduction Ordinance which requires employers with 50 or more employees to provide incentives for their employees to use transportation alternatives to get to work. • CP-2.4.4. Downtown Shared Parking Model. Continue to update and implement the Downtown Shared Parking Model.
TR9 (BICYCLE AND PEDESTRIAN ACCESS FACILITIES): **ENCOURAGE PLANNING FOR BICYCLE AND PEDESTRIAN FACILITIES IN LOCAL PLANS.**	Yes	The proposed 2040 General Plan includes the following policies related to bicycle and pedestrian facilities: • Policy W-1.1. Sausalito Waterfront. Leverage Sausalito's greatest asset, its waterfront, with careful consideration of pedestrian engagement, floating homes, and maritime lifestyles. • Policy W-1.2. Waterfront Access. Promote and enhance public access and enjoyment of the Sausalito waterfront from both land and water approaches. • Policy W-1.3. Waterfront Path. Provide functional access to the waterfront for bicyclists and pedestrians that promotes accessibility and prioritizes the working waterfront. • Policy W-1.7. Recreational Diversity. Work with local, regional, and State agencies as well as local organizations to provide a diversity of water-dependent recreational uses, especially those unique to Sausalito. • Policy CD-7.1. Public Stairs. Preserve and enhance public stairs and pathways for purposes of pedestrian safety and enjoyment, as well as emergency evacuation. • Policy CP-5.1. Bicycle Master Plan. Plan, design, implement, and maintain bicycle infrastructure in Sausalito according to a Bicycle Master Plan. • Policy CP-5.2. North-South Greenway. Link Sausalito to County-wide bicycle routes such as the North-South Greenway. • Policy CP-5.3. Bridgeway Bikeway South: Long-Term Solutions. Investigate and study long-term solutions to either ameliorate or bypass the most constricted and/or congested conditions at Alexander Avenue, South Street, and Bridgeway south of the Downtown. • Policy CP-5.4. Bicycle Route Design and Standards. Ensure that all existing and proposed bike routes, lanes, paths, and intersections are compliant with the most up-to-date standards to reduce conflicts between bicyclists, vehicles, and pedestrians, promote safety, and encourage the use of

2017 BAY AREA CLEAN AIR PLAN CONTROL MEASURE	CONSISTENT WITH CONTROL MEASURE?	DISCUSSION
		nonmotorized travel. • Policy CP-5.5. Regional Bicycle and Pedestrian Trails. Continue to support the San Francisco Bay Trail, Bay Area Ridge Trail, and other agencies and jurisdictions in their efforts to provide bicycle and pedestrian trails throughout the nine counties of the San Francisco Bay Area. • Policy CP-5.6. Pedestrian Trails and Paths. Maintain, improve, and extend existing public paths and stairways for use by residents and establish new pathway connections to complete the system as shown on Figure 5-3. • Policy CP-5.7. Bicyclist Safety. Provide a safe biking environment along City streets and bicycle trails. • Policy CP-5.8. Pedestrian Safety. Provide a safe walking environment along City streets and pathways. • Policy CP-5.9. Waterfront Path. Provide functional access to the waterfront for bicyclists and pedestrians that promotes accessibility and prioritizes the working waterfront. (Moved to Waterfront Element Policy W-1.3) • Policy CP-5.10. Accessibility. Ensure City sidewalks and pathways are accessible for people with physical disabilities. • Policy CP-5.11. Pedestrian/Bicycle Outreach. Promote bicycling and walking among residents and workers as an alternative to vehicular travel. • Policy CP-5.12. Complete Streets. Implement complete streets to ease walking and cycling in the City. • Policy CP-5.13. Development Plan Review. New development and substantial remodels in the Marinship should give special attention to the establishment and enhancement of pedestrian and bicycle pathways.
EN2 (DECREASE ELECTRICITY DEMAND): WORK WITH LOCAL GOVERNMENTS TO ADOPT ADDITIONAL ENERGY-EFFICIENCY POLICIES AND PROGRAMS.	Yes	The proposed 2040 General Plan includes the following policies to decrease electricity demand: • Policy S-5.1. Energy-Conscious Developments. Promote and enforce development standards that minimize energy use. • Policy S-5.1 City Efficiency. Take actions to minimize City's energy usage and provide leadership in conservation. • Policy S-2.3. Applied Research. New research and technology that will aid sustainability should be applied to City policies as applicable. • Policy S-2.3.7. Marin Clean Energy. Promote Marin Clean Energy.

2017 BAY AREA CLEAN AIR PLAN CONTROL MEASURE	CONSISTENT WITH CONTROL MEASURE?	DISCUSSION
		• Policy S-5.1. Energy-Conscious Developments. Promote and enforce development standards that minimize energy use. • Policy S-5.2. City Efficiency. Take actions to minimize City's energy usage and provide leadership in conservation.
BL4 (URBAN HEAT ISLAND MITIGATION): PERFORM OUTREACH TO CITIES AND COUNTIES TO MAKE THEM AWARE OF COOL ROOFING AND COOL PAVING TECHNIQUES.	Yes	Chapter 8.18 (Energy Code) adopts the 2016 California Energy Code, Title 24, Part 6, and incorporates the code into the Sausalito Municipal Code. Cool roofs became part of the requirements of the California Energy Code in October 2005.
NW2 (URBAN TREE PLANTING): ENCOURAGE LOCAL GOVERNMENTS TO ADOPT A MUNICIPAL TREE PLANTING ORDINANCE.	Yes	General Plan OBJ S-4 encourages the link between built and natural environments in the City with policies encouraging tree planting and replacements. Chapter 17.28 of the Sausalito Municipal Code (Trees, Shrubs and Plants) has been established to protect existing trees in the public realm. Chapter 11.12 of the Sausalito Municipal Code (Preservation of Trees and Views) encourages and promotes the planting and proper husbandry of trees throughout the city.
WA3 (GREEN WASTE DIVERSION): FACILITATE ADOPTION OF LOCAL ORDINANCES AND PROGRAMS TO REDUCE THE AMOUNT OF GREEN WASTE GOING TO LANDFILLS.	Yes	The proposed 2040 General Plan includes the following policies to reduce the amount of green waste going to landfills: • Policy S-4.2. Solid Waste Disposal. Strive to reduce the amount of solid waste generated in Sausalito in accordance with State law and Zero Waste Marin goals. • Policy S-6.1. Zero Waste Marin. Continue to work with the Marin Hazardous and Solid Waste Joint Powers Authority towards Zero Waste by 2025. • Policy S-6.2. Waste education. Implement education and social media programs to change Sausalito's waste-related behavior, emphasizing composting and recycling.
WA4 (RECYCLING AND WASTE REDUCTION): PROMOTE COMMUNITY-WIDE ZERO WASTE GOALS AND RECYCLING OF CONSTRUCTION AND DEMOLITION MATERIALS.	Yes	Chapter 8.54 (Construction and Demolition Waste Recovery) of the Sausalito Municipal code promote the redirection of recyclable materials generated during construction away from landfills.
WR2 (SUPPORT WATER CONSERVATION): INCORPORATE WATER CONSERVATION BEST PRACTICES INTO LOCAL PLANNING GUIDANCE.	Yes	The proposed 2040 General Plan includes the following policy related to water conservation: • Policy EQ-4.7. Water Conservation. Promote and encourage water conservation measures to assure that an adequate and safe supply of high-quality

2017 BAY AREA CLEAN AIR PLAN CONTROL MEASURE	CONSISTENT WITH CONTROL MEASURE?	DISCUSSION
		water is available for residents. Chapter 8.52 (Water Conserving Landscaping) of the Sausalito Municipal Code contains regulations to support water conservation.

Source: 2017 Clean Air Plan, Bay Area Air Quality Management District, Adopted April 19, 2017.

As demonstrated by Table 3.7-4, the proposed 2040 General Plan is consistent with the applicable control measures of the 2017 Clean Air Plan. Future projects would be required to comply with requirements of the proposed 2040 General Plan and Sausalito Municipal Code that aim to reduce GHG emissions in the Planning Area. Therefore, development facilitated by the proposed 2040 General Plan would not conflict with the 2017 Clean Air Plan, and impacts would be ***less than significant***.

Conclusion

Development facilitated by the proposed 2040 General Plan would be required to comply with requirements of the proposed 2040 General Plan and Sausalito Municipal Code to reduce GHG emissions. In addition, the city will be required to comply with existing and new federal, State, and local statutes and regulations related to GHG emissions. Compliance with the plans and codes would reduce impacts to ***less than significant***.

Impact GHG-3 **Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to GHG emissions.**

As described above, GHG emissions related to implementation of the proposed 2040 General Plan are not confined to a particular air basin but are dispersed worldwide. Therefore, the analysis under Impacts GHG-1 and GHG-2 also address cumulative impacts.

As discussed under Impacts GHG-1 and GHG-2, the proposed 2040 General Plan establishes the framework for future growth and development in Sausalito. A General Plan does not directly result in development without additional approvals. Before any development can occur in the city, it is required to be analyzed for consistency with the proposed 2040 General Plan, zoning requirements, and other applicable local and State requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits. Furthermore, existing federal, State, and local regulations and policies described throughout this section that serve to reduce communitywide GHG emissions would apply to future projects. Continued compliance with these regulations and implementation of proposed 2040 General Plan policies would reduce the proposed 2040 General Plan's cumulative contribution to this impact.

As discussed under Impact GHG-1 and shown on Table 3.7-3, the GHG emissions per service population for the proposed 2040 General Plan buildout conditions would be within the 4.0

$MTCO_2e$ per service population threshold necessary for the city to achieve its fair share of statewide GHG reductions in accordance with the State's long-term GHG reduction targets.

All cumulative projects would be required to comply with City ordinances, proposed 2040 General Plan policies, and adopted CAPs to reduce GHG emissions. Cumulative projects will also be required to comply with existing federal, State, and local regulations and policies to reduce communitywide GHG emissions. Last, cumulative projects will be required to comply with the requirements of CEQA and obtain all necessary clearances and permits.

For the reasons described above, impacts of the proposed 2040 General Plan related to GHG emissions are not cumulatively considerable and the cumulative impact would be ***less than significant***.

3.8 HAZARDS AND HAZARDOUS MATERIALS

Hazards include man-made and natural conditions that may pose a threat to human health, life, property, or the environment. Hazardous materials and waste present health and environmental hazards. These hazards can result during manufacture, transportation, use, or disposal of such materials if not handled properly. Hazards to humans can also result from air traffic accidents. See Section 3.16, Wildfire, for a discussion of potential hazards to humans and structures from natural or human induced wildland fires.

This section of the Draft EIR analyzes impacts associated with exposure to hazards and hazardous materials within the Planning Area, resulting from buildout of the proposed 2040 General Plan. Specifically, the analysis addresses impacts related to hazardous materials use and transportation, accidental release of hazardous materials, new development or re-development on contaminated sites, air traffic hazards, and interference with emergency response and evacuation plans.

Information in this section is based on statements, data, and figures provided by the following reference materials:

- State Water Resources Control Board GeoTracker Database;
- California Department of Toxic Substances Control EnviroStor Database;
- California Department of Toxic Substances Control Hazardous Waste and Substances Site List – Site Cleanup (Cortese List); and
- Marin County Multi-Jurisdictional Local Hazard Mitigation Plan.

3.8.1 EXISTING SETTING

Hazardous Materials and Wastes

Under Title 22 of the CCR, the term hazardous substance refers to both hazardous materials and hazardous wastes; both are classified according to four key properties: toxicity, ignitability, corrosiveness, and reactivity (CCR Title 22, Chapter 11, Article 3). Public health is potentially at risk whenever hazardous substances are or will be used. It is necessary to differentiate between the hazard of these substances and the acceptability of the risk they pose to human health and the environment.

A hazardous material is defined as a substance or combination of substances that may cause or significantly contribute to an increase in serious, irreversible, or incapacitating illness or may pose a substantial presence or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

Hazardous wastes are defined as substances that no longer have practical use, such as materials that have been discarded, discharged, spilled, contaminated, or are being stored until they can be disposed of properly (CCR Title 22, Chapter 11, Article 2, § 66261.10). Soil that is excavated from a site containing hazardous materials is also a hazardous waste if it exceeds specific CCR Title 22 criteria.

The United States Environmental Protection Agency (USEPA) describes household hazardous waste as leftover household products that can catch fire, react, explode under certain circumstances, or that are corrosive or toxic. Household hazardous wastes are similar to operational project-related hazardous materials described above, and include products such as paints, cleaners, oils, batteries, and pesticides.[1]

While hazardous substances are regulated by multiple agencies, as described in Section 3.8.2, Regulatory Setting, cleanup requirements for hazardous wastes are determined on a case-by-case basis according to the agency with lead jurisdiction over the project.

Transportation of hazardous materials within the State of California is subject to a variety of federal, State, and local regulations. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless use of the highway is required to permit delivery or loading of such materials (California Vehicle Code §§ 31602(b), 32104(a)). The California Highway Patrol (CHP) also designates through routes to be used for transportation of hazardous materials. Transportation of hazardous materials is restricted to these routes except in cases where additional travel is required from that route to deliver or receive hazardous materials to and from users.

Existing Hazardous Materials Conditions

Small quantities of hazardous materials in the City of Sausalito are routinely used, stored, and transported in commercial, retail, and industrial businesses as well as in educational facilities, health clinics, households, and the Marinship. Federal, State, and local agency databases maintain comprehensive information on the locations of facilities using large quantities of hazardous materials, as well as facilities generating hazardous waste. Some of these facilities use certain classes of hazardous materials that require accidental release scenario modeling and risk management plans to protect surrounding land uses.

Common contaminants that may be present in Sausalito include lead, oil, tar, solvents, pesticides, and contaminated soil and groundwater. Due to the age of some existing buildings in the city that may be redeveloped under the proposed 2040 General Plan, asbestos may be present in those structures and could be mobilized during demolition activities. Similarly, lead may be present in paint that was sold prior to 1978 or in soil that was contaminated by leaded gasoline or improperly discarded batteries. Existing soil contamination may also be present at potential redevelopment sites due to contamination from household hazardous wastes.

Hazardous Sites

Historical Uses

Historical uses in Sausalito include a train and ferry system, as well as significant ship building facilities. Deposition of hazardous materials has been found in some areas of Sausalito where these facilities operated, including Dunphy Park, which is an old burn dump site. Downtown Sausalito was developed as a train yard and ferry dock system, and these facilities contained creosote-treated timbers and other materials that are now considered to be hazardous

[1] United States Environmental Protection Agency. 2020. Household Hazardous Waste (HHW). February 4. Website: https://www.epa.gov/hw/household-hazardous-waste-hhw. Accessed March 11, 2020.

materials. The Marinship was originally developed as a Liberty ship construction area. Lead-based paint and other hazardous materials used in ship building can regularly be found in these areas.

Database Searches

United States Environmental Protection Agency

The USEPA's Toxic Release Inventory Search allows access to basic facility information, including all forms submitted to USEPA since 1987, as well as aggregate chemical release data for all years reported, and relative risk information. The results display any facility that has reported from 1987 to present, even though the facility may or may not have submitted Toxic Release Inventory data in the most recent reporting year. Based on a query of the Toxic Release Inventory Search on May 30, 2020, no results were found in the City of Sausalito.[2]

The USEPA's Superfund program is responsible for cleaning up the nation's most contaminated land and responds to environmental emergencies, oil spills and natural disasters. A query of the USEPA's Superfund Sites was performed on May 30, 2020 for the Planning Area for National Priorities List Sites, Non-National Priorities List Sites, and Superfund Alternative Approach Sites. Based on the query, one site was listed on the Non-National Priorities List: the Spirit of Sacramento Abandoned Derelict Vessel (CAN000903692).[3] The site, located at 2100 Bridgeway, is listed as a Removal Only Site (No Site Assessment Work Needed). The contaminants of concern included liquid paint waste and heavy metal solid waste. However, the vessel was only hauled to the city's USACE pier for decommissioning; hazardous materials were released at it's originating site near Rio Vista, California, but there was no threat of release to the City of Sausalito. The vessel has since been deconstructed and all hazardous materials removed from the Sausalito site.[4]

Department of Toxic Substances Control

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, as well as local agencies, and developers to obtain information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to update the list annually. The Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List, which is supplemented by other State and local government agencies.

DTSC's Brownfields and Environmental Restoration Program (Cleanup Program) includes an Annual Workplan (now referred to State Response and/or Federal Superfund), and also includes Backlog sites listed under Health and Safety Code Section 25356. In addition, DTSC's Cortese List includes sites Certified with Operation and Maintenance. The EnviroStor database tracks cleanup, permitting, enforcement and investigation efforts at hazardous waste facilities, sites with known contamination, and sites where there may be reasons to investigate further.

[2] United States Environmental Protection Agency. 2020. Toxics Release Inventory. April 8. Website: https://www.epa.gov/enviro/tri-search. Accessed May 30, 2020.

[3] United States Environmental Protection Agency. 2019. Superfund Sites Where You Live. November 22. Website: https://www.epa.gov/superfund/search-superfund-sites-where-you-live. Accessed May 30, 2020.

[4] Chris Reiner, USEPA On-Scene Coordinator. 2020. Phone conversation with FCS. June 1.

According to an EnviroStor search performed on May 30, 2020, the following sites are located within the Planning Area.[5]

Photo Waste Recycling, located at 200 Gate 5 Road # 115, was listed as a hazardous waste facility but is now non-operating. The current status of this Site is "Closed."

South Pacific Division Laboratory, located at 25 Liberty Ship Way, has a current status of "Certified O&M – Land Use Restrictions Only."[6] The site was first developed in the 1870's when the former Northwestern Pacific Railroad rail yard was constructed. The railyard was redeveloped as the Marinship shipyard during World War II (1942), where it operated as a machine shop. The U.S. Army Corps of Engineers acquired one building from the shipyard in 1948 and converted it into a geotechnical testing laboratory in 1950. An analytical laboratory capability was added in the early 1990s. The South Pacific Division Laboratory closed in 1997. Investigations have identified Polychlorinated Biphenyls (PCBs) contamination in the soil and petroleum hydrocarbon contamination in the soil and groundwater, likely associated with the former Marinship Electrical Shop operations. Other potential contaminants identified were solvents and metals. Solvents were detected sporadically at low concentrations in the groundwater. Elevated concentrations of arsenic in groundwater and in the soil were detected sitewide. A soil removal action was completed in 2006 to remove PCB contamination that was detected above levels considered safe for commercial/industrial use. Low level residual PCB contamination remains in subsurface soils north of the building. Land use restrictions have been applied to restrict the property from sensitive uses such as residential, hospital, or school. In 2009, the Veterans Administration took ownership of the property for redevelopment as a medical lab. Site ownership remains federal and the existing land use designation is Public Institutional, though the site is currently vacant.

Galilee Harbor, Parcel 1, located at 300 Napa Street, has a status of "Certified O&M – Land Use Restrictions Only." Since at least the 1880's, the site has been used for maritime purposes. In around 1913, Oceanic Boatyard Company purchased the property and utilized it for boat building and repair purposes. From 1942 until 1944, Sausalito Shipbuilding built steel barges on the site. From 1970 to 1974, the site was operated by Bob's Boatyard and by other individuals to build and repair fishing boats. In 1980, all structures on the site were demolished. The site has been used mainly for parking and boat storage since 1989 and is surrounded by commercial businesses. The land use restrictions over the property identify the prohibited uses (hospital, residential uses, day care center, elder care center) and require approval from the DTSC prior to any land disturbance activities.

The Marinship Site is located at Spring Street and Gate 5 Road. This Site was discovered by the Sausalito Planning Department in 1988. The Site was used for the manufacturing of large ships during World War II. A preliminary site screening has been conducted. The EPA is working on a Preliminary Assessment.

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5 Department of Toxic Substances Control. 2020. List of Hazardous Waste and Substances Sites.

6 Identifies where a remedy is implemented and the selected remedy results in hazardous substances remaining at the site at concentrations above those acceptable for unrestricted use and a Land Use Restriction or Land Use Covenant has been recorded for the site.

State Water Resources Control Board

There are no solid waste disposal sites with waste constituents above hazardous waste levels, or active Cease and Desist or Cleanup and Abatement Orders within the Planning Area.[7,8]

GeoTracker is the State Water Resources Control Board's (State Water Board) data management system for sites that impact, or have potential to impact, water quality in California, with emphasis on groundwater. GeoTracker contains records for sites that require cleanup, such as Leaking Underground Storage Tanks (LUST) Sites, Cleanup Program Sites, and Department of Defense Sites. GeoTracker also contains records for various unregulated projects, as well as permitted facilities including operating Permitted USTs, Irrigated Lands, Oil and Gas production, and Land Disposal Sites (landfills). According to a GeoTracker search performed on May 30, 2020, the following are located within the Planning Area.[§]

The Martin Luther King Jr. Campus, located at 100 Ebbtide Avenue, was an open LUST cleanup site beginning October 9, 2017. The New Village School and the Le Lycée Français de San Francisco – Sausalito Campus are privates K-12 schools that lease space on the Campus at the LUST site. Architectural drawings from 1949 were found in 2017 depicting installation of an underground diesel tank adjacent to the boiler room. The LUST and 40 cubic yards of soil were removed in October 2017. On April 5, 2020, a Closure Letter concluding No Further Action was sent to the city, indicating that the cleanup is complete.[9]

The Former Anderson's Boat Yard, located at 400 Harbor Drive, is comprised of boat maintenance yards, paved parking areas and boat slips within harbor basins (Basin 3). Prior to 1942, the upland portion of the Site was formerly part of Richardson's Bay. During 1942, fill materials comprised of native soil were used to fill in approximately 200 acres of Richardson's Bay for development of the Marinship Area. The Marinship Area was developed by the Marinship Corporation for ship construction during World War II. In 1949, the site was purchased by Clipper Yacht Company, LLC (Clipper). In 2009 lab analyses of soil samples taken on site revealed the presence of metals, total petroleum hydrocarbons as diesel, motor oil, and PCBs above applicable screening levels. Groundwater samples also contained metals above screening levels. Since remediation activities have been completed at and adjacent to the site, contaminant levels have been reduced to acceptable levels or completed pathways have been permanently blocked; however, a Site Management Plan (SMP) and a deed restriction is necessary before the Site receives a "Notice of Final Action" letter.

Airport Operations Hazards

Airport-related hazards are generally associated with aircraft accidents, particularly during takeoffs and landings. Other airport operation hazards include incompatible land uses, power transmission lines, wildlife hazards (e.g., bird strikes), and tall structures that penetrate the regulated surfaces surrounding an airport. The Richardson's Bay Seaplane Base/Heliport operates under a use permit from the County of Marin and there is a private airstrip approximately 0.7-miles north of city limits. The County has not adopted an Airport Land Use

7 State Water Resources Control Board. Sites Identified with Waste Constituents Above Hazardous Waste Levels Outside the Waste Management Unit.

8 State Water Resources Control Board. List of "active" CDO and CAO.

9 San Francisco Bay Regional Water Quality Control Board. 2020. Closure Letter for City of Sausalito, 100 Ebbtide Avenue, Sausalito, Marin County. April 5.

Compatibility Plan (ALUCP) or established an airport safety zone for the Richardson's Bay Seaplane Base/Heliport. San Francisco and Oakland International Airports are the closest airports to the city, both approximately 17 miles to the south and southeast, respectively.

3.8.2 REGULATORY SETTING

Federal – Regulations

Resource Conservation and Recovery Act

The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

The 1984 RCRA amendments provided the framework for a regulatory program designed to prevent releases from USTs. The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks. Tanks must also meet performance standards to ensure that stored material will not corrode their tanks.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. The Act was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous substances releases. CERCLA deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability.

Occupational and Safety Health Act

The Occupational and Safety Health Act is intended to ensure worker and workplace safety by requiring that employers provide their workers a place of employment free from recognized health hazards, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, and unsanitary conditions. The Occupational Safety and Health Administration (OSHA) is a division of the U.S. Department of Labor that oversees the administration of the act and enforces standards in all 50 states.

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) provides the EPA with authority to require reporting, record-keeping, testing requirements, and restrictions relating to chemical substances and mixtures. The TSCA addresses the production, importation, use, and disposal of specific chemicals, including PCBs, asbestos, radon, and lead-based paint.

Emergency Planning Community Right-to-Know Act

The Emergency Planning Community Right-to-Know Act (EPCRA), also known as SARA Title III, was enacted in October 1986. This law requires any infrastructure at the State and local levels

to plan for chemical emergencies. Reported information is then made publicly available so that interested parties may become informed about potentially dangerous chemicals in their community. EPCRA Sections 301 through 312 are administered by EPA's Office of Emergency Management. EPA's Office of Information Analysis and Access implements the EPCRA Section 313 program. In California, SARA Title III is implemented through California Accidental Release Program.

Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act, as amended, is the basic statute regulating hazardous materials transportation in the United States. The purpose of the law is to provide adequate protection against the risks to life and property inherent in transporting hazardous materials in interstate commerce. This law gives the United States Department of Transportation (USDOT) and other agencies, such as the California Public Utilities Commission (CPUC) and the CHP Patrol, the authority to issue and enforce rules and regulations governing the safe transportation of hazardous materials.

Federal – Implementing Agencies

Several federal agencies regulate hazardous substances. These agencies include the USEPA, the OSHA, and the USDOT. The role and authority of each agency is described below.

United States Environmental Protection Agency

The USEPA implements laws and regulations to ensure the safe production, handling, disposal, and transportation of hazardous materials. Many of these regulations are enforced by the CalEPA.

Occupational Safety and Health Administration

OSHA oversees the administration of the Occupational Safety and Health Act, which requires specific training for hazardous materials handlers, provision of information to employees who may be exposed to hazardous materials, and acquisition of material safety data sheets (MSDS) from materials manufacturers. The MSDS describe risks, as well as proper handling and procedures, related to particular hazardous materials. Employee training must include response and remediation procedures for hazardous materials releases and exposures.

United States Department of Transportation

The USDOT has the regulatory responsibility for the safe transportation of hazardous materials between states and to foreign countries. The USDOT regulations govern all means of transportation, except for those packages shipped by mail, which are covered by United States Postal Service regulations. The federal Resource Conservation and Recovery Act of 1976 imposes additional standards for the transport of hazardous wastes.

State – Regulations

California Code of Regulations

Title 3 of the CCR pertains to the application of pesticides and related chemicals. Parties applying regulated substances must continuously evaluate application equipment, weather, the treated lands, and all surrounding properties. Title 3 prohibits any application that would:

- Contaminate persons not involved in the application
- Damage non-target crops or animals or any other public or private property
- Contaminate public or private property or create health hazards on said property

Title 8 of the CCR establishes California Occupational Safety and Health Administration (Cal OSHA) requirements related to public and worker protection. Topics addressed in Title 8 include materials exposure limits, equipment requirements, protective clothing, hazardous materials, and accident prevention. Construction safety and exposure standards for lead and asbestos are set forth in Title 8.

Title 14 of the CCR establishes minimum standards for solid waste handling and disposal.

Title 17 of the CCR establishes regulations relating to the use and disturbance of materials containing naturally occurring asbestos.

Title 22 of the CCR sets forth definitions of hazardous waste and special waste. The section also identifies hazardous waste criteria and establishes regulations pertaining to the storage, transport, and disposal of hazardous waste. Title 22 was created to regulate the hazardous wastes generated by factories or similar sources, but soil excavated during construction may also be regulated.

Title 26 of the CCR pertains to hazardous materials and waste that are presented in other regulatory sections. Title 26 mandates specific management criteria related to hazardous materials identification, packaging, and disposal. In addition, Title 26 establishes requirements for hazardous materials transport, containment, treatment, and disposal. Staff training standards are also set forth in Title 26.

Title 27 of the CCR sets forth a variety of regulations relating to the construction, operation, and maintenance of the State's landfills. The title establishes a landfill classification system and categories of waste. Each class of landfill is constructed to contain specific types of waste (household, inert, special, and hazardous).

California Health and Safety Code and Code of Regulations

California Health and Safety Code Chapter 6.95 and CCR, Title 19, Section 2729 set out the minimum requirements for business emergency plans and chemical inventory reporting. These regulations require businesses to provide emergency response plans and procedures, training program information, and a hazardous material chemical inventory disclosing hazardous materials stored, used, or handled on-site. A business that uses hazardous materials or a mixture containing hazardous materials must establish and implement a business plan if the hazardous material is handled in certain quantities.

State – Implementing Agencies

California Environmental Protection Agency

One of the primary agencies that regulate hazardous materials is the CalEPA. The State, through CalEPA, is authorized by the USEPA to enforce and implement certain federal hazardous materials laws and regulations. The DTSC, a department of the CalEPA, protects California and Californians from exposure to hazardous waste, primarily under the authority of

the RCRA and the California Health and Safety Code.[10] The DTSC requirements include the need for written programs and response plans, such as Hazardous Materials Business Plans (HMBPs). The DTSC programs include dealing with aftermath clean-ups of improper hazardous waste management, evaluation of samples taken from sites, enforcement of regulations regarding use, storage, and disposal of hazardous materials, and encouragement of pollution prevention.

California Division of Occupational Safety and Health

Like the Occupational Safety and Health Administration (OSHA) at the federal level, the California Divisions of Occupational Health and Safety Administration (CalOSHA) is the responsible State-level agency for ensuring workplace safety. The CalOSHA assumes primary responsibility for the adoption and enforcement of standards regarding workplace safety and safety practices. If a site is contaminated, a Site Safety Plan is prepared and implemented to protect the safety of workers. Site Safety Plans establish policies, practices, and procedures to prevent the exposure of workers and members of the public to hazardous materials originating from the contaminated site or building.

California Department of Transportation

Caltrans has primary responsibility for enforcing federal and State regulations and responding to hazardous materials transportation emergencies. Caltrans manages more than 50,000 miles of California's highway and freeway lanes, provides intercity rail services, permits more than 400 public-use airports and special-use hospital heliports, and works with local agencies. Caltrans is also the first responder for hazardous material spills and releases that occur on those highway and freeway lanes and intercity rail services.

California Highway Patrol

The CHP is responsible for assuring the safe, convenient, and efficient transportation of people and goods on the State highway system. The CHP implements the Commercial Vehicle Safety Program, which includes enforcement, education, and partnerships to minimize the disastrous results from collisions involving commercial vehicles. CHP's Commercial Vehicle Section aids in safe operation and enforcement of commercial vehicles.

Common carriers are licensed by the CHP, pursuant to the California Vehicle Code, Section 32000. This section requires licensing every motor (common) carrier who transports, for a fee, more than 500 pounds of hazardous materials at one time and every carrier, who carries more than 1,000 pounds of hazardous material of the type requiring placards. Common carriers conduct a large portion of the business in the delivery of hazardous materials.

Vehicle and equipment inspection, shipment preparation, container identification, and shipping documentation are all part of the responsibility of the CHP. The CHP conducts regular inspections of licensed transporters to assure regulatory compliance and responds to hazardous materials emergencies on roadways.

[10] Hazardous Substance Account, Chapter 6.5 (Section 25100 et seq.) and the Hazardous Waste Control Law, Chapter 6.8 (Section 25300 et seq.) of the Health and Safety Code.

Regional

San Francisco Bay Regional Water Quality Control Board

The Porter-Cologne Water Quality Act established the State Water Resources Control Board (SWRCB) and divided the State into nine regional basins, each under the jurisdiction of a Regional Water Quality Control Board (RWQCB). The San Francisco Bay RWQCB regulates water quality in the Planning Area. The RWQCB has the authority to require groundwater investigations when the quality of groundwater or surface waters of the State is threatened, and to require remediation actions, if necessary.

Bay Area Air Quality Management District

The BAAQMD has primary responsibility for control of air pollution from sources other than motor vehicles and consumer products (which are the responsibility of CalEPA and the ARB). The BAAQMD is responsible for preparing attainment plans for non-attainment criteria pollutants, control of stationary air pollutant sources, and the issuance of permits for activities including demolition and renovation activities affecting asbestos containing materials (District Regulation 11, Rule 2) and lead (District Regulation 11, Rule 1).

Marin County Certified Unified Program Agency

The County of Marin Hazardous Materials Area Plan established the County Department of Public Works serves as the local Certified Unified Programs Agency (CUPA). The role of the CUPA is to regulate and inspect County businesses' compliance with hazardous materials regulations, as well as provide assistance and guidance in order to meet compliance requirements.[11] Any facility in Marin County that handles or stores hazardous materials or hazardous waste materials in quantities that require a State HMBP must report this use or storage to the County CUPA prior to business operation. The County CUPA then reviews and certifies the HMBP.[12]

Marin County Multi-Jurisdictional Local Hazard Mitigation Plan

The Marin County Multi-Jurisdiction Local Hazard Mitigation Plan (MCM LHMP), updated in 2018, was developed to reduce risks from natural disasters in unincorporated portions of the county and all incorporated Cities in Marin County. The MCM LHMP was last adopted by the City of Sausalito on May 14, 2019. The MCM LHMP identifies hazards, such as earthquakes, liquefaction, severe storms, debris flow (landslides), flooding, wind, tsunamis, wildfire, and post-fire landslides. The MCM LHMP also contains a vulnerability analysis highlighting specific facilities at risk to natural hazards and outlines mitigation strategies for reducing risk of identified hazards.[13]

Marin Operational Area Emergency Operations Plan

The purpose of the Marin Operational Area Emergency Operations Plan (EOP) is to plan responses to extraordinary emergencies due to large-scale disasters that affect Marin County.[14]

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[11] County of Marin. 2020. CUPA. Website: https://www.marin county.org/depts/pw/divisions/public-services/cupa. Accessed March 11, 2020.

[12] County of Marin – Waste Management Division. 2012. Hazardous Materials Business Plan. May 24.

[13] Marin County. 2018. Marin County Multi-Jurisdictional Local Hazard Mitigation Plan.

[14] Marin County Sheriff's Office of Emergency Services. 2014. Marin Operational Area Emergency Operations Plan. October.

The EOP identifies and facilitates inter-agency coordination in emergency operations, and applies to all emergencies in incorporated and unincorporated areas of Marin County when those emergencies require multi-agency coordination at the operational area level.

Local

Sausalito 2040 General Plan

The proposed 2040 General Plan includes the following relevant policies and programs that assist in reducing or avoiding potential impacts related to hazards and hazardous materials:

Community Design, Historic, and Cultural Preservation Element

Policy CD-7.1: Preserve and enhance public stairs and pathways for purposes of pedestrian safety and enjoyment, as well as emergency evacuation.

Health, Safety, and Community Resilience Element

Policy HS-1.4: Hazardous Materials. Minimize the risk of property damage and personal injury resulting from the production, use, storage, disposal and transporting of hazardous materials and waste by continuing to work within the Marin County Hazardous & Solid Waste Management – Joint Powers Authority.

Program HS-1.4.1: Marin County Hazardous and Solid Waste Management JPA. Work with Marin County, other cities in Marin County and other jurisdictions as necessary on implementation measures described by the Marin County Hazardous and Solid Waste Management - JPA.

Program HS-1.4.2: Subsurface Contamination Investigations. Through the environmental review process, require subsurface contamination investigations at potentially contaminated sites prior to development approval.

Program HS-1.4.3: Use of Potentially Harmful Materials on Public Lands. Continue to enforce the personnel regulation that requires the use of potentially harmful materials on public lands be done by qualified professionals only.

Program HS-1.4.4: Eliminate Use of Harmful Materials. Eliminate the use of potentially harmful materials on public land and minimize uses throughout the city.

Program HS-1.4.5: Coordination of Recycling Efforts. Coordinate and expand local recycling efforts and publicity efforts with those of the County to promote safe disposal and recycling of household hazardous waste.

Program HS-1.4.6: Public Awareness of Toxic Materials. Initiate public awareness programs to minimize the use of toxic garden and lawn sprays for both private and public purposes (see Program EQ-5.2.3).

Program HS-1.4.7: Phase 1 Reports. Require, at minimum, a Phase 1 hazardous materials assessment for all future development or redevelopment projects on sites located within the Marinship area or on sites with a known history of industrial uses (such as gas stations).

Program HS-1.4.8: Hazardous Materials Business Plan. Continue to require that all businesses that store more than 55 gallons of hazardous materials on site file a Hazardous Materials Business Plan with the County Office of Waste Management.

Program HS-1.4.9: Inspection. Require the Fire Inspector to inspect the types, amounts, and storage facilities of all hazardous materials located on all business sites during the Occupancy Permit process.

Program HS-1.4.10: Integrated Pest Management Plan (IPM). Periodically update the Integrated Pest Management Plan, including notification of use of pesticides and herbicides.

Program HS-1.4.11: Emergency Response Plan. Develop a response plan that addresses the impacts of a broken gas line or hazardous incident in the City or its Sphere of Influence.

Policy HS-2.1: Emergency Preparedness. Ensure that the City, its citizens, businesses, and services are prepared for an effective response and recovery in the event of emergencies or disasters.

Program HS-2.1.1: City Emergency Response Plan. Implement and publicize the City's emergency response plan.

Program HS-2.1.2: Disaster Preparedness Coordination. Coordinate City-wide and neighborhood disaster preparedness planning efforts through the Emergency Preparedness Committee with the Fire and Police Departments, the American Red Cross, and the County.

Program HS-2.1.3: Citizen Training. Support the Sausalito Police Department's Volunteers in Public Safety (VIPS) program in training the public, including Sausalito residents, in how to respond to emergencies.

Program HS-2.1.4: Specific Action Plan. Develop an emergency response action plan to address identifiable risks in the case of an emergency or disaster.

Program HS-2.1.5: Disaster preparedness outreach. Increase public awareness and volunteer opportunities for disaster preparedness programs of the Sausalito Police Department, Southern Marin Fire Protection District, and the Community Safety/Disaster Preparedness Committee.

Policy HS-2.4: Access for Emergency Vehicles. Provide and maintain adequate access for emergency vehicles and equipment, particularly fire-fighting equipment. Proactive measures may be necessary to encourage efficient measures.

Program HS-2.4.1: Street Encroachment Permit Process. Maintain a temporary street encroachment permit process so that construction and other large pieces of equipment or vehicles occupying the public right-of-way may be regulated.

Sausalito Municipal Code

Title 8 of the Sausalito Municipal Code (Buildings and Construction) includes the most recently adopted State codes (Building Code, Residential Code, etc.).

Title 12 (Health and Safety) establishes measures for solid waste disposal.

Disaster Preparedness: Citizen's Guide

The Sausalito Disaster Preparedness/Emergency Operations Program is operated by the Community Safety/ Disaster Preparedness Committee to prepare the city for disasters and has provided disaster preparedness information and training to all city departments, as well as citizens' groups that have requested assistance. The Committee is a civilian board appointed by the City Council with additionally city representatives that advises the City Council and publishes an annual Disaster Preparedness: Citizen's Guide.

3.8.3 THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines Appendix G, the proposed 2040 General Plan would have a significant impact related to hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- 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;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼-mile of an existing or proposed school;
- 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, create a significant hazard to the public or the environment;
- Result in a safety hazard or excessive noise for people residing or working in the project area (for a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport); or
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. (See Section 3.16, Wildfire.)

3.8.4 ANALYSIS, IMPACTS, AND MITIGATION MEASURES

Impacts related to hazards and hazardous materials resulting from implementation of the proposed 2040 General Plan are discussed below. The following impact analysis is based on an assessment of baseline conditions for the Sausalito Planning Area, including locations of hazardous materials use and storage, existing contaminated sites, air traffic hazards, and emergency response and evacuation plan requirements. This analysis identifies potential impacts based on the interaction between the affected environment and construction, operation, and maintenance activities related to future development that could occur under the proposed 2040 General Plan. This section describes impacts in terms of location, context, duration, and intensity.

Environmental Topics Eliminated from Further Analysis

Section 21002.1(e) of CEQA requires an EIR discussion to focus on those potential effects on the environment of a proposed project which the lead agency has determined are or may be significant. Lead agencies may limit discussion on other effects to a brief explanation as to why those effects are not potentially significant.

Aviation Hazards

Hazards related to airports are typically grouped into two categories: air hazards and ground hazards. Air hazards jeopardize the safety of an airborne aircraft and expose passengers, pilots, and crews to danger. Examples of air hazards include tall structures, glare-producing objects, bird and wildlife attractants, radio waves from communication centers, or other features that

have the potential to interfere with take-off or landing procedures, posing a risk to aircraft. Ground hazards jeopardize the safety of residents and/or workers in the vicinity of an airport. The most obvious ground hazard is a plane crash, which may produce a serious, immediate risk to those residing in or using areas adjacent to the airport. Most accidents occur during take-off and landing.

As previously stated, the Planning Area is not located within any protected airspace zones defined by the Marin County ALUCP. The closest airports, San Francisco and Oakland International Airports, are located approximately 17 miles to the south and southeast of the city, respectively. The Seaplane Adventures and Commodore Center Heliport operate under a use permit from the County of Marin and include a private airstrip approximately 0.7-miles north of city limits. As such, implementation of the proposed 2040 General Plan would not result in a safety hazard for people residing or working in the Planning Area, and no impacts would occur under this criterion. Therefore, this topic is not evaluated further.

Environmental Topics Analyzed

Impact HAZ-1 Development facilitated by the proposed 2040 General Plan would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Development accommodated under the proposed 2040 General Plan could result in an incremental increase in new residential, commercial, and industrial uses, which could result in an incremental increase in the transportation, use, and disposal of hazardous materials. However, buildout of the proposed 2040 General Plan would comply with requirements and regulations set forth by the USDOT, Caltrans, CHP, local CUPA, and Southern Marin Fire Protection (SMFD).

During construction activities, commercially available hazardous materials (e.g., fuels, solvents, paints, and some consumer electronics) would be used and may generate small amounts of hazardous waste. As such, construction activities could result in an incremental increase in transportation, use, and disposal of hazardous materials.

Hazardous Material Transportation

As described in the Regulatory Setting section, the transportation of hazardous materials on local roadways and along railways is regulated and monitored by multiple agencies. These agencies enforce federal and State regulations regarding transportation of hazardous materials and respond to hazardous material spills and releases that occur on roadways, railway lines, and at railroad crossings. Further, businesses handling or storing hazardous materials over threshold quantities are required to submit an HMBP to the local CUPA. Should an accident occur during transport of hazardous materials, the CUPA, SMFD, and Marin County Sheriff's Department would respond.

Hazardous Material Use

The SMFD and City of Sausalito Building Division coordinate review of building permits to ensure hazardous materials requirements are met prior to construction, including required separation between hazardous materials and sensitive land uses, and proper hazardous materials storage facilities. Any businesses that generate or use hazardous materials within the

Planning Area would also be subject to existing hazardous materials regulations, such as those implemented by the local CUPA, and hazardous materials permits from the SMFD. The CUPA and SMFD also conduct inspections for fire safety and hazardous materials management of businesses and residential dwellings.

Businesses storing or handling hazardous materials over threshold quantities are required to submit HMBPs. These Plans must include measures for safe storage, use, and handling of hazardous materials, along with a contingency plan that describes the facility's response procedures in the event of a hazardous materials release.

Hazardous Material Disposal

The disposal of hazardous materials is regulated and monitored by the local CUPA, SMFD, CalOSHA, and the DTSC consistent with the requirements of federal, State, and local regulations and policies.

Conclusion

While development envisioned by the proposed 2040 General Plan could result in an incremental increase in transportation, use, and disposal of hazardous materials in the Planning Area, future projects would be required to comply with requirements and regulations set forth by the USDOT, Caltrans, CHP, local CUPA, and SMFD. Therefore, impacts related to transportation, use, and disposal of hazardous materials would be ***less than significant***.

Impact HAZ-2 **Development facilitated by the proposed 2040 General Plan would not 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.**

Development accommodated under the proposed 2040 General Plan could result in an incremental increase in new residential, commercial, and industrial uses. Construction activities have the potential to release potentially hazardous soil-based materials into the environment during site grading and excavation operations. Likewise, demolition of existing structures could potentially result in release of hazardous building materials (e.g., asbestos, lead paint, etc.).

Future development (including redevelopment of existing developed sites) must comply with the CCR. Title 8 of the CCR, which establishes CalOSHA requirements related to public and worker protection. Topics addressed include materials exposure limits, equipment requirements, protective clothing, hazardous materials, and accident prevention. Construction safety and exposure standards for lead and asbestos are set forth in Title 8. Title 17 of the CCR, which establishes regulations relating to use and disturbance of materials containing naturally occurring asbestos. Soil excavated during construction is regulated under Title 22 of the CCR. The local CUPA is responsible for ensuring that the CCR and all other programs related to hazardous materials are implemented during construction activities.

As described in Section 3.9, Hydrology and Water Quality, future development that disturbs one acre or more of soil, or that is part of a common plan of development that disturbs one acre or more of soil, must obtain permit coverage under the Construction General Permit by filing an Notice of Intent (NOI) and Stormwater Pollution Prevention Plan (SWPPP) with the RWQCB prior to commencement of construction. The SWPPP must describe the site, facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of

approved local plans, control of construction sediment and erosion, maintenance responsibilities, and non-stormwater management controls. The Best Management Practices in the SWPPP include measures to prevent spills and require on-site materials for cleanup.

Compliance with State law and implementation of a SWPPP during construction activities would ensure that future development under the proposed 2040 General Plan would not create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving release of hazardous materials into the environment. Therefore, impacts would be **less than significant.**

Impact HAZ-3 **Development facilitated by the proposed 2040 General Plan may result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within ¼-mile of an existing or proposed school.**

As discussed in Section 3.13, Public Services and Recreation, Sausalito is served by public and private schools, including three private preschools. Given the distribution of schools in the city and the city's small size, it is probable that future development and redevelopment associated with the proposed 2040 General Plan may result in an increase in hazardous emissions and handling of hazardous materials and wastes within 0.25-mile of an existing or future school.

The City of Sausalito Building Division coordinates review of building permits to ensure hazardous materials use requirements are met prior to construction, including required separation between hazardous materials and sensitive land uses, and proper hazardous materials storage facilities. Future development (including redevelopment of existing developed sites) under the proposed 2040 General Plan would be required by the local CUPA to store, manage, and dispose of the materials in accordance with the Unified Program. In addition, as described under Impacts HAZ-1 and HAZ-2, development facilitated by the proposed 2040 General Plan would be required to comply with existing regulations related to hazardous materials. Therefore, the potential for school children to be exposed to hazardous materials during construction and operation from future development permitted under the proposed 2040 General Plan would be less than significant.

Impact HAZ-4 **Implementation of the proposed 2040 General Plan could result in development on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.58 and, as a result, create a significant hazard to the public or environment.**

As discussed in the Existing Setting section, historical uses in Sausalito include a train and ferry system, as well as a significant ship building facilities. Deposition of hazardous materials has been found in some areas of Sausalito where these facilities operated, including Dunphy Park, which is an old burn dump site. In addition, an EnviroStor search indicated that two sites have land use restrictions because of past contamination (South Pacific Division Laboratory and Galilee Harbor Parcel 1). As such, development facilitated by the proposed 2040 General Plan could occur on a contaminated site.

This proposed 2040 General Plan contains policies and programs to address the inadvertent discovery of hazardous materials on project sites. Program HS-1.4.2 requires that subsurface contamination investigations at potentially contaminated sites be conducted prior to

development approval. Program HS-1.4.7 requires, at minimum, a Phase 1 hazardous materials assessment for all future development or redevelopment projects on sites located within the Marinship area or on sites with a known history of industrial uses (such as gas stations).

As described under HAZ-1, should any hazardous materials be inadvertently encountered during construction activities from development facilitated by the proposed 2040 General Plan, the handling, transportation, and disposal of hazardous materials would be required to comply with the requirements and regulations set forth by the USDOT, Caltrans, CHP, CPUC, Hazardous Materials Compliance Division (HMCD), and Santa Clara County Fire Department (SCCFD).

While development envisioned by the proposed 2040 General Plan could result in inadvertent discovery of hazardous materials, compliance with proposed 2040 General Plan policies and programs to identify potentially contaminated sites, and compliance with federal, State and local regulations regarding handling, transportation, and disposal of hazardous materials, would ensure that potential hazards to the public or environment would be ***less than significant***.

Impact HAZ-5 Development facilitated by the proposed 2040 General Plan would not impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

As described in the Regulatory Setting section, the County of Marin has developed an EOP which describes overall responsibilities of federal, State and County, and city for protecting life and property and assuring overall wellbeing of the population. The SMFD conducts evacuation exercises annually to prepare for emergency situations. Evacuations in the planning area are an emergency support function that local law enforcement organizes and coordinates with the SMFD.[15]

The Sausalito Community Safety/ Disaster Preparedness Committee also publishes an annual Disaster Preparedness: Citizen's Guide and provides disaster preparedness training to city departments and residents.

The routes that would be used in the event of an evacuation include Bridgeway, Spencer Avenue, Alexander Avenue, Highway 101, Donahue Street, and Shoreline Highway. For persons residing on boats, or persons having access to boats, including the Golden Gate Ferry, evacuation could be potentially taken via Richardson's Bay.

Development accommodated under the proposed 2040 General Plan could result in an incremental increase in new residential, commercial, and industrial uses. As described in Section 2, Project Description, the proposed 2040 General Plan is expected to accommodate approximately 304 new residential dwelling units, 587,961 square feet of new commercial space, and 146,124 square feet of new industrial space. This new growth would increase the city's population by approximately 467 residents and approximately 1,762 employees. Some of these new employees are also expected to be residents of the Planning Area.

Development and growth in the city under the proposed 2040 General Plan could result in an incremental increase in demand for emergency response services. New development under the proposed 2040 General Plan would be considered in the context of the EOP and is not expected to impair implementation of or physically interfere with the EOP. The EOP is maintained on a

[15] Christian Tubbs, Fire Chief. 2020. Email correspondence with Lilly Whalen, Community Development Department Head. April 20.

regular basis by the County Sheriff's Office of Emergency Services. As such, as development occurs under the proposed 2040 General Plan, the EOP can be modified to reflect new growth within the Planning Area. Therefore, impacts would be ***less than significant***.

Development and growth in the city under the proposed 2040 General Plan would result in an incremental increase in demand for emergency evacuation routes within the Planning Area. Most of the development facilitated by the proposed 2040 General Plan would be served by existing emergency evacuation routes, which have sufficient capacity to accommodate projected growth. Therefore, impacts would be ***less than significant***.

Impact HAZ-6 **Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to hazards and hazardous materials.**

This analysis evaluates whether impacts of the proposed 2040 General Plan, together with impacts of cumulative development, would result in a cumulatively significant impact with respect to hazards and hazardous materials. This analysis then considers whether incremental contribution of impacts associated with implementation of the proposed 2040 General Plan would be significant. Both conditions must apply for a project's cumulative effects to rise to the level of significance. The geographic context for this analysis includes the Sausalito Planning Area, Marin City, Mill Valley, Tiburon, Belvedere, and other adjacent unincorporated areas.

Hazards and Hazardous Materials

As previously discussed, development facilitated by the proposed 2040 General Plan could result in an incremental increase in new residential, commercial, and industrial uses, which could result in an incremental increase in transportation, use, and disposal of hazardous materials. Construction activities under the proposed 2040 General Plan would have the potential to disturb and release potentially hazardous soil-based materials, hazardous building materials (e.g., asbestos, lead paint, etc.), or other hazardous materials into the environment. Furthermore, construction activities must comply with the CCR and implement a SWPPP to prevent hazardous materials spills and protect public safety. In addition, 2040 General Programs HS-1.4.2 and HS-1.4.7 would reduce potential impacts related to sites with known hazardous materials to less than significant.

As previously stated, development under the proposed 2040 General Plan would be required to comply with requirements and regulations set forth by the USDOT, Caltrans, CHP, the local CUPA, and SMFD related to transport, use, and disposal of hazardous materials. All cumulative projects would be subject to similar requirements and regulations set forth by the same and similar agencies for each projects' own jurisdiction. Cumulative projects will also be required to implement a SWPPP and comply with the CCR during construction, site grading, excavation operations, and building demolition. For these reasons, impacts of the proposed 2040 General Plan on hazards and hazardous materials are not cumulatively considerable and the cumulative impact would be **less than significant.**

Emergency Response and Evacuation Plans

As previously discussed, development envisioned by the proposed 2040 General Plan would result in an incremental increase in demand for emergency response and use of emergency evacuation routes. The SMFD conducts evacuation exercises annually to prepare for emergency

situations. Evacuations in the planning area are an emergency support function that local law enforcement organizes and coordinates with the SMFD.[16] The MCM LHMP covers all incorporated Cities in Marin County, as well as unincorporated areas. The LHMP addresses emergency preparedness, mitigation, warnings, communications, responses, and recovery. The LHMP also identifies resources, information, and strategies for reducing risk from natural hazards. In addition, Marin County has an EOP that is regularly updated. Adjacent jurisdictions also have emergency response plans and emergency evacuation plans. For these reasons, impacts of the proposed 2040 General Plan on adopted emergency response plans or emergency evacuation plans are not cumulatively considerable and the cumulative impact would be ***less than significant***.

[16] Christian Tubbs, Fire Chief. 2020. Email correspondence with Lilly Whalen, Community Development Department Head. April 20.

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3.9 HYDROLOGY AND WATER QUALITY

This section of the Draft EIR describes the existing hydrology, drainage, flooding, water quality, and groundwater within the Planning Area and evaluates impacts anticipated to occur from implementation of the proposed 2040 General Plan. Water supply and wastewater conveyance and treatment are discussed in Section 3.15, Utilities and Service Systems. Issues regarding wetlands and Waters of the United States are discussed in Section 3.3, Biological Resources.

Information in this section is based on information provided by the following reference materials:

- Marin Watershed Program;
- Sausalito 2040 General Plan Health, Safety, and Community Resilience Element (February 2013); and
- 2016 Clean Water Act Section 303(d) List of Impaired Water Bodies.[1]

3.9.1 EXISTING SETTING

Regional Hydrology

In Marin County, the Marin Watershed Program in combination with the Marin County Flood Control and Water Conservation District designates watershed boundaries. A watershed is an area of land where all streams and the rain drain into a common outlet such as a reservoir or mouth of a bay. Generally, a watershed is comprised of surface water (lakes, streams, reservoirs, and wetlands) and all the underlying groundwater.[2]

Richardson's Bay Watershed

The City of Sausalito is located within the Richardson's Bay Watershed. Richardson's Bay is part of the San Francisco Bay system and is situated in southern Marin County. As shown in Exhibit 3.9-1, five local government jurisdictions have oversight over the Richardson's Bay Watershed: Marin County; the cities of Sausalito, Mill Valley, Tiburon, Belvedere; and BCDC. The upper slopes and ridges of the watershed, in the Mount Tamalpais area, are largely protected from development, but the remaining watershed area is developed with residential and commercial areas.[3] The Richardson's Bay Watershed ranges in elevation from 2,571 feet above mean seal level (msl) at Mount Tamalpais down to the shoreline at sea level. According to the California Department of Water Resources (DWR), there is no groundwater basin in the Sausalito Planning

[1] Approved by the San Francisco Bay Regional Water Quality Control Board on April 26, 2017.
[2] United States Geological Survey. The USGS Water Science School. Website: https://www.usgs.gov/special-topic/water-science-school. Accessed March 25, 2020.
[3] Marin County Watershed Program. Richardson Bay Watershed. Website: https://www.marinwatersheds.org/creeks-watersheds/richardson-bay. Accessed March 25, 2020.

Area.[4] Although outside of the Planning Area, there are several creeks and streams within the Richardson's Bay Watershed, such as Coyote Creek and Old Mill Creek, that eventually drain into Richardson's Bay.

Flooding

Sausalito is situated at a point where the Marin Headlands meet Richardson's Bay. The resulting topography creates a sharp gradient that extends down to the city waterfront. In this context, the low-lying and unprotected coastal areas of the community are subject to flooding from extreme weather events, storm surges, exceptional high tides, and sea level rise. Inadequate drainage and land subsidence also contribute to the problem of flooding.

FEMA Flood Zones

Floodplain mapping prepared by FEMA provides important guidance for the city in planning for flooding events and regulating development within identified flood hazard areas. FEMA's National Flood Insurance Program (NFIP) is intended to encourage State and local governments to adopt responsible floodplain management programs and flood measures. As part of the program, the NFIP defines floodplain and floodway boundaries that are shown on Flood Insurance Rate Maps (FIRMs). The FEMA flood zones for the Sausalito Planning Area are shown on Exhibit 3.9-2.

Exhibit 3.9-2 depicts the FEMA flood hazard zones, which are based on the 2016 FEMA Flood Insurance Maps.[5] The majority of the Sausalito Planning Area's shoreline is subject to 100-year flooding, which refers to a flooding event that has a one percent chance of occurring in any given year. Other areas within the Planning Area's shoreline are subject to 500-year flooding and are identified as having a 0.2 percent chance of being flooded in a given year. The remaining portions of the Planning Area are located at higher elevations where the risk of flooding is relatively low. Wind wave action in Richardson's Bay can also result in a flooding hazard.

Dam or Levee Failure Inundation Zones

The Marin County Flood Control District maintains one levee in the immediate vicinity of Sausalito, approximately 1-mile long, located east of and parallel to Highway 101. The levee ends south of the intersection at Shoreline Highway and Highway 101, near the community of Manzanita.[6] The levee was constructed by the U.S. Army Corps of Engineers in the 1960s to provide protection from tidal action and flooding. Oversight of the levee was subsequently

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[4] California Department of Water Resources. SGM Sustainable Groundwater Management. Website: https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management. Accessed March 25, 2020.

[5] City of Sausalito. Sea Level Rise and FEMA Flood Insurance. Website: https://www.sausalito.gov/departments/public-works/engineering-division/sea-level-rise-and-fema-flood-insurance. Accessed March 25, 2020.

[6] Conservation Biology Institute Data Basin. San Francisco Bay Levees. Website: https://databasin.org/datasets/ed05b99c85e94df5befb6e619847e378. Accessed March 25, 2020.

transferred to the Marin County Flood Control District for operations and maintenance. The levee is periodically inspected, most recently in September 2010.[7] Available records indicate that the levee received a minimally acceptable inspection. Nevertheless, tidal flooding does occasionally cause closure of the Shoreline Highway, the Caltrans Manzanita Park-and-Ride lot, and the Mill Valley-Sausalito Pathway. The Marin County Flood Control District has established Zone 3 – Richardson's Bay, to address specific flooding problems within Sausalito and the surrounding areas. Most recently, drainage improvements were implemented to address flooding near Highway 101 and in the lower reaches of Marin City (lowland areas).[8]

Alpine Dam is an arched concrete gravity structure located approximately 10 miles northwest of Sausalito. The dam was built in 1917 to create a reservoir and provide flood control. The Marin Municipal Water District (MMWD) owns and operates the dam, providing its customers with clean, affordable water from a reservoir. According to State records, the dam is 143 feet high with a crest length of 524 feet. The reservoir's capacity is approximately 8,892 acre-feet.

The State requires "emergency action plans" (EAP) for dams located upstream of areas where more than 1,000 people reside. An EAP is a formal document that identifies potential emergency conditions at a dam. The EAP further specifies actions that must take place to minimize loss of life and property damage. In July 2017, the Division of Safety of Dams notified MMWD that it must update and submit an EAP for Alpine Dam by January 2018. The DWR designated the downstream hazard as "extremely high" but a 2017 assessment report lists the dam's condition as "satisfactory."[9] In the event of a failure, the outflow from Alpine Lake will flow into Kent Lake, located 1.5 miles downstream, and pass through the spillway at Peters Dam. If the Peter Dam spillway were to subsequently fail, outflow will continue downstream and empty into Tomales Bay, which is located over 22 miles northwest of the Planning Area.

Tsunami Inundation Zones

Tsunamis consist of waves generated by large disturbances of the sea floor, which are caused by volcanic eruptions, landslides, or earthquakes. Shallow earthquakes along dip slip faults are more likely to be sources of tsunami than those along strike slip faults. Tsunamis are often incorrectly referred to as tidal waves; they are a series of waves that can travel at speeds averaging 450 (and up to 600) miles per hour with unusual wave heights. Tsunamis can reach the beach before warnings are issued. Associated risks include flooding, contamination of drinking water, ruptured tanks or gas lines, and the loss of vital community infrastructure.[10]

Marin County communities may be vulnerable to tsunamis because of the location and quality of the built environment. The principal exposure would be people, buildings, and infrastructure

[7] US Army Corps of Engineers. National Levee Database. Website: https://levees.sec.usace.army.mil/#/. Accessed March 26, 2020.

[8] Marin County Flood Control and Water Conservation District. 2017. Marin City Drainage Study. A Study for the Marin Flood Control Zone No. 3. October 20.

[9] California Natural Resources Agency, Department of Water Resources. 2017. Dams Within Jurisdiction of the State of California. September.

[10] Marin County. 2018. Marin County Multi-Jurisdiction Local Hazard Mitigation Plan, page 70.

located in the low-lying potential inundation area. Especially at risk are visitors, hikers, campers, and non-residents who might be on the shore when the tsunami strikes. Tsunami hazard zones within the Planning Area are shown in Exhibit 3.9-3. As shown in the exhibit, the areas east of Bridgeway are most likely to become inundated in the event of a tsunami.

Water Quality

Stormwater Runoff

Potential hazards to surface water quality include the following nonpoint pollution problems: high turbidity from sediment resulting from erosion of improperly graded construction projects, concentration of nitrates and dissolved solids from agriculture or surfacing septic tank failures, contaminated street and lawn run-off from urban areas, and warm water drainage discharges into cold water streams.

The most critical period for surface water quality is following a rainstorm that produces significant amounts of drainage runoff into streams at low flow, resulting in poor dilution of contaminates in the low flowing stream. Such conditions are most frequent during the fall at the beginning of the rainy season when stream flows are near their lowest annual levels. Besides the greases, oils, pesticides, litter, and organic matter associated with such runoff, heavy metals such as copper, zinc, and cadmium can cause considerable harm to aquatic organisms when introduced to streams in low flow conditions.

Urban stormwater runoff was managed as a non-point discharge (a source not readily identifiable) under the Federal Water Pollution Control Amendments of 1972 (PL 92-500, § 208) until the mid-1980's. Since that time, the USEPA has continued to develop implementing rules categorizing urban runoff as a point source (an identifiable source) subject to NPDES permits. Rules now affect medium and large urban areas, and further rulemaking is expected as programs are developed to meet requirements of Federal water pollution control laws.

Surface water pollution is also caused by erosion. Excessive and improperly managed grading, vegetation removal, quarrying, logging, and agricultural practices all lead to increased erosion of exposed earth and sedimentation of watercourses during rainy periods. In slower moving water bodies these same factors often cause a buildup of siltation, which ultimately reduces the capacity of the water system to percolate and recharge groundwater basins, as well as adversely affecting both aquatic resources and flood control efforts.

Impaired Water Bodies

Section 303(d) of the Federal Clean Water Act (CWA) requires states to identify waters that do not meet water quality standards or objectives and thus, are considered "impaired." Once listed, Section 303(d) mandates prioritization and development of a Total Maximum Daily Load (TMDL). The TMDL is a tool that establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved.

The State Water Board and RWQCB assess water quality data for California's waters every two years to determine if the water bodies contain pollutants at levels that exceed protective water quality criteria and standards. Based on the assessment, the water body segment is placed in one of the categories listed below:

- Category 1: All core beneficial uses are supported.
- Category 2: At least one core beneficial use is supported and none are known to be impaired.
- Category 3: Insufficient information to determine beneficial use support.
- Category 4: At least one beneficial use is not supported but TMDL is not needed.
- Category 4a: A TMDL has been developed and approved by USEPA for any waterbody-pollutant combination, and the approved implementation plan is expected to result in full attainment of the water quality standard within a specified time frame.
- Category 4b: Another regulatory program is reasonably expected to result in attainment of the water quality standard within a reasonable, specified time frame.
- Category 4c: The non-attainment of any applicable water quality standard for the waterbody segment is the result of pollution and is not caused by a pollutant.
- Category 5: At least one beneficial use is not supported and a TMDL is needed.

The Sausalito Planning Area has two water bodies listed in the San Francisco Bay RWQCB 2016 CWA Section 303(d) list of impaired water bodies:[11]

- Coyote Creek – Category 4a segment for diazinon (pesticide)
- Arroyo Corte Madera Del Presidio – Category 4a segment for diazinon

The listing for diazinon was made by USEPA for the 1998 303(d) list. For 2006, diazinon was moved by USEPA from the "303(d) List" to the "Being Addressed by USEPA Approved TMDL List" because the TMDL approved by USEPA and the implementation plans are in place. Additionally, Schoonmaker Beach was included on the proposed de-listings pages for the 2018 San Francisco Bay Region 303(d) list for the pollutant: Indicator Bacteria.

Water Supply

The City of Sausalito receives 100 percent of its water supply from the MMWD.[12] As discussed in Section 3.15, Utilities and Service Systems, the MMWD has studied the potential for municipal groundwater use since the 1970's, and has determined that the potential for municipal groundwater use within the boundaries of the MMWD's service area is very limited due to limited production capabilities, water quality constraints, and potential water rights issues. As a result, groundwater is not currently or planned to be used as a municipal water supply source by

[11] San Francisco Bay Regional Water Quality Control Board. 2016 Clean Water Act Section 303(d) List. Website: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/303dlist.html. Accessed March 25, 2020.

[12] Marin Municipal Water District. Website: https://www.marinwater.org/27/About. Accessed March 25, 2020.

the MMWD, though private groundwater wells are used in the MMWD's service area.[13] See Section 3.15, Utilities and Service Systems, for additional details about water supply and demand for the Sausalito Planning Area.

3.9.2 REGULATORY SETTING

Federal

Clean Water Act

Under the CWA, the USEPA seeks to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The statute employs a variety of regulatory and non-regulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. The CWA authorizes the USEPA to implement water quality regulations. The NPDES permit program under Section 402 of the CWA controls water pollution by regulating soil erosion and stormwater discharges into the waters of the United States. NPDES permitting authority is administered by the State Water Board and its nine RWQCBs.

The RWQCB has issued the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), which regulates stormwater discharges related to construction activities.[14] Projects disturbing one or more acres of soil, or whose projects disturb less than one acre but are part of a larger common plan of development that, in total, disturbs one or more acres, are required to obtain coverage under the Construction General Permit. The Construction General Permit requires the applicant to file a Notice of Intent (NOI) and SWPPP with the RWQCB prior to commencement of construction. The SWPPP must list best management practices (BMPs) that the discharger would use to reduce or eliminate pollutants associated with construction activities in stormwater runoff and document the placement and maintenance of those BMPs.

The RWQCB has also issued a Municipal Regional Permit (MRP), which regulates municipal separate storm sewer systems (MS4s). Phase I MS4 regulations cover municipalities with more than 100,000 residents, certain industrial processes, or construction activities that disturb an area of 5 acres or more. Phase II "small" MS4 regulations require stormwater management plans to be developed by municipalities with fewer than 100,000 residents and construction activities that disturb one or more acres of land.

The County and all its municipalities, including Sausalito, are subject to the conditions of regulations described in the current 2013 Phase II Permit. Provision C.3 of the MRP for New Development and Redevelopment allows the permittees to use their planning authorities to include appropriate source control, site design, and stormwater treatment measures in new development and redevelopment projects to address both soluble and insoluble stormwater

[13] Marin Municipal Water District. 2016. 2015 UWMP, page 6-3.
[14] Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-006-DWQ.

runoff pollutant discharges and prevent increases in runoff flows from new development and redevelopment projects. The goal is to be accomplished primarily through the implementation of low impact development (LID) techniques.

Federal Emergency Management Act

FEMA administers the NFIP, in which participating agencies must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 adopted a desired level of protection with an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once every 100 years, although such a flood may occur in any given year. The 1968 Act made federally subsidized flood insurance available to property owners if their communities participate in the NFIP. A community establishes its eligibility to participate by:

- Adopting and enforcing floodplain management measures to regulate new construction; and
- Ensuring that substantial improvements within Special Flood Hazard Areas (SFHA) are designed to eliminate or minimize future flood damage.

An SFHA is an area within a floodplain having a one percent or greater chance of flood occurrence within any given year. SFHAs are delineated on flood hazard boundary maps issued by FEMA. The Flood Disaster Protection Act of 1973 and the National Flood Insurance Reform Act of 1994 make flood insurance mandatory for most properties in SFHAs. Based on a review of the FIRMs that cover the Sausalito Planning Area,[15] the areas adjacent to the city shoreline and Bridgeway, a local roadway, are delineated as SFHAs. Executive Order 11988 Executive Order 11988 (Floodplain Management) addresses floodplain issues related to public safety, conservation, and economics. It generally requires federal agencies constructing, permitting, or funding a project in a floodplain to do the following:

- Avoid incompatible floodplain development;
- Be consistent with the standards and criteria of the NFIP; and
- Restore and preserve natural and beneficial floodplain values.

National Flood Insurance Program

In response to the increasing cost of disaster relief, Congress passed the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. FEMA administers the NFIP to provide subsidized flood insurance to communities that comply with FEMA regulations to limit development in floodplains. A FIRM is an official FEMA-prepared map of a community. It is used to delineate both the SFHAs and the flood-risk premium zones that are applicable to the community.

[15] Maps numbered 06041C0507E and 06041C0526E.

Rivers and Harbors Act

Section 10 of the Rivers and Harbors Act of 1899 prohibits work that affects the course, location, conditions, or capacity of navigable Waters of the United States without a permit from US Army Corps of Engineers. Navigable waters under the act are "those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high water mark and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce," (Title 33 CFR §3294). A Section 10 permit may be required for structures or work outside the limits of navigable waters if the structure or work affects the course, location, condition, or capacity of the water body.

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Act (Water Code § 13000 et seq.) is the basic water quality control law for California. The Act established the State Water Board and divided the State into nine regional basins, each under the jurisdiction of a RWQCB. The Porter-Cologne Act authorizes the State Water Board to draft State policies regarding water quality and requires the State Water Board or a RWQCB to adopt basin plans for the protection of water quality. The Porter-Cologne Act authorizes the State Water Board and RWQCBs to issue and enforce waste discharge requirements, NPDES permits, Section 401 water quality certifications, or other approvals.

Other Water Quality Regulatory Agencies

Other State agencies with jurisdiction over water quality regulation in California include the California Department of Health Services (for drinking water regulations), the California Department of Pesticide Regulation, and the Office of Environmental Health and Hazard Assessment.[16]

State Updated Model Water Efficient Landscape Ordinance (Assembly Bill 1881)

The Water Conservation in Landscaping Act was enacted in 2006, requiring the DWR to update the Model Water Efficient Landscape Ordinance (MWELO). In 2009, the Office of Administrative Law approved the updated MWELO, which required a retail water supplier or a county to adopt the provisions of the MWELO by January 1, 2010, or to enact its own provisions equal to or more restrictive than the MWELO provisions. In 2015, Executive Order B-29-15 tasked DWR with revising the 2010 updated MWELO to increase water efficiency standards for new and retrofitted landscapes through encouraging the use of more efficient irrigation systems, graywater usage, and onsite storm water capture, and by limiting the portion of landscapes that can be covered in turf.[17]

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[16] State of California, Office of the Governor. 2008, Executive Order S-13-08.

[17] California Department of Water Resources. 2015. Model Water Efficient Landscape Ordinance

Regional

San Francisco Bay Water Quality Control Plan (Basin Plan)

The City of Sausalito is within a regional watershed administered by the RWQCB. The RWQCB has established regulatory standards and objectives for water quality in San Francisco Bay in its Water Quality Control Plan for the San Francisco Bay Basin, commonly referred to as the Basin Plan. The board is required to develop, adopt (after public hearing), and implement a basin plan for the region. Basin plans are updated and reviewed every three years. They provide the technical basis for determining waste discharge requirements, taking enforcement actions, and evaluating clean water grant proposals. A basin plan must include (1) a statement of beneficial water uses that the RWQCB will protect, (2) the water quality objectives needed to protect the designated beneficial water uses, and (3) strategies to be implemented, with time schedules for achieving the water quality objectives.[18] The San Francisco Bay Basin Plan was last updated in 2017.[19]

In basin plans, RWQCBs designate beneficial uses for all water body segments in their jurisdictions and then set the criteria necessary to protect these uses. Consequently, the water quality objectives developed for particular water segments are based on the designated use and vary, depending on such use. Each RWQCB has region-wide and water body–specific beneficial uses and sets numeric and narrative water quality objectives for several substances and parameters in numerous surface waters in its region. For water bodies that do not have specific beneficial uses or water quality objectives designated in the Basin Plan, the tributary rule[20] applies. Specific objectives for concentrations of chemical constituents are applied to bodies of water according to their designated beneficial uses. In addition, the State Water Board identifies waters that fail to meet standards for specific pollutants, which are then state listed in accordance with CWA Section 303(d), described previously.

Marin County Stormwater Pollution Prevention Program

A joint effort of Marin's cities, towns and unincorporated areas, Marin County Stormwater Pollution Prevention Program (MCSTOPPP) was established in 1993 to prevent stormwater pollution; protect and enhance water quality in creeks and wetlands; and preserve beneficial uses of local waterways. MCSTOPPP is administered by the Marin County Flood Control and Water Conservation District and staffed by Marin County Department of Public Works employees. Countywide MCSTOPPP staff enforce permit compliance, track stormwater regulations, and document local and countywide permit compliance efforts in annual reports to

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[18] San Francisco Bay Regional Water Quality Control Board, San Francisco Bay Basin (Region 2). Programs. Website: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/. Accessed January 14, 2020.

[19] San Francisco Bay Regional Water Quality Control Board, San Francisco Bay Basin (Region 2). Water Quality Control Plan (Basin Plan). Website: https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html. Accessed January 14, 2020.

[20] The "tributary rule" refers to any water body or stream not specifically listed in the Basin Plan that is deemed to have the same beneficial uses and water quality objectives of the listed stream, river, or lake to which they are a tributary.

the RWQCB. Member agencies implement a local stormwater pollution prevention program and funds the countywide MCSTOPPP.

Local

Sausalito General Plan

The proposed 2040 General Plan includes the following relevant policies and programs that assist in reducing or avoiding potential impacts related to hydrology and water quality:

Land Use and Growth Management Element

Policy LU-6.5: Richardson's Bay Shoreline. Preserve the existing shoreline of Richardson's Bay as open shoreline and natural habitat.

Waterfront Element

Policy W-3.2: Vessel Pollution. Evaluate water-dependent developments with regard to their pollution control and sea level rise.

Policy W-4.2: Bay Waters. Preserve and enhance the wetlands, open waters, and ecosystem of Richardson's and San Francisco Bays and utilize these landscapes for sea level rise mitigation.

Environmental Quality Element

Policy EQ-4.2: Regional Collaboration. Work together with regional, County, State, and Federal actors on water quality and sea level rise issues of common concern.

Program EQ-4.2.1: Stormwater Pollution Prevention Program. Continue to participate in the Marin County Stormwater Pollution Prevention Program (MCSTOPPP).

Program EQ-4.2.2: Well Ordinance Review. Work with County and others to periodically review and update the Well Ordinance as new technical and environmental information becomes available.

Program EQ-4.2.3: Richardson's Bay Regional Agency. Coordinate with the Richardson's Bay Regional Agency (RBRA) or successor agency in implementing the adopted water pollution control program contained in the Richardson Bay Special Area Plan.

Program EQ-4.2.4: Monitoring Bay Water Quality. Coordinate with the Richardson's Bay Regional Agency to assist the RWQCB and BCDC in the regular monitoring of Bay water quality.

Program EQ-4.2.6: Flood Insurance. Continue participation in FEMA's National Flood Insurance Program (NFIP) and the Community Rating System to improve resilience and reduce flood damage.

Program EQ-4.2.8: Discharge Monitoring. Comply with National Pollutant Discharge Elimination System (NPDES) and state pollution discharge programs by implementing programs and projects that address filtration of storm water systems prior to discharge into the Waters of the United States.

Policy EQ-4.3: Stormwater Management. Manage flooding, mitigate hazardous runoff from stormwater, and mitigate landslides.

Program EQ-4.3.3: Pervious Surfaces. Encourage pervious surfaces in new developments or major renovations to the maximum extent feasible to percolate stormwater runoff into groundwater without impacting subsurface stability.

EQ-4.3.4. Ordinance Amendment (Impervious Surfaces). Consider modifications to the definition of impervious surface regulations in the Zoning Ordinance to ensure that pervious surfaces are encouraged.

Program EQ-4.3.5: Toxin-Free Landscape. Increase outreach on the use of toxin-free landscape management practices to residents and landscape businesses.

Program EQ-4.3.6: Runoff Discharge. During permitting processes for new development or substantial remodels, ensure that post-development peak stormwater runoff discharge rates do not exceed the estimated pre-development rate, such that the development does change preexisting drainage patterns. In addition, dry weather runoff from these projects should not exceed the pre-development baseline flow rate.

Policy EQ-4.6: Creeks and Drainage Ways. Promote the natural integrity of creeks and/or drainageways as riparian habitat, wildlife corridors, and to protect residents from flooding and other hazards.

Program EQ-4.6.2: Public Information. Initiate public information programs to stress the importance of keeping debris clear for proper drainage and enhancement of privately-owned creeks and drainageways for wildlife habitat.

Program EQ-4.6.4: Daylighting Creeks. Initiate or support daylighting projects to increase riparian habitat and reduce runoff.

Policy EQ-4.7: Water Conservation. Promote and encourage water conservation measures to assure that an adequate and safe supply of high-quality water is available for residents.

Health, Safety, and Community Resilience Element

Program HS-1.2.7: Erosion Mapping. Develop a citywide GIS layer that maps the City's drainage and erosion hot spots related to geologic weathering.

Policy HS-1.8: Flooding. Manage the threat of flooding for existing and future structures and their occupants.

Program HS-1.8.1: Zoning Ordinance (Tsunami Hazards). Continue to review the effect of sea level rise, flooding, and tsunamis on parcels that have an elevation of 25 feet or less above Mean Lower Low Water level datum through the environmental review process.

Program HS-1.8.2: 100-Year Flood Zone Mapping. Update the "100-year" flood area map, as shown on Map 7-3 [of the General Plan], as new information becomes available from the Federal Emergency Management Agency or the U.S. Department of Housing and Urban Development.

Program HS-1.8.3: Creek Drainageway Monitoring. Periodically monitor the City's creek drainageways in order to keep them clear and prevent blockage of storm waters (see Policy EQ-4.6).

Policy HS-1.9: Shoreline Safety. Minimize the potential for personal injury and damage to shoreline property from waves and flooding.

Program HS-1.9.1: Sea Level Rise. Continue to support studies by appropriate State agencies which monitor the rise in sea level.

Program HS-1.9.2: Localized Sea Level Rise Study. Consider initiating and implementing a localized sea level rise study that identifies local improvements in low lying areas to minimize current effects of sea level rise.

Program HS-1.9.3: Shoreline Flooding Identification. Require site plans of shoreline development to identify areas of the parcel subject to flooding and wave action.

Program HS-1.9.4: Wind Waves. Support BCDC in exploring ways to reduce the effects of wind waves on the shoreline and waterborne uses.

Policy HS-2.1: Emergency Preparedness. Ensure that the City, its citizens, businesses, and services are prepared for an effective response and recovery in the event of emergencies or disasters.

Program HS-2.1.1: City Emergency Response Plan. Implement and publicize the City's emergency response plan.

Program HS-2.1.4: Specific Action Plan. Develop an emergency response action plan to address identifiable risks in the case of an emergency or disaster.

Program HS-2.1.7: Release of Pollutants Due to Project Site Inundation. Develop an action plan to identify how the city will address the potential release of pollutants within the city's flood hazard and tsunami zones, should they become inundated.

Sustainability Element

Policy S-4.1: Adequacy of Facilities. Allow construction to proceed for only those projects that demonstrate the availability of adequate potable water, sewer, septic leach fields and storm drainage.

Program S-4.3.1: Water Conservation. Continue to require that new landscaping plans be reviewed to assure compliance with the Water Conservation Ordinance. (See Policy EQ-4.7)

Sausalito Municipal Code

Chapter 8.48 (Floodplain Management) describes methods for reducing losses due to floods such as restricting uses that could pose risk to health, safety, and property due to water or erosion hazards; requiring that uses and facilities that are vulnerable to floods incorporate flood damage protection at the time of initial construction; controlling actions, such as filling, grading, and dredging, that may increase flood damage, or actions, such as alteration of stream channels and construction of barriers, that can divert flood water and therefore increase flood hazards in other areas. Additionally, Chapter 8.48 provides updated flood hazard maps for Sausalito and

Marin County.[21] The maps were completed in 2016 and available to the public. In Sausalito, the city's Engineer serves as the city's Floodplain Administrator. Pursuant to city regulations, the city Floodplain Administrator is responsible for review of permit applications to ensure the proposed development is reasonably safe from flooding and that it would not increase the flood risk in the area.

Chapter 11.17 (Urban Runoff Pollution Prevention Ordinance) is intended to prevent or minimize discharges other than storm runoff to storm drains or watercourses. The Ordinance calls for prohibiting, reducing, preventing, controlling, and responding to spills to the maximum extent practicable. For example, construction site operations are required to implement BMP on-site controls such as scheduling and timing of grading activities, revegetation of graded areas, using hydro-seed and mulches to stabilize slopes, and control blankets. As another example, newly developed or redeveloped lands are required to maintain pre-development stormwater runoff rates and prevent stormwater pollution where possible through LID design.

Chapter 11.18 (Regulatory Fee for Clean Stormwater Activities) is intended to protect and enhance the water quality of watercourses, water bodies, and wetlands in a manner consistent with the CWA. It establishes a funding source for urban runoff pollution prevention ordinance enforcement; maintenance, repair, and improvement of stormwater drainage facilities; and provide other clean stormwater activities.

Chapter 17.08 (Excavations Generally) sets forth rules and regulations to control excavation, grading, and earthwork construction on land to safeguard public health, safety, and welfare.

Chapter 18.12 (Sewers) regulates connections and discharge to the city's sanitary sewer system. The ordinance specifically prohibits the discharge of toxic substances including cooking grease, waste automotive radiator coolant, explosive mixtures, radioactive wastes and solid or viscous wastes which may cause obstruction to the flow in a sewer pipeline.

3.9.3 THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines Appendix G, the proposed 2040 General Plan would have a significant impact related to hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;

[21] City of Sausalito Department of Public Works, Engineering Division. Sea Level Rise and FEMA Flood Insurance. Website: https://www.sausalito.gov/departments/public-works/engineering-division/sea-level-rise-and-fema-flood-insurance. Accessed March 25, 2020.

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;
- 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;
- impede or redirect flood flows;
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation;
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

3.9.4 ANALYSIS, IMPACTS, AND MITIGATION MEASURES

Impacts to hydrology and water quality resulting from implementation of the proposed 2040 General Plan are discussed below. The impact analysis is based on an assessment of baseline conditions for the Sausalito Planning Area, including climate, topography, watersheds and surface waters, groundwater, and floodplains, as described above under the Existing Setting section. This analysis identifies potential impacts to hydrology and water quality from construction, operation, and maintenance activities related to future development that could occur under the proposed 2040 General Plan.

Impact HYD-1 **Development facilitated by the proposed 2040 General Plan would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.**

Construction Activities

Development under the proposed 2040 General Plan would involve grading, excavation, and removal of vegetative cover that have the potential to result in runoff that contains sediment and other pollutants that could degrade surface and groundwater quality if not properly controlled. Sources of potential pollution associated with construction include fuel, grease, oil and other fluids, concrete material, sediment, and litter. These pollutants have the potential to result in impacts due to chemical contamination from construction activities and materials that could pose a hazard to the environment or degrade water quality if not properly managed and controlled.

Future development (including redevelopment of existing developed sites) that disturbs one acre or more of soil or that is part of a common plan of development that disturbs one acre or more of soil must obtain permit coverage under the Construction General Permit by filing a NOI and SWPPP with the RWQCB prior to commencement of construction. The SWPPP must

describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Inspection of construction sites before and after storms is also required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary.

The proposed 2040 General Plan includes policies and programs to map areas with high susceptibility to erosion and protect water quality. Program HS-1.2.7 requires the city to develop a citywide GIS layer that maps the city's drainage and erosion hot spots related to geologic weathering, which will also protect water quality. Program EQ-4.2.1 requires the city to continue to participate in MCSTOPPP. Program EQ-4.2.3 requires the city to coordinate with the RBRA in implementing the adopted water pollution control program contained in the Richardson's Bay Special Area Plan.

The Sausalito Municipal Code contains rules and regulations to protect water quality during construction. Chapter 11.17 calls for prohibiting, reducing, preventing, controlling, and responding to spills to the maximum extent practicable. Additionally, Chapter 11.18 establishes a funding source for urban runoff pollution prevention ordinance enforcement; maintenance, repair, and improvement of stormwater drainage facilities; and provide other clean stormwater activities. Finally, the rules and regulations of the Municipal Code that address soil erosion, such as Chapter 17.08, also protect water quality during construction.

Compliance with mandatory NPDES permit requirements, adherence to the Sausalito Municipal Code, and implementation of proposed 2040 General Plan policies and programs would ensure that impacts related to water quality degradation from construction activities would be ***less than significant***.

Dewatering

Construction activities associated with future development, including excavation and trenching, may encounter shallow groundwater. If shallow groundwater is encountered, dewatering of the excavation or trenching site may be required. If improperly managed, these dewatering activities could result in discharge of contaminated groundwater. In accordance with the General Waste Discharge Requirements for Extracted Groundwater from Structural Dewatering Requiring Treatment in the San Francisco Bay Region (Order No. R2-2012-0060; General NPDES Permit No. CAG912004), any contaminated groundwater would be treated prior to discharge or disposed of at an appropriate disposal facility or wastewater treatment plant. Also, discharges of dewatered groundwater to a storm drain must be conducted in a manner that complies with the RWQCB San Francisco Bay Region Order No. R2-2009-0074, MRP.

Program EQ-4.2.8 requires compliance with NPDES and State pollution discharge programs.

The Sausalito Municipal Code contains rules and regulations to prevent the discharge of pollutants to waters of the United States or the ocean, which would include any contaminated

groundwater encountered during construction. Chapter 11.17 is intended to prevent or minimize discharges other than storm runoff to storm drains or watercourses.

Compliance with mandatory NPDES permit requirements and adherence to the Sausalito Municipal Code would ensure that impacts related to water quality degradation from the discharge of dewatered groundwater would be ***less than significant***.

Operation

New development under the proposed 2040 General Plan could add additional areas of impervious surfaces within the Planning Area and could therefore increase the volume of pollutants that are typically associated with urban runoff into the stormwater. These pollutants can include sediments, petroleum hydrocarbons, pesticides, fertilizers, and heavy metals such as lead, zinc, and copper that tend to build up during the dry months of the year. Precipitation during the early portion of the wet season (generally from November to April) washes away most of these pollutants, resulting in high pollutant concentrations in the initial wet weather runoff. This initial runoff is referred to as the "first flush" of storm events. Subsequent periods of rain would result in less concentrated pollutant levels in the runoff.

The amount and type of runoff generated by the various future projects could potentially be greater than under existing conditions. An increase in impervious surfaces could result in a corresponding increase in urban runoff pollutants and first flush roadway contaminants, as well as an increase in nutrients and other chemicals from landscaped areas. These constituents could result in water quality impacts to onsite and offsite drainage flows to area waterways.

The proposed 2040 General Plan includes policies and programs specifically designed to address water quality at operation. Program EQ-4.3.3 requires that new developments or major renovations incorporate pervious surfaces to percolate stormwater runoff into groundwater. Program EQ-4.3.5 requires the city to increase outreach on use of toxin-free landscape management practices. Program EQ-4.3.6 requires that post-development peak stormwater runoff discharge rates do not exceed the estimated pre-development rate when permitting for new development or substantial remodels. In addition, dry weather runoff from these projects should not exceed the pre-development baseline flow rate. Policy EQ-4.6 and Program HS-1.8.3 aim to ensure natural integrity of creeks and/or drainageways are maintained not only as riparian habitat and wildlife corridors, but also to reduce flood hazards. The Sausalito Municipal Code also contains rules and regulations to protect water quality at operation. Chapter 11.17 is intended to prevent or minimize discharges other than storm runoff to storm drains or watercourses. The Ordinance requires that newly developed or redeveloped lands maintain pre-development stormwater runoff rates and prevent stormwater pollution where possible through LID design. LID uses site design and stormwater management to maintain the site's predevelopment runoff rates and volumes. The goal of LID is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to the source of rainfall.

Future development under the proposed 2040 General Plan would also be required to comply with the CWA and regulations enforced by the RWQCB. In addition, future projects would

comply with requirements of the Sausalito Municipal Code, and the proposed 2040 General Plan policies and programs related to water quality. Therefore, future development under the proposed 2040 General Plan at operation would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. As such, implementation of the proposed 2040 General Plan would result in a ***less than significant*** impact relative to this topic.

Impact HYD-2 **Development facilitated by the proposed 2040 General Plan would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.**

Buildout of the proposed 2040 General Plan could lead to an increased demand for water, which could lead to an increase in groundwater pumping. As described in Section 3.15, Utilities and Service Systems, the City of Sausalito receives its water supply from the MMWD, which has studied the potential for municipal groundwater use since the 1970's and has determined that the potential for municipal groundwater use within the boundaries of the MMWD's service area is very limited due to limited production capabilities, water quality constraints, and potential water rights issues. As a result, groundwater is not currently or planned to be used as a municipal water supply source by the MMWD, though private groundwater wells are used in the MMWD's service area.[22]

As concluded in Section 3.15, the city would have adequate water supplies to support new development anticipated by the proposed 2040 General Plan. Therefore, projected growth under the proposed 2040 General Plan would not substantially deplete groundwater supplies in the Ross Valley, San Rafael Valley, and part of the Novato Basins and impacts would be ***less than significant***.

Subsequent development under the proposed 2040 General Plan could result in an increase in impervious surfaces, which could reduce rainwater infiltration. However, as stated in the Existing Setting section, according to the DWR, there is no groundwater basin in the Sausalito Planning Area; therefore, implementation of the proposed 2040 General Plan would not interfere with groundwater recharge or impede with groundwater management and impacts would be ***less than significant***.

Impact HYD-3 **Development facilitated by the proposed 2040 General Plan would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site.**

Development under the proposed 2040 General Plan would be located within the city limits and discourages development in open space areas or hillsides with slopes averaging greater than 40 degrees, which have a higher potential for soil erosion. Nonetheless, future development would

[22] Marin Municipal Water District. 2016. 2015 UWMP, page 6-3.

involve construction activities such as stockpiling, grading, excavation, paving, and other earth-disturbing activities. Loose and disturbed soils are more prone to erosion and loss of topsoil by wind and water. This could result in an increase in stormwater runoff and the potential to cause erosion or sedimentation in drainage swales and creeks. However, none of the future development facilitated by the proposed 2040 General Plan would require the alteration of the course of an existing stream or river.

Construction activities that disturb one or more acres of land surface are subject to the Construction General Permit adopted by the State Water Board. Compliance with the permit requires each qualifying development project to file an NOI with the State Water Board. Permit conditions require development of a SWPPP, which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Inspection of construction sites before and after storms is also required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary.

Chapters 11.17 and 11.18 of the Sausalito Municipal Code set forth rules and regulations to prevent stormwater pollution and reduce pollutants from entering the storm drainage system. For example, Chapter 11.17 requires construction activities to implement BMPs that reduce stormwater pollutants from exiting a project site. Chapter 17.08 sets forth rules and regulations to control excavation, grading, and earthwork construction on land, which would minimize soil erosion during construction.

In addition to compliance with mandatory CWA and Sausalito Municipal Code requirements, adherence to proposed 2040 General Plan policies and programs would further reduce the potential for erosion and off-site siltation from construction-related soil disturbance. As such, potential impacts related to erosion and off-site siltation would be reduced to ***less-than-significant*** levels.

Impact HYD-4	**Development facilitated by the proposed 2040 General Plan would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.**

Development under the proposed 2040 General Plan encourages infill development and discourages development in open space areas or hillsides. New development or redevelopment that would be allowed by the proposed 2040 General Plan could incrementally increase the total impervious area within Sausalito and increase stormwater runoff, which could result in flooding.

However, as described previously, implementation of proposed 2040 General Plan policies and programs and adherence to the requirements of the Sausalito Municipal Code would maximize the on-site infiltration capacity for new development and redevelopment projects and would minimize the offsite runoff that would leave those project sites. For example, Chapter 11.17 of

the Sausalito Municipal Code requires new or re-development projects to include operational stormwater drainage infrastructure that incorporates LID features and BMPs. Stormwater infrastructure such as rain gardens, bioswales, and retention basins would be designed to retain stormwater on-site and reduce high velocity peak flows that could erode soils, transport pollutants into Richardson's Bay and the San Francisco Bay, and lead to flooding.

Compliance with the proposed 2040 General Plan policies and programs, as well as adherence to the Sausalito Municipal Code, would maximize infiltration and rainwater retention, which would in turn reduce stormwater runoff. Therefore, impacts related to flooding, exceedances in stormwater drainage systems, or the creation of substantial additional sources of polluted runoff would be considered ***less than significant***.

Impact HYD-5 **Development facilitated by the proposed 2040 General Plan would not 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.**

Development under the proposed 2040 General Plan encourages infill development and discourages development in open space areas or hillsides. New development or redevelopment that would be allowed by the proposed 2040 General Plan could incrementally increase the total impervious area within Sausalito and increase stormwater runoff, which could result in flooding, exceed stormwater drainage facility capacity, or create additional sources of polluted runoff.

However, as described previously, implementation of proposed 2040 General Plan policies and programs and adherence to the requirements of the Sausalito Municipal Code would maximize the on-site infiltration capacity for new development and redevelopment projects and would minimize the offsite runoff that would leave those project sites. For example, Chapter 11.17 of the Sausalito Municipal Code requires new or re-development projects to include operational stormwater drainage infrastructure that incorporates LID features and BMPs. Stormwater infrastructure such as rain gardens, bioswales, and retention basins would be designed to retain stormwater on-site and reduce high velocity peak flows that could erode soils, transport pollutants into Richardson's Bay and the San Francisco Bay, and lead to flooding. Additionally, Chapter 11.18 ensures that funds are maintained for the continued enforcement of the ordinance requirements.

Compliance with the proposed 2040 General Plan policies and programs, as well as adherence to the Sausalito Municipal Code, would maximize infiltration and rainwater retention, which would in turn reduce stormwater runoff. Therefore, impacts related to flooding, exceedances in stormwater drainage systems, or the creation of substantial additional sources of polluted runoff would be considered ***less than significant***.

Impact HYD-6 Development facilitated by the proposed 2040 General Plan would not impede or redirect flood flows.

As shown in Exhibit 3.9-2, areas in the Sausalito Planning Area adjacent to Richardson's Bay are located within FEMA designated 100-year flood zones with a 1 percent chance of being flooded in any given year, and 500-year flood zones with a 0.2 percent of being flooded in any given year. The development in the city that is located further away from Richardson's Bay is located within Zone X – Area of Minimal Flood Hazard due to the elevation and distance from the shoreline.

The proposed 2040 General Plan includes numerous policies and programs specifically designed to address flood hazards. Policy HS-1.9 requires the city to minimize the potential for personal injury and damage to shoreline property from waves and flooding. Program HS-1.9.3 requires all proposed projects adjacent to the shoreline identify areas on the parcel subject to flooding and wave action. Finally, Program HS-1.8.2 requires the city to update the "100-year" flood area map as new information becomes available. Sausalito Municipal Code Chapter 8.43 Floodplain Management provides updated flood hazard maps. These updated maps were completed in 2016, are available to the public, and ensure proposed development is reasonably safe from flooding while not increase flood risk in another area. Furthermore, Chapter 8.48 Floodplain Management includes strategies for reducing loss from floods. These strategies include restricting uses that could pose a risk to health, safety, and property due to flood damage, requiring flood protection as part of development, controlling construction actions that could increase flood risk, and preventing alterations of stream channels and waterways which could lead to diversion of flood waters or increase flood hazards in other areas.

As described in Section 3.15, Utilities and Service Systems, most of the city's storm drain infrastructure is beyond its expected useful life. However, storm drain facilities are rehabilitated as part of street improvement projects as funding permits and necessity dictates. These improvements would likely occur concurrently with new development under the proposed 2040 General Plan such that the drainage system remains adequate.

Subsequent development, infrastructure, and planning projects would be subject to the proposed 2040 General Plan policies and programs to reduce the risks of flooding to city residents and properties. Furthermore, as described in the Regulatory Setting section, numerous federal, State, and local agencies are responsible for maintaining flood protection features in the City of Sausalito, including: U.S. Army Corps of Engineers, DWR, CDFW, BCDC, and MCSTOPPP. Therefore, the potential for loss, injury, or death from impeding flood flows would be reduced to a ***less-than-significant*** level.

Impact HYD-7 **Development facilitated by the proposed 2040 General Plan may be located in flood hazard or tsunami zones and may result in a release of pollutants due to project site inundation.**

Inundation by Seiche

Seiches are changes or oscillations of water levels within a confined water body. Seiches are caused by fluctuation in the atmosphere, tidal currents, or earthquakes. The effect of this phenomenon is a standing wave that would occur when influenced by external causes. There are no large confined water bodies within the City of Sausalito. Therefore, development under the proposed 2040 General Plan would not result in substantial inundation by seiche during a seismic event, and ***no impact*** would occur related to a release of pollutants due to inundation by seiche.

Inundation by Flooding

As described under Impact HYD-6, the portions of the Sausalito Planning Area adjacent to Richardson's Bay are located within FEMA designated 100-year flood zones with a 1 percent chance of being flooded in any given year and 500-year flood zones with a 0.2 percent of being flooded in any given year. However, as detailed under Impact HYD-6, the proposed 2040 General Plan contains policies and programs specifically designed to address flood hazards. In addition, the Sausalito Municipal Code contains rules and regulations to reduce the risks of flooding. Further, Program HS-1.8.1 requires the city to review the effect of sea level rise, flooding, and tsunamis on parcels that have an elevation of 25 feet or less above Mean Lower Low Water level datum through the environmental review process. As such, development anticipated under the proposed 2040 General Plan located in flood hazard zones are not expected to be substantially inundated such that there would be a release of pollutants due to inundation. Therefore, potential impacts would be ***less than significant***.

Earthquakes centered close to a dam or levee are typically the most likely cause of dam or levee failure. As discussed in the Environmental Setting, there are no significant levees or dams protecting the City of Sausalito. As previously stated, Alpine Dam reservoir located 10 miles to the north of the Planning Area and is the most likely reservoir to be affected by seismic activity. Current estimates indicate that if dam failure occurs during an earthquake, up to 8,892 acre-feet of water could be released into Tomales Bay, which is located over 22 miles northwest of the Planning Area. Therefore, development facilitated by the proposed 2040 General Plan would not result in substantial inundation by dam or levee failure, and ***no impact*** would occur related to a release of pollutants due to inundation by dam or levee.

Inundation by Tsunami

A tsunami is a sea wave caused by a submarine earthquake, landslide, or volcanic eruption. Tsunamis can cause catastrophic damage to shallow or exposed shorelines. The coastal low-lying portions of Sausalito, portions of the low-lying plain along Richardson's Bay, and most of the area east of Bridgeway are subject to the risk of tsunami inundation (see Exhibit 3.9-3). As

such, some development facilitated by the proposed 2040 General Plan could be located within a tsunami inundation area.

The proposed 2040 General Plan contains policies and programs to reduce the likelihood of located new development within a tsunami inundation area. Program HS-1.8.1 requires the city to review the effect of sea level rise, flooding, and tsunamis on parcels that have an elevation of 25 feet or less above Mean Lower Low Water level datum through the environmental review process. Program HS-1.9.3, requires submittal of shoreline development site plans to identify areas of the parcel subject to flooding and wave action. In addition, the policies and programs related to sea level rise would also assist in minimizing inundation in the event of a tsunami. For example, Program HS-1.9.1 requires the city to continue to support studies by appropriate State agencies which monitor the rise in sea level.

Nonetheless, in the unlikely event of a tsunami, development under the proposed 2040 General Plan may become inundated such that there may be a release of pollutants due to inundation. In the event of a tsunami, Sausalito would implement the city's emergency response plan (per Program HS-2.1.1), which would also address any release of pollutants due to inundation. Further, Program HS-2.1.4 requires the city to develop an emergency response action plan to address identifiable risks in the case of an emergency or disaster. Lastly, as specified in Program HS-2.1.7, the city is required to develop an action plan to identify how the city will address the potential release of pollutants within the city's flood hazard and tsunami zones, should they become inundated. Therefore, potential impacts would be ***less than significant***.

Impact HYD-8 **Development facilitated by the proposed 2040 General Plan would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.**

The City of Sausalito is within a regional watershed administered by the RWQCB. The RWQCB has established regulatory standards and objectives for water quality in San Francisco Bay in its Water Quality Control Plan for the San Francisco Bay Basin, commonly referred to as the Basin Plan.

As discussed under Impact HYD-1, construction and operation of development facilitated by the proposed 2040 General Plan would be required to comply with CWA, the proposed 2040 General Plan policies and programs, the Sausalito Municipal Code, and the mandatory NPDES permit requirements. Therefore, future development under the proposed 2040 General Plan at construction and operation would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, in compliance with the San Francisco Bay Basin Plan. As such, implementation of the proposed 2040 General Plan would result in a ***less than significant*** impact relative to this topic.

As discussed under HYD-2, there is no groundwater basin in the Sausalito Planning Area. As such, there is no existing groundwater management plan for the Planning Area. Therefore, implementation of the proposed 2040 General Plan would not conflict with our obstruct implementation of a sustainable groundwater management plan and ***no impact*** would occur.

Impact HYD-9 **Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to hydrology and water quality.**

This analysis evaluates whether the impacts of the proposed 2040 General Plan, together with the impacts of cumulative development, would result in a cumulatively significant impact on hydrology or water quality. This analysis then considers whether incremental contribution of the impacts associated with the implementation of the proposed 2040 General Plan would be significant. Both conditions must apply for cumulative impacts to rise to the level of significance.

Cumulative development contributes to an incremental increase in impervious surfaces that could introduce pollutants that are typically associated with urban runoff into the stormwater and/or contribute to cumulative flood conditions in the watersheds. Cumulative development could also contribute to water quality impacts in the watersheds from construction activities.

As previously discussed, development facilitated by the proposed 2040 General Plan would be required to conform with federal, State, and local policies that would reduce hydrology and water quality impacts to less-than-significant levels. When applicable, any additional new development within the Sausalito Planning Area would be subject, on a project-by-project basis, to independent CEQA review as well as policies and programs in the proposed 2040 General Plan, the Sausalito Municipal Code, and other applicable city requirements that reduce impacts related to hydrology and water quality. More specifically, potential changes related to stormwater quality, stormwater flows, drainage, impervious surfaces, and flooding would be minimized by the implementation of stormwater control measures, retention basins, infiltration, and LID measures, and review by the city's Public Works Department to integrate measures to reduce potential flooding impacts.

All cumulative projects would be subject to similar permit requirements and would be required to comply with city ordinances and proposed 2040 General Plan policies, as well as other water quality regulations that control construction-related and operational discharge of pollutants in stormwater. The water quality regulations implemented by the RWQCB take a basin-wide approach and consider water quality impairment in a regional context. For example, the Construction General Permit ties receiving water limitations and basin plan objectives to terms and conditions of the permit, and the MS4 Permit works with all municipalities to manage stormwater systems to be collectively protective of water quality. For these reasons, impacts of the proposed 2040 General Plan on hydrology and water quality are not cumulatively considerable and the cumulative impact would be ***less than significant***.

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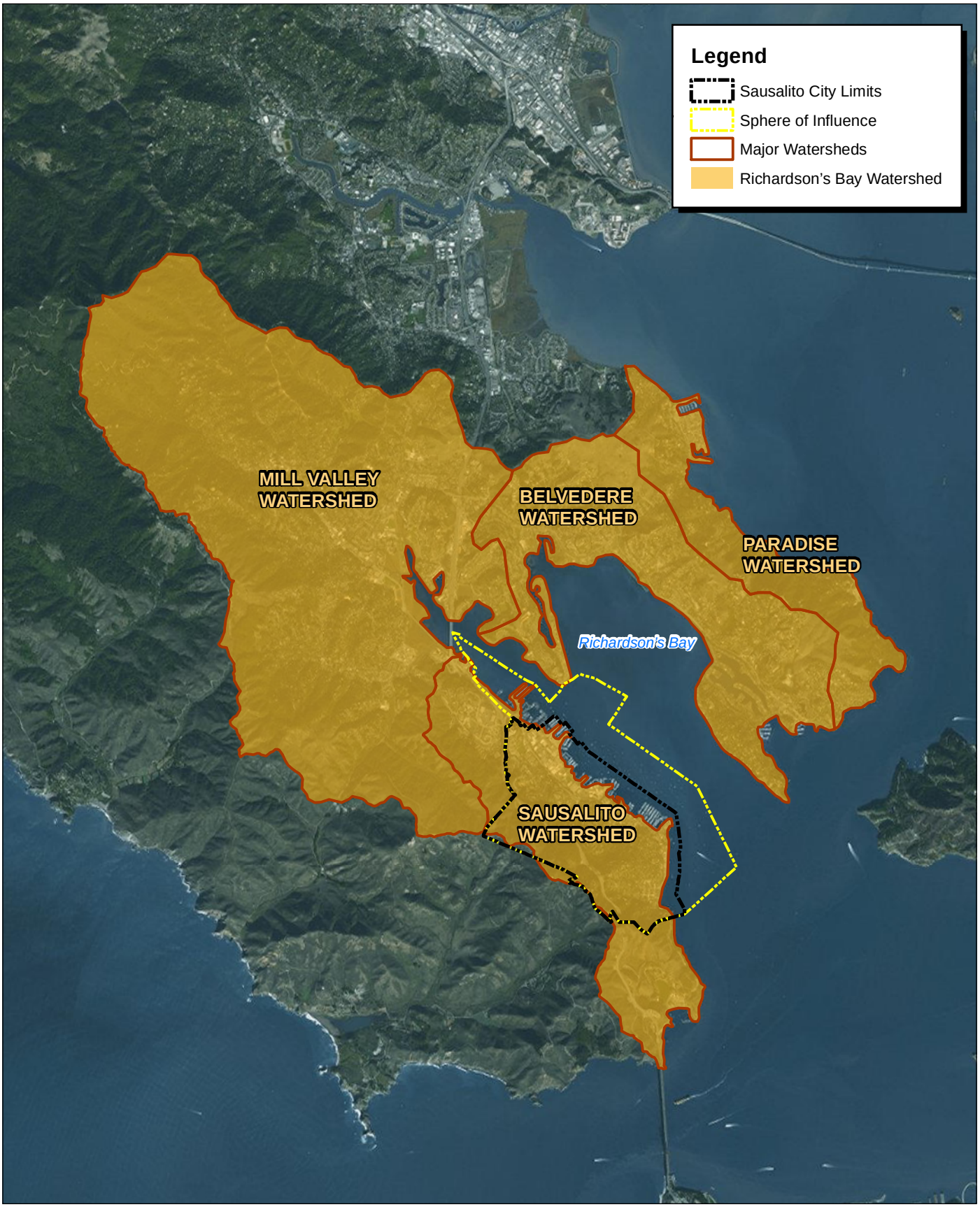

Source: ESRI Aerial Imagery. Marin County GIS Data.

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Exhibit 3.9-1
Richardson's Bay Watershed

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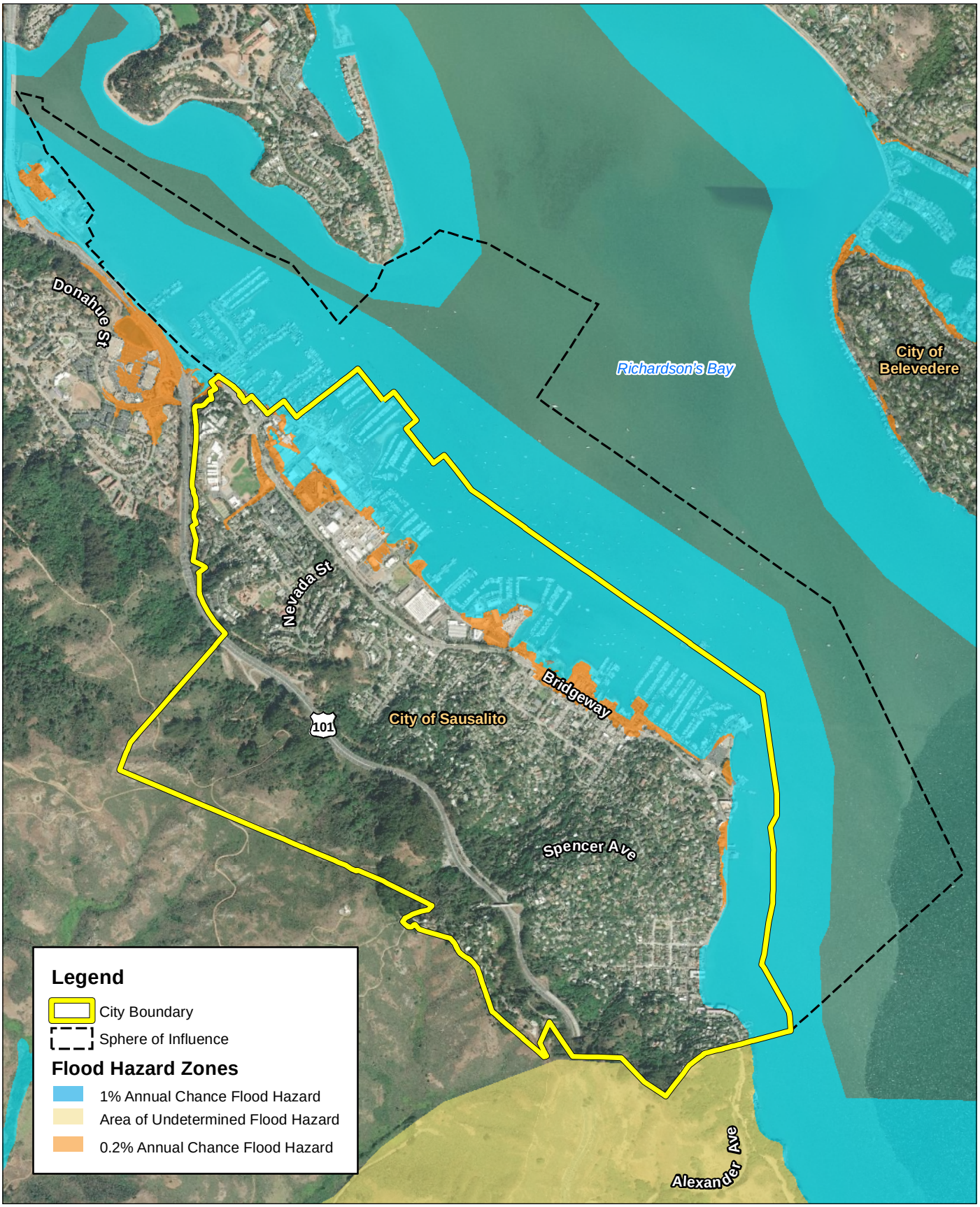

Source: ESRI Aerial Imagery. FEMA NFHL Map Image Data.

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Exhibit 3.9-2
FEMA Flood Hazard Zones

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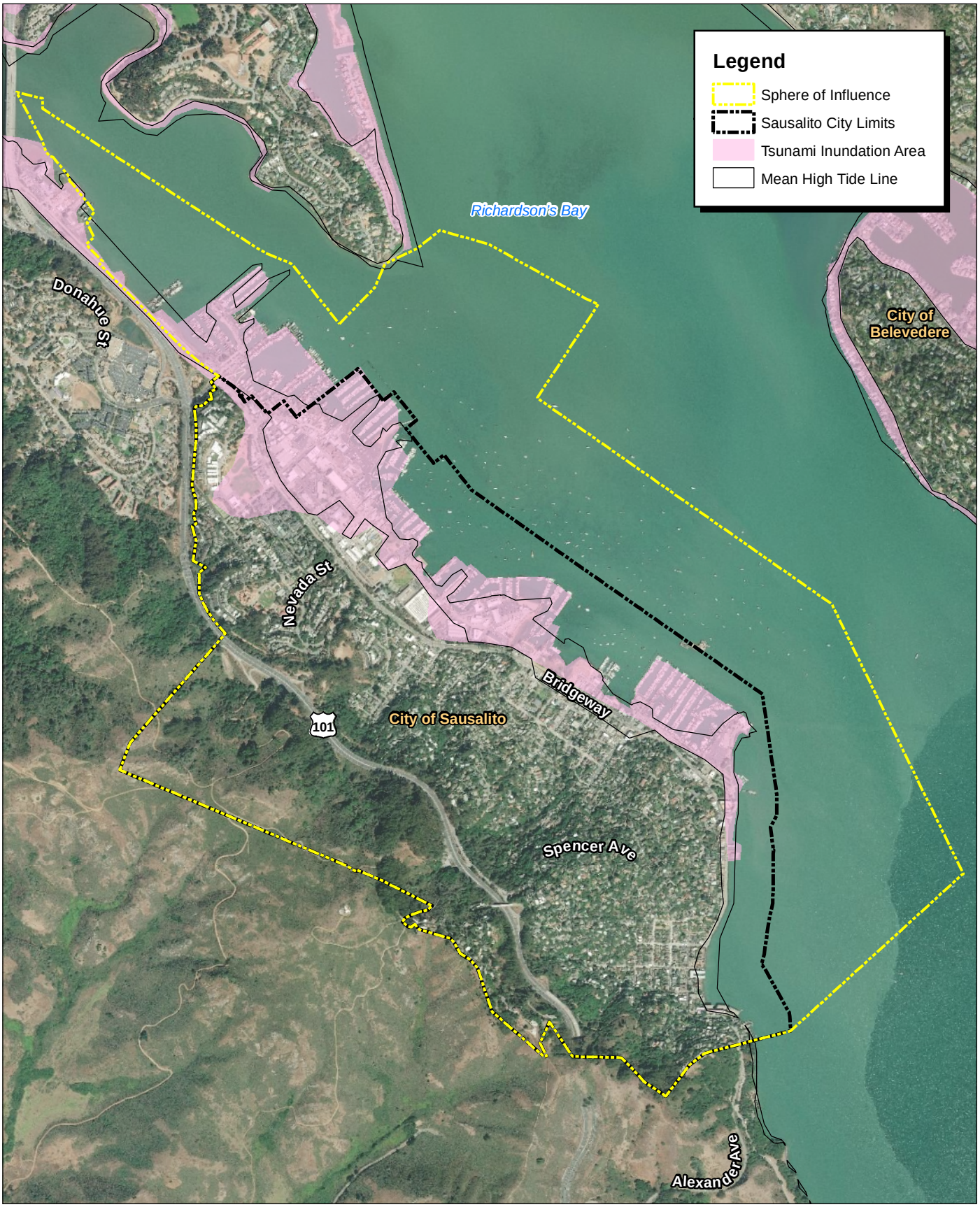

Source: ESRI Aerial Imagery. ABAG.

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Exhibit 3.9-3
Tsunami Hazard Zones

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3.10 LAND USE AND PLANNING

This section of the Draft EIR describes the existing character of the Sausalito Planning Area related to land use and addresses the consistency of the proposed 2040 General Plan with any land use plan, policy or regulation, which has been adopted for the purpose of avoiding or mitigating an environmental effect.

Proposed 2040 General Plan policies associated with other specific environmental topics (aesthetics, air quality, biological resources, cultural and tribal cultural resources, energy, geology/soils, greenhouse gas, hazards, hydrology/water quality, noise, population and housing, public services and recreation, transportation, and utilities) are discussed in their relevant sections of this Draft EIR.

The information in this section is based on information provided by the following reference materials:

- Marin County General Plan;
- Sausalito 2040 General Plan; and
- Sausalito Municipal Code.

3.10.1 EXISTING SETTING

The proposed 2040 General Plan Planning Area (Planning Area) consists of all properties located within the incorporated boundary of the city, as well as lands within the city's Sphere of Influence (SOI). The Planning Area is comprised of approximately 1,730 acres. Approximately 981 acres are located within the city limits, 143 acres of which encompass water areas. Approximately 749 acres are located within the SOI, 645 acres of which encompass water areas. The SOI, established by the Marin County Local Agency Formation Commission (Marin LAFCo) contains land that may ultimately be annexed into the city. The Planning Area boundaries for the proposed 2040 General Plan are depicted in Exhibit 3.10-1. The Planning Area has a predominantly residential character, and includes larger residential parcels, long established neighborhoods, scenic hillsides, open space areas, and established commercial and office areas.

Land Use

Sausalito's residential areas feature open area and residential uses, most of which is medium and lower density, single-family homes. High density residential uses comprised primarily of townhome and apartment units are found near the downtown Sausalito and waterfront areas. The city designates approximately 1,000 acres as either open are or open space. The approximately 788 acres designated as open area are part of Richardson's Bay, while the approximately 211 acres designated as open space are mostly located in the western area of the city adjacent to Highway 101.

The commercial and shopping areas are primarily resident-serving and include a range of restaurants, specialty retail, and personal services. Most of the commercial areas are located near the waterfront and Richardson's Bay. Other commercial areas include:

- North of the Coloma Street and Bridgeway intersection;
- The east and west side of Spring Street and Bridgeway intersection; and
- And between Richardson Street and Valley Street, east of West Street.

There are designated industrial uses in the northern portion of the city east of Bridgeway.

The areas adjacent to Richardson's Bay are primarily designated as Waterfront. Other major land uses in the city include community and public facilities sites such as the Sausalito Public Library, located on the south side of Caledonia Street.

The total acreage by land use category within the Planning Area is shown in Table 3.10-1. The most common existing land use category is open area, which comprises approximately 45.6 percent of the existing Planning Area.

TABLE 3.10-1: EXISTING LAND USE SUMMARY

LAND USE CATEGORY	ACRES	PERCENT OF TOTAL
Very Low Density Residential (VLR)	23.57	1.3%
Low Density Residential (LR)	34.41	1.9%
Medium Low Density Residential (MLR)	135.92	7.8%
Medium Density Residential (MR)	5.89	0.3%
Medium High Density Residential (MHR)	85.46	4.9%
Planned Development – High Density Residential (PR)	3.79	0.2%
High Density Residential (HR)	48.94	2.8%
Arks (A)	0.34	0.01%
Houseboats (H)	57.90	3.3%
Mixed Residential and Commercial (CR)	7.29	0.4%
Central Commercial (CC)	6.33	0.4%
Neighborhood Commercial (CN)	5.56	0.3%
Commercial Waterfront (CW)	9.43	0.5%
Shopping Center (CS)	1.56	0.09%
Industrial (I)	65.43	3.8%
Waterfront (W)	107.94	6.2%
Public Institutional (PI)	64.45	3.7%
Public Parks (PP)	15.19	8.8%
Open Space (OS)	211.78	12.2%
Open Area (OA)	788.06	45.6%
General Commercial (SOI)	1.01	0.05%

LAND USE CATEGORY	ACRES	PERCENT OF TOTAL
Conservation Overlay (SOI)	49.73	2.9%
TOTALS	**1,730**	**100%**

Source: Sausalito 2040 General Plan Land Use and Growth Management Element.

3.10.2 REGULATORY SETTING

State

California General Plan Law

California Government Code Section 65300 et seq. requires all counties and cities in the state to prepare and maintain a General Plan for the long-term growth, development, and management of the land within the jurisdiction's planning boundaries. The proposed 2040 General Plan acts as a "constitution" for development and is the city's lead legal document in relation to growth, development, and resource management issues. Development regulations (e.g., zoning and subdivision standards and public improvement plans and projects, such as a Capital Improvement Program) are required by law to be consistent with the proposed 2040 General Plan.

General Plans must address a broad range of topics, including, at a minimum, the following mandatory elements: land use, circulation, housing, conservation, open space, noise, and safety. At the discretion of each jurisdiction, the proposed 2040 General Plan may combine these elements and may add optional elements relevant to the physical features the jurisdiction.

The California Government Code also requires that a General Plan be comprehensive, internally consistent, and plan for the long term. Accordingly, the proposed 2040 General Plan should be clearly written, easy to administer, and readily available to the public.

Regional

Marin County Local Agency Formation Commission

Marin LAFCo is a State-mandated local agency established to oversee the boundaries of cities and special districts and charged with the responsibilities of encouraging orderly development, discouraging urban sprawl, and preserving agricultural and open space lands. Marin LAFCo is a seven-member body with two County Members, one Public Member, two Special Districts Members, and two Cities/Town Member. There are also four alternate members. State law requires LAFCos to consider agricultural land and open space preservation in all decisions related to expansion of urban development.

Local

Sausalito General Plan

The proposed 2040 General Plan contains the following policies and programs related to land use:

Land Use and Growth Management Element

Policy LU-1.1: Very Low, Low, and Medium Low Density Residential. Protect and preserve the existing single-family areas as described in Table 1-1 [of the proposed 2040 General Plan].

Policy LU-1.2: Medium and Medium High Density Residential. Allow a mix of single- and two-family structures as described in Table 1-1 [of the proposed 2040 General Plan].

Policy LU-1.3: Planned Development High Density. Allow clustered high-density housing which provides on-site amenities and is located near transportation, commercial and public services as described in Table 1-1 [of the proposed 2040 General Plan].

Policy LU-1.4: High Density Residential. Allow a mix of high-density housing types in areas that are located a half-mile from a major transportation stop and commercial and public services as described in Table 1-1 [of the proposed 2040 General Plan], while recognizing that the maximum number of units may not be achieved on all sites due to parcel configuration and other site constraints.

Policy LU-1.5: Houseboats. Maintain and enhance the City's diverse housing stock by continuing to allow houseboat uses on the City's waterfront.

Policy LU-1.6: Residential Arks. Preserve the existing residential arks where designated by the General Plan Land Use Map (Figure 1-1).

Policy LU-1.7: Liveaboards. Allow limited residential use of pleasure boats in the marinas located throughout the City for security purposes while prohibiting the multi-family or commercial use of liveaboard recreational boats.

Policy LU-1.8: Traffic Impacts. Consider the impact of traffic on the City street system in locating development in all residential zoning districts.

Policy LU-1.9: Residential Development Intensity. Regulate balance between the amount of lot coverage and floor area ratio (FAR) of structures located on any site designated for residential use.

Policy LU-1.10: Open Space Requirement. Recognize the irregular nature of the development pattern in Sausalito when designing open space requirements.

Policy LU-1.11: Planned Unit Development. Maintain the intent and purpose of all existing Planned Unit Developments when proposals for plan revisions are submitted to the City.

Policy LU-1.12: Accessory Dwelling Units. Provide opportunity for owners to legalize and construct accessory dwelling units if specified standards can be met.

Policy LU-1.13: Non-Residential Facilities. Permit place of public assembly including churches, private schools and private clubs in residential areas where such non-commercial uses will have minimal impact on the surrounding neighborhood.

Policy LU-1.14: Concentration of Non-Residential Facilities. Control the over concentration of permitted non-residential uses in all residential neighborhoods.

Policy LU-1.15: Child Care and Residential Care Facilities. Permit childcare facilities and residential care facilities as required by State law, ideally where such uses will have minimal impact on the surrounding neighborhood.

Policy LU-1.16: Non-Conforming Uses (Residential). Allow property owners to apply for discretionary permits for the reinstatement of use or expansion of uses that are not consistent with the permitted uses in residential areas.

Policy LU-1.17: Non-Conforming Structures (Residential). Recognize the importance of maintaining the existing character of Sausalito neighborhoods by preserving the existing intensity of any nonconforming structure in residential neighborhoods that exceeds zoning standards.

Policy LU-1.19: Affordable housing. Consider areas for affordable housing, workforce housing, senior housing, live/workspaces for artists, and maritime workers with long-term affordability in mind, as well as opportunities for water-based housing.

Policy LU-2.1: Downtown Land Use. Retain the boundaries of the visitor-serving commercial area in the Downtown to provide a clear distinction between the visitor-serving commercial activities and neighboring residential uses.

Policy LU-2.3: Tourist/Residential Serving Buffer. Provide a buffer so that the Downtown visitor commercial area and the Caledonia Street residential serving commercial areas remain distinct.

Policy LU-2.4: Visitor-Serving Uses in Downtown. Emphasize visitor-serving commercial uses in the Downtown area while also encouraging uses which also serve local resident needs.

Policy LU-2.5: Commercial/ Residential Compatibility. Encourage rebuilding and reuse of commercial space in a manner which minimizes conflict with adjacent residential uses.

Policy LU-2.8: Upper Floor Residential Uses. Encourage residential use on the upper levels of commercial structures.

Policy LU-2.10: Caledonia Street's Role. Enhance Caledonia Street's role as a mixed residential and commercial area by encouraging local/resident serving commercial uses and the preservation of housing as described in Table 1-1 [of the proposed 2040 General Plan], General Plan Land Use Categories, and shown on the General Plan Land Use Map (Figure 1-1).

Policy LU-2.13: Neighborhood Commercial Uses. Only promote uses that will increase the diversity and economic sustainability and viability of local neighborhood commercial areas that serve immediate neighborhoods as described in Table 1-1 [of the proposed 2040 General Plan], General Plan Land Use Categories, and shown on the General Plan Land Use Map, Figure 1-1.

Policy LU-2.14: Neighborhood Commercial Areas. Limit neighborhood commercial areas in Sausalito to those which currently exist.

Policy LU-2.16: Marinship Office Uses Impacts. Continue to ensure that office uses do not adversely affect the desired continuance of marine related industrial and waterfront uses in the Marinship area.

Policy LU-3.1: Marinship Industrial. Encourage industrial use of the Marinship as described in Table 1-1 [of the proposed 2040 General Plan], General Plan Land Use Categories, and shown on the General Plan Land Use Map, Figure 1-1.

Policy LU-4.2: Marinship Waterfront Uses. Promote marine industrial oriented uses that require waterfront locations and ensure the preservation of the existing general industrial uses found in the Marinship waterfront area.

Policy LU-4.3: New Recreational Marinas. Prohibit the creation of new shoreline recreational marinas along the Marinship waterfront.

Policy LU-4.4: Existing Recreational Marinas and New Marine Service Boatyards. Provide opportunities to build new marine service boatyards and allow for minor expansion of existing recreational marinas in the Marinship.

Policy LU-4.5: Central Waterfront Uses. Promote commercial uses that maximize open water and view corridors in the Commercial Waterfront area as described in Table 1-1 [of the proposed 2040 General Plan], General Plan Land Use Categories, and shown on the General Plan Land Use Map, Figure 1-1.

Policy LU-4.6: Central Waterfront Open Water Areas. Preserve the total acreage of existing open water areas in the Central Waterfront.

Policy LU-4.7: Downtown Waterfront. Maintain and enhance the existing character of the Downtown waterfront with a mixture of open vistas and commercial uses.

Policy LU-4.11: Sea Level Rise: Consider land use and development in the context of a changing shoreline due to sea level rise, related subsidence and erosion.

Policy LU-5.1: City-Owned Open Space and Parks. Maintain existing City-owned lands as public open space or recreational parks.

Policy LU-5.3: Martin Luther King, Jr. Campus. Provide greater opportunity to utilize the Martin Luther King, Jr. Campus site for recreational uses for local residents and cottage industry.

Policy LU-5.4: Federal Government Facilities. Protect and maintain the existing federal government facilities and encourage additional facilities as needed.

Policy LU-5.5: Housing Opportunities. Consider whether any publicly-owned parcels would be suitable to address Sausalito's housing needs.

Policy LU-6.1: Sphere of Influence Boundaries. Establish Sphere of Influence boundaries for areas which may annex in the future without eroding services now being provided within the current City limits.

Policy LU-6.2: Marin City. Consider whether to expand the City's Sphere of Influence to include Marin City.

Policy LU-6.4: Shoreline Houseboats. Enhance and maintain the diverse housing stock outside the City's immediate jurisdiction by continuing to allow houseboat uses on Richardson Bay.

Policy LU-6.5: Richardson Bay Shoreline. Preserve the existing shoreline of Richardson Bay as open shoreline and natural habitat.

Policy LU-6.6: Shoreline. Continue to include the Shoreline area, as shown on Figure 1-3 [of the proposed 2040 General Plan], as a part of Sausalito's Sphere of Influence.

Policy LU-9.1: Municipal Code Enforcement. The Land Use policies and programs will be implemented mainly through the City's Municipal Code to promote a desired array of land uses in appropriate areas of Sausalito.

Sausalito Municipal Code

Besides the proposed 2040 General Plan, the Sausalito Municipal Code is the primary tool that regulates physical development in the Planning Area. The Municipal Code contains all ordinances for the City, and identifies land use categories, site development regulations, and other general provisions that ensure consistency between the proposed 2040 General Plan and proposed development projects. The Municipal Code contains all ordinances for the City and is organized by Title, Chapter, and Section. The current Municipal Code is up to date through Ordinance 1275, passed November 19, 2019.

Chapter 9 (Subdivisions) supplements and implements the State Subdivision Map Act and implements the goals and policies of the City's proposed 2040 General Plan and any applicable specific plan.

Chapter 10 (Zoning Regulations) sets forth the City's Zoning Ordinance, the primary purpose of which is "to promote and protect the public health, safety, peace, morals, comfort, convenience and general welfare." The Zoning Ordinance is the mechanism used to implement the land use goals, policies, and implementation measures of the proposed 2040 General Plan and to regulate all land use within the City. The Zoning Ordinance establishes the zoning districts, contains the zoning map, and includes zoning regulations that govern the use of land for each zoning district, such as development standards and design review.

3.10.3 THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines Appendix G, the proposed 2040 General Plan will have a significant impact related to land use if it would:

- Physically divide an established community; or

- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect;

3.10.4 ANALYSIS, IMPACTS, AND MITIGATION MEASURES

Impacts related to land use resulting from implementation of the proposed 2040 General Plan are discussed below. The impact analysis is based on potential buildout under the proposed 2040 General Plan, as detailed in Section 2.6.2 of Section 2, Project Description. Impacts related to land use are assessed using the significance criteria established by the CEQA guidelines.

Impact LUP-1 Development facilitated by the proposed 2040 General Plan would not physically divide an established community.

The proposed 2040 General Plan could result in a significant impact if it leads to new development or physical features that would divide existing communities. The physical division of an established community typically refers to the construction of a physical feature (such as a wall, interstate highway, or railroad tracks) or the removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying areas.

Development anticipated by the proposed 2040 General Plan could result in an incremental increase in new residential, commercial, and industrial uses. The proposed 2040 General Plan would retain the existing roadway patterns and does not propose any new major roadways or other physical features that would create new barriers to connectivity in the Planning Area. Further, development under the proposed 2040 General Plan would be located on sites either developed, underutilized, or near existing residential, commercial, and industrial uses.

Most development under the proposed 2040 General Plan is expected to be on developed lots in areas where existing infrastructure (including highways and local roadways) are already in place. An incremental increase in development could occur in the western portions of the Planning Area, which may require the installation of new infrastructure, such as roads, power lines, fire access roads, emergency water sources, and other utilities; however, any new infrastructure would be limited to serving new development.

The proposed 2040 General Plan includes policies and programs that promote cohesive and compatible neighborhoods and prevent new development from dividing existing uses where different land uses abut one another. Policies LU-1.1 through LU-1.7 establish the allowable uses under each residential land use category. Policies LU-1.13 through LU-1.15 address the placement of non-residential facilities within and adjacent to residential areas to ensure compatibility between the two uses. Policy LU-2.1 requires the city to retain the boundaries of the visitor-serving commercial area in the Downtown to provide a clear distinction between the visitor-serving commercial activities and neighboring residential uses. Policy LU-2.3 provides a buffer between tourist and residential uses by ensuring that the Downtown visitor commercial area and the Caledonia Street residential serving commercial areas remain distinct. Policy LU-2.5 encourages rebuilding and reuse of commercial space in a manner which minimizes conflict with adjacent residential uses. Policy LU-2.16 requires the city to ensure that office uses do not adversely affect the desired continuance of marine related industrial and waterfront uses in the Marinship area. Policy LU-4.2 promotes marine industrial oriented uses that require waterfront

locations and ensure the preservation of the existing general industrial uses found in the Marinship waterfront area. Therefore, the proposed 2040 General Plan would have a ***less than significant*** impact associated with the physical division of an established community.

Impact LUP-2 Implementation of the proposed 2040 General Plan would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

The proposed 2040 General Plan was prepared in conformance with State laws and regulations associated with the preparation of general plans, including requirements for environmental protection. A discussion of the proposed 2040 General Plan's consistency with State regulations, plans, and policies associated with specific environmental issues (e.g., air quality, greenhouse gas emissions, transportation, water quality, etc.) is provided in the relevant sections of this Draft EIR. As discussed throughout this Draft EIR, the proposed 2040 General Plan was found to be consistent with State plans, policies, and regulations. The State would continue to have authority over any State-owned lands in the vicinity of the Sausalito Planning Area and the proposed 2040 General Plan would not conflict with continued application of State land use plans, policies, and regulations adopted to avoid or mitigate environmental effects.

Regional and local plans and regulations that could potentially conflict with the proposed 2040 General Plan include Plan Bay Area 2040, BAAQMD 2017 Clean Air Plan, Marin BayWAVE Plan, Sausalito Climate Action Plan, San Francisco Bay Plan, San Francisco Bay Water Quality Control Plan, MCSTOPPP Stormwater Program, Marin County Integrated Waste Management Plan, Marin County Transportation Authority plans, and the Marin County General Plan. A discussion of the proposed 2040 General Plan's consistency with regional and local regulations, plans, and policies associated with specific environmental issues (e.g., air quality, greenhouse gas emissions, transportation, water quality, etc.) is provided in the relevant sections of this Draft EIR. As discussed throughout this Draft EIR, the proposed 2040 General Plan was found to be consistent with regional and local plans, policies, and regulations.

As set forth by State law, the proposed 2040 General Plan serves as the primary planning document for the city and requires that subordinate documents and plans be periodically updated to be consistent with the proposed 2040 General Plan. The City of Sausalito's comprehensive General Plan was initially prepared in 1995. Since 1995, the Circulation and Parking Element was updated in 1999, the Housing Element was updated in 2012 and 2015, and the Health and Safety Element was updated in 2019. The proposed 2040 General Plan Update is a focused effort to refine the objectives, policies, and programs to reflect current regulations and help guide and shape the community over the next 20 years. As part of the update process, the objectives, policies, and programs of the Marinship Specific Plan have been incorporated into the Land Use and Growth Management, Waterfront, Community Design, Historic and Cultural Preservation, Circulation and Parking, Health, Safety, and Community Resilience, Sustainability, and Economic Elements.

The proposed 2040 General Plan carries forward and enhances the policies and programs from the 1995 General Plan that were intended for environmental protection and would not remove or conflict with city plans, policies, or regulations adopted for environmental protection. The proposed 2040 General Plan would require modifications to the city's Municipal Code to provide consistency between the proposed 2040 General Plan and zoning; however, these modifications

will not remove or adversely modify portions of the Municipal Code that were adopted to mitigate an environmental effect.

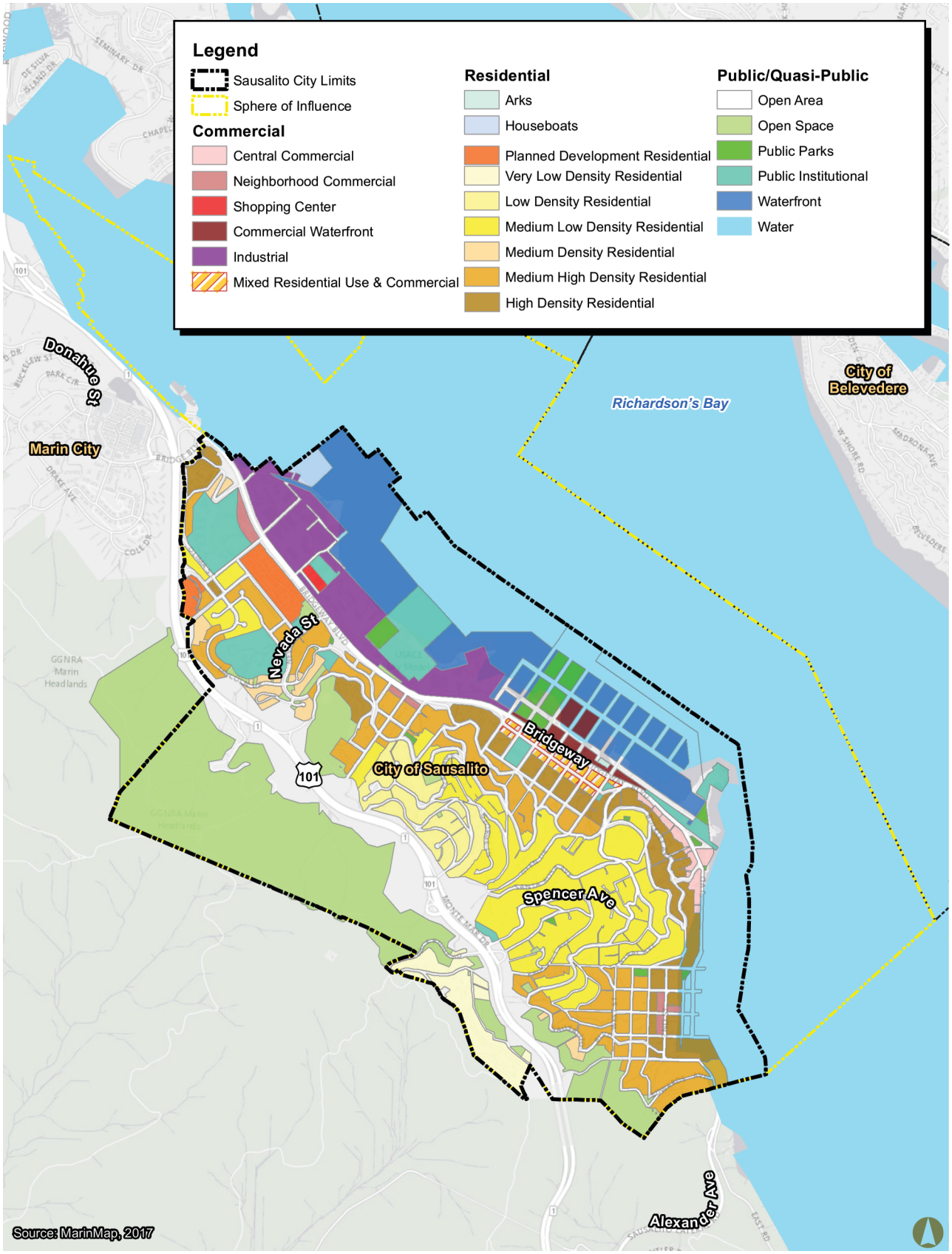
Because the General Plan is the overriding planning document for the city, and the proposed 2040 General Plan involves updates to achieve compliance with current State laws and regional plans, programs, and policies, the potential impact would be ***less than significant***.

Impact LUP-3 Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to land use.

This analysis evaluates whether the impacts of the proposed 2040 General Plan, together with the impacts of cumulative development, could result in a cumulatively significant impact with respect to land use. This analysis then considers whether incremental contribution of impacts associated with the implementation of the proposed 2040 General Plan would be significant. Both conditions must apply for a project's cumulative effects to rise to the level of significance.

The geographic context for the analysis of cumulative impacts related to land use includes the incorporated and unincorporated lands surrounding the Planning Area. As discussed under Impacts LUP-1 and LUP-2, implementation of the proposed 2040 General Plan would not physically divide an established community or conflict with any land use plan, policy, or regulation within or outside the City of Sausalito, adopted for the purpose of avoiding or mitigating an environmental effect. As such, development anticipated under the proposed 2040 General Plan would not create substantial land use impacts.

Development is likely to continue occurring in the surrounding Cities of Mill Valley, Tiburon, Larkspur, and San Rafael. However, most of this development would take place in urbanized areas as in-fill development and not require significant land use changes that would create land use conflicts, nor would they divide existing communities. Further, the unincorporated lands surrounding the Planning Area are mostly protected as parks and open space areas (see Section 3.13, Public Services and Recreation). The remaining unincorporated lands adjacent to the Planning Area are subject to the land use plans, policies and regulations of Marin County. As such, development within unincorporated Marin County is not likely to create significant land use conflicts or divide existing communities. Therefore, the proposed 2040 General Plan would not result in a cumulatively considerable contribution to cumulative impacts related to land use impacts would be ***less than significant***.



Source: City of Sausalito, Marin County.

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Exhibit 3.10-1
Adopted General Plan Land Use Map

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3.11 NOISE

This section of the EIR describes the existing noise environment in the Sausalito Planning Area and evaluates impacts anticipated to occur from the implementation of the proposed 2040 General Plan.

The following resources were identified to inform and support this section:

- California Department of Transportation, various technical manuals;
- General Plan Update and EIR, Sausalito, CA Future Circulation Conditions, Memo prepared by Parisi Transportation Consulting, M-Group April 21, 2020 (Appendix F);
- City of Sausalito Municipal Code; and
- Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

3.11.1 EXISTING SETTING

Noise Fundamentals

Noise is defined as unwanted sound and is usually objectionable due to its disturbing or annoying nature. Environmental noise is a component of modern society and is produced by a variety of sources including automobiles, machinery, and people. Sounds which are considered desirable to some may be considered objectionable to others.

Table 3.11-1 includes a list of terms used throughout this section.

TABLE 3.11-1: DEFINITION OF ACOUSTICAL TERMS

NOISE DESCRIPTOR	DEFINITION
DECIBEL, DB	A unit describing, the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.
FREQUENCY, HZ	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-WEIGHTED SOUND LEVEL, DBA	The sound pressure level in dBs as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
EQUIVALENT NOISE LEVEL, L_{EQ}	The average A-weighted noise level during the measurement period.
LMAX, LMIN	The maximum and minimum A-weighted noise level during the measurement period.

NOISE DESCRIPTOR	DEFINITION
L_{01}, L_{10}, L_{50}, L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
DAY/NIGHT NOISE LEVEL, L_{DN} OR DNL	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 dB to levels measured in the night between 10:00 pm and 7:00 am.
COMMUNITY NOISE EQUIVALENT LEVEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 dB in the evening from 7:00 pm to 10:00 pm and after addition of 10 dB to sound levels measured in the night between 10:00 pm and 7:00 am.
AMBIENT NOISE LEVEL	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
INTRUSIVE	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Data Compiled by FCS, 2020.

Characteristics of Sound

Amplitude

Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels (dBs). The dB is a logarithmic unit that expresses the ratio of the sound pressure level being measured to a standard reference level. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. An increase of 10 dB represents an increase in acoustic energy of 10 times, where 20 dB is 100 times more intense, 30 dB is 1,000 times more intense, and so on. While there are several methods used to characterize sound, the A-weighted decibel (dBA) is most used as it gives greater weight to those frequencies which are audible to the human ear. For reference, a list of A-weighted noise levels associated with common noise sources are listed in Table 3.11-2. Ambient sounds generally range from 30 to 100 dBA. A change in sound of three dBA is considered the minimum change detectable to the human ear, where five dBA is detectable to most people in an exterior setting.

Frequency

Frequency is defined as the number of complete pressure fluctuations per second above and below atmospheric pressure and is measured in Hertz (Hz). Sound waves that are below 16 Hz and above 15,000 Hz are not typically perceptible to the human ear.

TABLE 3.11-2: TYPICAL NOISE LEVELS IN THE ENVIRONMENT

COMMON OUTDOOR ACTIVITIES	NOISE LEVEL DBA	COMMON INDOOR ACTIVITIES
	110 dBA	Rock concert
Jet fly-over at 1,000 feet		
	100 dBA	
Gas lawn mower at 3 feet		
	90 dBA	
Diesel truck traveling at 50mph at 50 feet		Household blender at 3 feet
	80 dBA	Garbage Disposal at 3 feet
Noisy urban area, daytime		
	70 dBA	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	**60 dBA**	
		Large business office
Quiet urban area, daytime	**50 dBA**	Dishwasher running in the next room
Quiet urban area, nighttime	**40 dBA**	
Quiet suburban area, nighttime		
	30 dBA	Library
Quiet rural nighttime		Bedroom at night
	20 dBA	Whispering at 5 feet
		Broadcast/recording studio
	10 dBA	Normal breathing
Threshold of hearing	**0 dBA**	Threshold of hearing

Source: Adapted From: Caltrans Technical Noise Supplement 2013, Table 2-5, page 2-20; Center for Hearing and Communication, Common Environmental Noise Levels.

Temporal Effects

Noise impacts are measured for both instantaneous events as well as noise measurements over an extended period. The longer the duration of sound, the more likely it is to be an annoyance or cause direct physical or environmental stress. The noise metric used to account for both duration and sound level is the equivalent noise level (L_{eq}). L_{eq}, as defined in Table 3.11-1, is the single steady A-weighted level that is equivalent to the amount of energy contained in the average noise level. Generally, L_{eq} is totaled over a one-hour period.

The period in which noise occurs is also an important factor to consider as it relates to impacts on people since nighttime noise tends to disturb people more than daytime noise. The day-night average (L_{dn}) and the Community Noise Equivalent Level (CNEL) are noise metrics which account for the greater sensitivity to noise during the nighttime. With the L_{dn} metric, nighttime sensitivity is accounted for by adding 10 dB to the nighttime period (10:00 p.m. to 7:00 a.m.). The CNEL metric is identical to the L_{dn}, except that it also adds 5 dB to the evening period (7:00 p.m. to 10:00 p.m.). Since L_{dn} and CNEL levels typically to not differ by more than 1 dBA, they are often used interchangeably.

Sound Propagation

Noise dissipates as distance from the source increases. The manner in which noise reduces with an increase in distance depends on geometric spreading, ground absorption, atmospheric impacts, and shielding by natural and manmade features. Sound produced by a point source travels uniformly away from the source in a spherical pattern and drops off at a rate of 6 dBA for each doubling of distance.

Psychological and Physiological Effects of Noise

Noise is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels can impact the entire human system. Noise exposure above 75 dBA increases body tensions, and thereby affects blood pressure, functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA could result in permanent hearing damage. Based on these known adverse effects of noise, the federal government, State of California, and local governments have established criteria to protect public health and safety and to prevent disruption of certain human activities.

Groundborne Vibration

Vibration is a trembling, quivering, or oscillating motion of the earth and is typically of a frequency that is felt rather than heard.

Types of Vibration

Vibration can be produced naturally, such as in the form of earthquakes, volcanic eruptions, sea waves, or landslides, or manmade such as from explosions, or the operation of heavy machinery or heavy vehicles such as trains. Both natural and manmade vibration may be continuous or transient. Vibration is transmitted through propagation. Propagation of earth borne vibrations is dependent upon the physical environment and is therefore complicated and difficult to predict. The following are three main types of vibration propagation:

- **Surface waves** travel along the ground's surface carrying most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water.
- **Compression waves,** also known as P waves, are body waves where particles are displaced parallel to the wave direction.

- **Shear waves,** also known as S waves, are body waves where particles are displaced perpendicular to the wave direction.

As vibration waves propagate from a source, the energy is spread over an increasing area reducing the energy level with increased distance from the energy source. This geometric spreading loss is inversely proportional to the square of the distance. Wave energy is also reduced with distance because of material damping in the form of internal friction, soil layering, and void spaces. The amount of attenuation provided by material damping varies with soil type and condition as well as the frequency of the wave.

Amplitude

Amplitude may be characterized in three ways: displacement, velocity, and acceleration. Particle displacement is a measure of the distance that a vibrated particle travels from its original position and for the purposes of soil displacement is typically measured in inches or millimeters. Particle velocity is the rate of speed at which soil particles move in inches per second or millimeters per second. Particle acceleration is the rate of change in velocity with respect to time and is measured in inches per second or millimeters per second. Typically, particle velocity (measured in inches or millimeters per second) and/or acceleration (measured in gravities) are used to describe vibration. Table 3.11-3 presents the human reaction to various levels of peak particle velocity (PPV).

TABLE 3.11-3: HUMAN REACTION TO TYPICAL VIBRATION LEVELS

VIBRATION PPV (IN/SEC)	VIBRATION VELOCITY LEVEL (VDB)	HUMAN REACTION	EFFECT ON BUILDINGS
0.006–0.019	64-74	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08	86	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10	88	Level at which continuous vibration begins to annoy people	Virtually no risk of "architectural" (i.e., not structural) damage to normal buildings
0.20	94	Vibrations annoying to people in buildings	Threshold at which there is a risk to "architectural" damage to normal dwelling–houses with plastered walls and ceilings
0.40–0.60	100-104	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: California Department of Transportation. 2013. Transportation- and Construction-Induced Vibration Guidance Manual. June.

Frequency

Vibrations also vary in frequency which affects perception. Typical construction vibrations are between 10 to 30 Hz and usually occur at 15 Hz. Traffic vibrations exhibit a similar range of frequencies; however, due to their suspension systems, buses often generate frequencies around 3 Hz at high vehicle speeds. It is less common, but possible, to measure traffic frequencies above 30 Hz.

Noise Sources

Traffic

Traffic noise levels depend primarily on vehicular speed and total traffic volume, but also the type of vehicle. The primary source of noise from automobiles is high-frequency tire noise. Trucks, older automobiles, and motorcycles produce significant engine and exhaust noise, and trucks can also generate wind noise. Descriptions of major roadways in the City of Sausalito are found in the Circulation and Parking Element of the proposed 2040 General Plan. However, the major noises of road traffic are Highway 101 and Bridgeway.

Boats and Ferry

Boat and Ferry noise is created by engines, cavitation[1] from propellers and activities associated with loading and unloading of vessels. No new ferry service or routes are planned by Golden Gate Bridge, Highway and Transportation District. However, the Sausalito Ferry Terminal is expected to receive an upgrade in its passenger boarding system as part of the Sausalito Ferry Terminal Improvements Project. The project proposes a wider, modern boarding facility that is ADA-compliant and will allow for easier boarding and unloading of passengers, including those with bicycles. This project would not result in increased capacity of the facility or any added frequency of services.

Aircraft

Occasional aircraft flyovers are generated by aircraft facilities including Oakland International Airport (OAK), San Francisco International Airport (SFO), and Marin Ranch Airport. Aircraft noise in Sausalito accounts for a small part of the city's noise environment. Flyovers of large aircraft from SFO and OAK are at altitudes that make their noise noticeable, but noise from aircraft is usually not intrusive at ground level.

There is a long history of seaplane operations in and around Sausalito within the County of Marin, beginning when the Federal government created a seaplane landing strip in Richardson's Bay in April 1949. The seaplane area is adjacent to, but outside the Sausalito Planning Area. Marin County conducted a study of the Richardson's Bay Sea Plane Base/Heliport for the Countywide Plan that revealed that the noise exposure from aircraft operations is below that from adjacent Highway 101 and off-ramp traffic.[2]

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[1] Cavitation is the forming of gas bubbles in a liquid, caused by changes in pressure.

[2] Cinnidire Naruna Seaokan Base, County of Marin. Website: https://marin.granicus.com/MetaViewer.php?view_id=3&clip_id=8710&meta_id=912592. Accessed April 20, 2020.

Existing Traffic Noise Levels

Existing traffic noise levels were calculated through use of the Federal Highway Administration (FHWA) RD-77-108 model and the traffic volumes provided in the Future Circulations Conditions Memo. Table 3.11-4 shows each roadway segment's noise level at 50 feet from the centerline as well as the distance to the 60 dBA CNEL noise contour. In addition, shows the traffic noise contours created from Highway 101.

TABLE 3.11-4: EXISTING ROADWAY NOISE CONTOURS

ROAD	SEGMENT	CNEL AT 50 FEET FROM CENTERLINE (DBA)	DISTANCE – CENTERLINE TO 60 DBA CNEL NOISE CONTOUR (FEET)
BRIDGEWAY	South of N Bridge Boulevard	69	190
RODEO AVENUE	East of Highway 101	52	RW
MONTE MAR DRIVE	West of Crecienta Drive	52	RW
SPENCER AVENUE	East of Wolfback Ridge Road	55	22
ALEXANDER AVENUE	At City Limits	57	32
2ND STREET	South of Richardson Street	58	35
BRIDGEWAY	South of Princess Street	58	38
BRIDGEWAY	South of Bay Street	59	41
BRIDGEWAY	South of Johnson Street	59	45
BRIDGEWAY	South of Napa Street	60	50
BRIDGEWAY	South of Marinship Way	66	118
BRIDGEWAY	South of Nevada Street	66	130
BRIDGEWAY	South of Coloma Street	67	147
BRIDGEWAY	South of Gate 5 Road	68	161
RICHARDSON STREET	West of 2nd Street	48	RW
PRINCESS STREET	West of Bridgeway	50	RW
JOHNSON STREET	South of Bridgeway	52	RW
NAPA STREET	South of Bridgeway	54	RW
EASTERBY STREET	South of Bridgeway	51	RW
SPRING STREET	South of Bridgeway	51	RW

ROAD	SEGMENT	CNEL AT 50 FEET FROM CENTERLINE (DBA)	DISTANCE – CENTERLINE TO 60 DBA CNEL NOISE CONTOUR (FEET)
NEVADA STREET	South of Bridgeway	53	RW
HARBOR DRIVE	South of Bridgeway	48	RW
COLOMA STREET	South of Bridgeway	53	RW
EBBTIDE AVENUE	South of Bridgeway	50	RW

Notes:
RW = 60 dBA CNEL Noise Contour within the Public Road Right-of-Way.
Source: FCS 2020 (see Appendix E).

3.11.2 REGULATORY SETTING

Federal

United States Department of Transportation

The United States Department of Transportation (USDOT) is a federal department responsible for maintaining and developing the nation's transportation and infrastructure. The Federal Aviation Administration (FAA), FHWA, Federal Railroad Administration (FRA), and Federal Transit Administration (FTA) address specific areas of the transportation network and have regulatory authority related to noise impacts.

The FAA has prepared guidelines for acceptable noise exposure in its Federal Aviation Regulations Part 150 Noise Compatibility Planning program for airports. The program aims to balance the operational needs of airports while also considering impacts on surrounding communities. The purpose of the program is to reduce noise impacts on existing incompatible land uses and prevent the introduction of new incompatible land uses in areas impacted by aircraft noise. The program establishes standard noise methodologies and metrics, identifies land uses normally compatible with various levels of airport noise, and provides for voluntary development and submission of noise exposure maps and noise compatibility programs by airport operators.

Through regulations in 23 CFR Part 772, the FHWA, FRA, and FTA have established recommendations to conduct thorough noise and vibration assessments for any highway, high-speed railroad, or mass transit project that would be constructed proximate to residential areas. These recommendations apply to projects that are federally funded or that require federal review.

United States Department of Housing and Urban Development

New residential developments that qualify for United States Department of Housing and Urban Development financing and are proposed in high noise areas (exceeding 65 dBA L_{dn}) are required to incorporate noise attenuation features to maintain acceptable interior noise levels. Attenuation requirements are intended to achieve a level of 45 dBA L_{dn} or less. It is assumed that standard construction will provide sufficient attenuation to achieve this goal if the exterior noise level is 65 dBA L_{dn} or less. Approvals in a "normally unacceptable noise zone" (exceeding 65 dBA but not exceeding 75 dBA) require a minimum of 5 dBA additional noise attenuation if the L_{dn} is greater than 65 dBA, but not exceeding 70 dBA. A minimum of 10 dBA additional noise attenuation is required if the L_{dn} is greater than 70 dBA but does not exceed 75 dBA.

Environmental Protection Agency

The USEPA has determined that over a 24-hour period, a L_{eq} of 70 dBA will result in some hearing loss. Interference with activity and annoyance will not occur if exterior noise levels remain at or below a L_{eq} of 55 dBA and interior levels at or below 45 dBA. Although these levels are relevant for planning and design and useful for informational purposes, they are not land use planning criteria because they do not consider economic cost, technical feasibility, or the needs of the community.

The USEPA has set 55 dBA L_{dn} as the basic goal for residential environments. However, other federal agencies, in consideration of their own program requirements and goals, as well as difficulty of achieving a goal of 55 dBA L_{dn}, have generally agreed on the 65 dBA L_{dn} level as being appropriate for residential uses. At 65 dBA L_{dn} activity interference is kept to a minimum, and annoyance levels are still low. It is also a level that can be realistically achieved.

State

California Government Code Section 65302(f)

California Government Code Section 65302(f) requires that all General Plans include a Noise Element to address noise problems in the community. The State Office of Planning and Research has established guidelines for the content of the Noise Element. A noise element shall identify and appraise noise problems in the community. The noise element shall recognize the guidelines established by the Office of Noise Control and shall analyze and quantify to the extent practicable current and projected noise levels for all the following sources:

- Highways and freeways.
- Primary arterials and major local streets.
- Passenger and freight on-line railroad operations and ground rapid transit systems.
- Commercial, general aviation, heliport, and military airport operations, aircraft flyovers, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation.
- Local industrial plants, including, but not limited to, railroad classification yards.

- Other stationary ground noise sources identified by local agencies as contributing to the community noise environment.

State of California Code of Regulations

The State's noise insulation standards are codified in the CCR, Title 24, Building Standards Administrative Code, Part 2, California Building Standards Code (CBC). These noise standards are applied to new construction in California for interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

Caltrans Vibration Guidance

Construction vibration is regulated in accordance with standards established by the Transportation and Construction-Induced Vibration Guidance Manual, issued by Caltrans. Transient sources create a single, isolated vibration event, such as blasting or drop-ball impacts. Continuous/frequent intermittent sources include multiple impacts from pile drivers, the use of vibratory compaction equipment, and other construction equipment that creates vibration other than in single events. Table 3.11-5 provides guidelines for vibration damage potential to existing structures and Table 3.11-6 provides guidelines for vibration annoyance potential criteria.

TABLE 3.11-5: GROUNDBORNE VIBRATION EXPOSURE STANDARDS

STRUCTURE AND CONDITION	MAXIMUM PPV (INCHES/SECOND)	
	TRANSIENT SOURCES	CONTINUOUS/FREQUENT INTERMITTENT SOURCES
Extremely fragile historic building, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and older residential structures with plaster walls and ceilings	0.50	0.25
New residential structures with gypsum board walls and ceilings	1.00	0.50
Modern commercial and industrial buildings	2.00	0.50

Source: California Department of Transportation. 2004.

TABLE 3.11-6: GROUNDBORNE VIBRATION ANNOYANCE POTENTIAL CRITERIA

HUMAN RESPONSE	MAXIMUM PPV (INCHES/SECOND)	
	TRANSIENT SOURCES	CONTINUOUS/FREQUENT INTERMITTENT SOURCES
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Source: California Department of Transportation. 2004.

California Noise Land Use Compatibility Matrix

The State Department of Health Services, Office of Noise Control establishes compatibility of land uses relative to existing and future ambient noise levels. Appendix D of the State of California General Plan Guidelines, prepared by the Governor's Office of Planning and Research and reproduced below as Table 3.11-7, identifies noise level acceptability for each land use type from 'normally acceptable', to 'clearly unacceptable'. Normally acceptable indicates new standard construction can occur with no special noise reduction requirements.

TABLE 3.11-7: PROPOSED LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS

EXTERIOR NOISE EXPOSURE (L_{DN} OR CNEL, DB)						
LAND USE TYPE	55	60	65	70	75	80
Residential, Hotels and Motels						
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds						
Schools, Libraries, Museums, Hospitals, Churches, Personal Care, Meeting Halls						
Office Buildings, Business Commercial, and Professional						
Auditoriums, Concert Halls, Amphitheaters						
Industrial, Manufacturing, Utilities and Agriculture						

Key:

Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal

EXTERIOR NOISE EXPOSURE (L_{DN} OR CNEL, DB)						
LAND USE TYPE	55	60	65	70	75	80
	conventional construction, without any special noise insulation requirements.					
	Conditionally Acceptable: Specified land use may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features included in the design.					
	Unacceptable: New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.					

Local

Sausalito General Plan

The proposed 2040 General Plan includes the following relevant policies and programs that assist in reducing or avoiding potential noise impacts:

Environmental Quality Element

Policy EQ-3.2: Special Events. Permit safe special events in specific sites, managing the potential impacts of parking, noise, congestion, and lighting.

Program EQ-3.2.1: City Permit (Special Events). Continue to require that special events obtain a City permit (see Policy HS-3.4).

Health, Safety, and Community Resilience Element

Policy HS-3.1: Noise Guidelines. Maintain noise level guidelines to direct the siting, design, and insulation of new residential, commercial, and industrial development.

Program HS-3.1.1: Municipal Code (Noise Ordinance). Update the Noise Ordinance in the Sausalito Municipal Code to establish ambient sound levels that reflect actual conditions so that uses exceeding the ambient noise level can be cited for violation; establish standards for construction equipment and controls related to other potential nuisances such as music, dogs, special events, and mechanical/sound equipment; and encourage enforcement and penalties for violations of the Noise Ordinance.

Program HS-3.1.2: Land Use Compatibility Standards. Update zoning ordinance to integrate the Land Use Compatibility Standards (see Table 7-4 in the Background section [of the General Plan]) and noise contours shown on Figure 7-7 [of the General Plan] to review of the siting and design of new or substantially remodeled structures.

Program HS-3.1.3: Noise Insulation Standards. Continue to enforce the noise insulation standards of the State of California Administrative Code, Title 24 and the Uniform Building Code, Chapter 35 for residential development.

Program HS-3.1.4: Interior Noise Guidelines. Rely on the interior noise guidelines in Table 7-5 when considering the feasibility of new or substantially remodeled commercial and industrial structures.

Program HS-3.1.5: Environmental and Design Review Assessment of Noise. Design guidelines should be written to identify noise thresholds and means to achieve them.

Policy HS-3.2: Impacts on Existing Developed Areas. Prohibit unnecessary, excessive, and annoying noise in existing developed areas.

Program HS-3.2.1: Noise Ordinance Review. Review the existing Noise Ordinance and consider changes, including the provision of realistic quantifiable noise standards and effective enforcement.

Policy HS-3.3: Traffic Noise. Strive to reduce traffic noise levels in existing residential areas.

Program HS-3.3.1: Enforcement of Vehicle Noise Standards. Continue enforcement of vehicle noise standards through noise readings and enforcement actions.

Program HS-3.3.1: Consider Noise Criteria in Purchase of New City Vehicles and Equipment. Consider noise criteria in the purchase of new City vehicles, their components, and other equipment.

Policy HS-3.4: Single-Event Noise. Allow single-event occurrences at specific sites per Policy EQ-3.2 subject to special permit conditions which alleviate noise to the greatest extent possible.

Program HS-3.4.1: Special Events. Limit the number of special single events that are allowed to take place a year.

Policy HS-3.5: Construction Noise. Strive to reduce noise levels associated with construction activities.

Program HS-3.5.1: Equipment Noise. Require noise baffling devices to be installed on heavy equipment during site excavation, grading, or construction.

Program HS-3.5.2: Construction Noise. Continue to restrict construction activities to acceptable time periods.

Program HS-3.5.3: Sound Walls. Consider constructing temporary sound walls surrounding construction sites during construction.

Policy HS-3.6: Mitigate Construction-related Vibration Impacts on Historic Structures

Program HS-3.6.1: Construction Vibration. Prior to issuance of grading permits for any project that is located within 150 feet of a historic structure that is depicted in Figure 4-1 of the proposed General Plan and, if construction activities will require either: (1) pile driving within 150 feet; or (2) utilization of mobile construction equipment within 50 feet of the historic structure, the property owner/developer shall retain an acoustical engineer to conduct a vibration analysis for potential impacts from construction-related vibration impacts onto the historic structure. The vibration analysis shall determine the vibration levels created by construction activities at the historic structure, and if necessary develop mitigation to reduce the vibration levels to within Caltrans threshold of 0.12 inches per second PPV for historic buildings.

Sausalito Municipal Code

Chapter 12.16 of the Sausalito Municipal Code (Noise Control) establish excessive noise guidelines and exemptions. The following portions of the Municipal Code address noise:

SEC. 12.16.020 Definitions.

A. "Ambient noise" is the all-encompassing noise associated with a given environment, being usually a composite of sounds from many sources near and far. For the purpose of this chapter, "ambient noise level" is the level obtained when the noise level is averaged over a period of 15 minutes without inclusion of noise from isolated identifiable sources, at the location and time of day near that at which a comparison is to be made.

B. "Commercial purpose" means and includes the use, operation, or maintenance of any sound amplifying equipment for the purpose of advertising any business, or any goods, or any services, or for the purpose of attracting the attention of the public to, or advertising for, or soliciting patronage or customers to or for any performance, show, entertainment, exhibition, or event, or for the purpose of demonstrating such sound equipment.

C. "Decibel" means a unit for measuring the relative loudness of sounds equal approximately to the smallest degrees of difference of loudness ordinarily detectable by the human ear, whose range includes about 130 decibels on a scale beginning with one for the faintest audible sound.

D. "Emergency work" means work made necessary to restore property to a safe condition following a public calamity or work required to protect persons or property from an imminent exposure to danger or work by private or public utilities when restoring utility service.

E. "Motor vehicles" includes, but is not limited to, mini-bikes and go-carts.

F. "Noncommercial purpose" means the use, operation, or maintenance of any sound equipment for other than a commercial purpose. "Noncommercial purpose" means and includes, but shall not be limited to, philanthropic, religious, political, patriotic, and charitable purposes.

G. "Person" means a person, firm, association, copartnership, joint venture, corporation, or any entity, public or private in nature.

H. "Sound amplifying equipment" means any machine or device for the amplification of the human voice, music, or any other sound. "Sound amplifying equipment" shall not include standard automobile radios when used and heard only by the occupants of the vehicle in which the automobile radio is installed. "Sound amplifying equipment," as used in this chapter, shall not include warning devices on any vehicle used only for traffic safety purposes.

I. "Sound level" (noise level), in decibels (dB), is the sound measured with the A weighting and slow response by a sound level meter.

J. "Sound level meter" means an instrument including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement of sound levels which satisfies the pertinent requirements in American Standard Specifications for sound level meters S1.4-1971 or the most recent revision thereof.

K. "Sound truck" means any motor vehicle, or any other vehicle regardless of motive power, whether in motion or stationary, having mounted thereon, or attached thereto, any sound amplifying equipment.

SEC. 12.16.030 Sound Level Measurement Criteria.

Any sound level measurement made pursuant to the provisions of this chapter shall be measured with a sound level meter using the A weighting and slow response.

SEC. 12.16.040 Ambient Noise Levels.

Where the ambient noise level is less than designated in this section, the respective noise level in this section shall govern (Table 3.11-8).

TABLE 3.11-8: AMBIENT NOISE LEVEL

ZONE	TIME	SOUND LEVEL A, DECIBELS COMMUNITY ENVIRONMENT CLASSIFICATION
R1 and R2	10:00 p.m. to 7:00 a.m.	45
R1 and R2	7:00 p.m. to 10:00 p.m.	50
R1 and R2	7:00 a.m. to 7:00 p.m.	55
R3	10:00 p.m. to 7:00 a.m.	50
R3	7:00 a.m. to 10:00 p.m.	55
CN, RC	10:00 p.m. to 7:00 a.m.	55
CC, W, OA, and CW	7:00 a.m. to 10:00 p.m.	60
CM	Anytime	70

Source: Sausalito Municipal Code 2019.

SEC. 12.16.130 Machinery, Equipment, Fans and Air Conditioning.

It is unlawful for any person to operate any machinery, equipment, pump, fan, air conditioning apparatus, or similar mechanical device in any manner so as to create any noise which would cause the noise level at the property line of any property to exceed the ambient base noise level by more than five decibels.

SEC. 12.16.140 Time Restrictions on Operating Construction Devices in Residential Zones.

A. The operation of construction, demolition, excavation, alteration or repair devices and equipment shall only take place during the following hours:
   1. Weekdays: Between 8:00 a.m. and 6:00 p.m.
   2. Saturdays: Between 9:00 a.m. and 5:00 p.m.
   3. Sundays: Prohibited.
   4. Holidays officially recognized by the City of Sausalito not including Sundays: Between 9:00 a.m. and 7:00 p.m.

B. Homeowners currently residing on the property and all other legal residents may operate construction, demolition, excavation, alteration or repair devices and equipment themselves on their own property on Sundays and holidays officially recognized by the City; provided, that such operations occur between 9:00 a.m. and 6:00 p.m. and otherwise comply with the City's laws regulating noise.

C. For purposes of this section, "holidays officially recognized by the City" are those holidays indicated on the official City Calendar which is adopted by the City Council as it currently exists and may hereinafter be amended.

SEC. 12.16.150 Repairing, Rebuilding or Testing in Residential Zones.

It is unlawful for any person within any residential zone, as defined in the zoning regulations of the City, to repair, rebuild, or test any motor vehicle in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance.

3.11.3 THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines Appendix G, a significant noise impact would occur if development facilitated by the proposed 2040 General Plan would result in any of the following:

- Generate a substantial temporary or permanent increase in ambient noise levels in excess of standards established by the local general plan, noise ordinance, or applicable standards of other agencies;
- Generate excessive groundborne vibration or groundborne noise levels; or

- Expose people residing or working within the vicinity of a private airstrip or an area within an airport land use plan to excessive noise levels, or where such a plan has not been adopted, within 2 miles of a public or private use airport, to excessive noise levels.

3.11.4 ANALYSIS, IMPACTS, AND MITIGATION MEASURES

Noise impacts resulting from implementation of the proposed 2040 General Plan are discussed below. The following analysis is based on an assessment of existing and future conditions for the Planning Area. This analysis identifies potential noise impacts based on development anticipated from buildout of the proposed 2040 General Plan.

Environmental Topics Eliminated from Further Analysis

Section 21002.1(e) of the CEQA statute requires an EIR discussion to focus on those potential effects on the environment of a proposed project which the lead agency has determined are or may be significant. Lead agencies may limit discussion on other effects to a brief explanation as to why those effects are not potentially significant.

Expose People to Noise Generated from Airports

A significant noise impact would occur if implementation of the proposed 2040 General Plan would expose people residing or working within the vicinity of a private airstrip or an area within an airport land use plan to excessive noise levels, or where such a plan has not been adopted, within 2 miles of a public or private use airport. There is the Sausalito VOR,[3] which is located approximately 0.7 mile west of the city. However, the Sausalito VOR is an aviation radar and visual checkpoint for aircraft and there is no airstrip at this location. The closest public airport is Marin Ranch Airport, located approximately 9.8 miles north of the city. Additionally, SFO is located approximately 16 miles south of the city and OAK is located approximately 17 miles southeast of the city.

The city is not located within the area governed by an airport land use plan and is not within 2 miles of a public or private use airport and would therefore not expose people residing or working in the city to excessive noise levels. The CNEL noise contours from Marin Ranch, SFO and OAK do not impact the City of Sausalito.[4,5] Marin County conducted a study of the Richardson's Bay Sea Plane Base/Heliport for the Countywide Plan that revealed that the noise exposure from aircraft operations is below that from adjacent Highway 101 and off-ramp traffic.

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3 VHF navigational facility-Omnidirectional Course only.

4 San Francisco Airport Final 2019 Noise Exposure Map (NEM). Website: https://media.flysfo.com/media/sfo/noise-abatement/sfo_p150_2019-nem-36x24-plot-signed_ada.pdf. Accessed April 20, 2020. Alameda County Airport Land Use Commission. Oak Appendix B Airport Land Use Compatibility Concepts. Website: https://www.acgov.org/cda/planning/generalplans/documents/OAK_Appendix_B_Airport_Land_Use_Compatibility_Concepts.pdf. Accessed April 20, 2020.

5 Alameda County Airport Land Use Commission. Oak Appendix B Airport Land Use Compatibility Concepts. Website: https://www.acgov.org/cda/planning/generalplans/documents/OAK_Appendix_B_Airport_Land_Use_Compatibility_Concepts.pdf. Accessed April 20, 2020.

Implementation of the proposed 2040 General Plan would not expose people residing or working in Sausalito to significant noise levels generated by either facility. Therefore, noise from adjacent airports would have no impact and this topic is not analyzed any further.

Environmental Topics Analyzed

Impact NOI-1 **Implementation of the proposed 2040 General Plan would not generate a substantial temporary or permanent increase in ambient noise levels in excess of standards established by the local general plan, noise ordinance, or applicable standards of other agencies.**

New development under the proposed 2040 General Plan could result in up to 304 new residential units, 587,961 new square feet of commercial uses and 146,124 new square feet of industrial uses within the Sausalito Planning Area. The proposed 2040 General Plan includes policies that require preparation of acoustical studies for residential development where the existing noise levels exceed an exterior noise level of 60 dBA CNEL. Additionally, policies require that new office and commercial development be designed to reduce interior noise levels.

Construction Noise

Noise generated by individual construction projects are anticipated to occur under the proposed 2040 General Plan and would temporarily increase ambient noise levels on adjacent sites from construction activities and from construction-related traffic. Since there are no specific development proposals associated with the adoption of the proposed 2040 General Plan, determining exact noise levels, locations, or time periods for construction of such projects is highly speculative. However, it can be concluded that sites adjacent to areas where future development/ redevelopment is anticipated to occur would expose people to substantial construction noise throughout the construction period.

Construction activities, including traffic, demolition, and reconstruction, have the potential to generate temporary noise which exceeds established standards. Noise levels similar to those shown in Table 3.11-8 would be expected to occur with individual development projects. Table 3.11-9 illustrates typical noise levels associated with construction equipment at a distance of 50 feet from a construction site. Noise typically drops off at a rate of 6 dBA per doubling of distance. Noise levels at 100 and 200 feet were derived based on this assumption.

TABLE 3.11-9: CONSTRUCTION EQUIPMENT NOISE EMISSION LEVELS

EQUIPMENT	NOISE LEVEL (DBA)		
	50 FEET	100 FEET	200 FEET
AIR COMPRESSOR	80	74	68
BACKHOE	80	74	68
CONCRETE MIXER	85	79	73
BULLDOZER	85	79	73
GENERATOR	82	76	70
GRADER	85	79	73
JACKHAMMER	88	82	76
PAVER	85	79	73
SAW	76	70	64
SCRAPER	85	79	73
TRUCK	84	78	72

Source: Federal Transit Administration. 2018. Transit Noise and Vibration Impact Assessment Manual, Table 7-1, page 176. September.

The Sausalito Municipal Code Section 12.16.14 regulates the time when construction activities may occur, limiting such activities to the period between 8:00 a.m. and 6:00 p.m. on weekdays, 9:00 a.m. and 5:00 p.m. on Saturdays, and prohibiting construction from occurring on Sundays and holidays.

Construction could result in temporary exceedance of daytime noise levels that would disturb residents and workers. However, the temporary nature of construction noise and the city's timing restrictions of construction activities would reduce noise impacts at nearby noise-sensitive receptors. Therefore, the impact of construction noise from development facilitated by the proposed 2040 General Plan would be intermittent and have a ***less than significant*** impact.

Traffic Noise

According to the Future Circulation Conditions Memo, buildout of the proposed 2040 General Plan would generate up to an additional 10,100 daily vehicle trips on the city roadways. Noise from motor vehicles is generated by engine vibrations, the interaction between tires and the road, and the exhaust system.

The traffic noise contours with buildout of the proposed 2040 General Plan were calculated through use of the FHWA-RD-77-108 model and the traffic volumes provided in the Future Circulations Conditions Memo. Table 3.11-10, shows each roadway segment's noise level at 50 feet from the centerline as well as the distance to the 60 dBA CNEL noise contour.

TABLE 3.11-10: PROPOSED 2040 GENERAL PLAN BUILDOUT ROADWAY NOISE CONTOURS

ROAD	SEGMENT	CNEL AT 50 FEET FROM CENTERLINE (DBA)	DISTANCE – CENTERLINE TO 60 DBA CNEL NOISE CONTOUR (FEET)
BRIDGEWAY	South of N Bridge Boulevard	70	221
RODEO AVENUE	East of Highway 101	53	RW
MONTE MAR DRIVE	West of Crecienta Drive	52	RW
SPENCER AVENUE	East of Wolfback Ridge Road	55	25
ALEXANDER AVENUE	At City Limits	58	39
2ND STREET	South of Richardson Street	59	42
BRIDGEWAY	South of Princess Street	59	44
BRIDGEWAY	South of Bay Street	60	48
BRIDGEWAY	South of Johnson Street	60	52
BRIDGEWAY	South of Napa Street	61	60
BRIDGEWAY	South of Marinship Way	67	156
BRIDGEWAY	South of Nevada Street	67	156
BRIDGEWAY	South of Coloma Street	68	178
BRIDGEWAY	South of Gate 5 Road	69	193
RICHARDSON STREET	West of 2nd Street	49	RW
PRINCESS STREET	West of Bridgeway	52	RW
JOHNSON STREET	South of Bridgeway	53	RW
NAPA STREET	South of Bridgeway	55	23
EASTERBY STREET	South of Bridgeway	51	RW
SPRING STREET	South of Bridgeway	51	RW
NEVADA STREET	South of Bridgeway	54	RW
HARBOR DRIVE	South of Bridgeway	49	RW
COLOMA STREET	South of Bridgeway	53	RW
EBBTIDE AVENUE	South of Bridgeway	52	RW

Notes:

***RW = 60** dBA **CNEL** Noise Contour within the Public Road Right-of-Way.*

*Source**: FCS 2020 (**see Appendix E**).*

Program HS-3.1.2 directs the city to update the Zoning Ordinance to integrate the Land Use Compatibility Standards (see Table 3.11-7) that details 60 dBA CNEL is the normally acceptable exterior noise exposure level for nearby sensitive receptors. However, neither the proposed 2040 General Plan nor the CEQA Guidelines define what constitutes a "substantial permanent increase"; as such, this analysis has utilized guidance from the FTA for a moderate impact and is summarized below:

- When ambient noise levels are between 45 and 49 dBA L_{dn}, an increase of more than 7 dB at the exterior of any nearby sensitive receptor is considered significant.
- When ambient noise levels are between 50 and 54 dBA L_{dn}, an increase of more than 5 dB at the exterior of any nearby sensitive receptor is considered significant.
- When ambient noise levels are between 55 and 59 dBA L_{dn}, an increase of more than 3 dB at the exterior of any nearby sensitive receptor is considered significant.
- When ambient noise levels are between 60 and 64 dBA L_{dn}, an increase of more than 2 dB at the exterior of any nearby sensitive receptor is considered significant.
- When ambient noise levels are between 65 and 74 dBA L_{dn}, an increase of more than 1 dB at the exterior of any nearby sensitive receptor is considered significant.
- When ambient noise levels are 75 dBA L_{dn} or greater, any measurable increase in noise levels at the exterior of any nearby sensitive receptor is considered significant.

The proposed 2040 General Plan's traffic noise impacts have been analyzed for the Without General Plan Buildout and the With General Plan Buildout conditions. Table 3.11-11 presents a comparison between the Without General Plan Buildout and the With General Plan Buildout scenarios, and the FHWA model printouts are provided in Appendix E.

TABLE 3.11-11: PROPOSED 2040 GENERAL PLAN BUILDOUT TRAFFIC NOISE CONTRIBUTIONS

ROADWAY	SEGMENT	DBA CNEL AT 50 FEET			INCREASE THRESHOLD
		WITHOUT GENERAL PLAN BUILDOUT	WITH GENERAL PLAN BUILDOUT	PROJECT CONTRI-BUTION	
BRIDGEWAY	South of N Bridge Boulevard	69	70	1	+1 dBA
RODEO AVENUE	East of Highway 101	52	53	1	+5 dBA
MONTE MAR DRIVE	West of Crecienta Drive	52	52	0	+5 dBA
SPENCER AVENUE	East of Wolfback Ridge Road	55	55	0	+3 dBA
ALEXANDER AVENUE	At City Limits	57	58	1	+3 dBA
2ND STREET	South of Richardson Street	58	59	1	+3 dBA
BRIDGEWAY	South of Princess Street	58	59	1	+3 dBA
BRIDGEWAY	South of Bay Street	59	60	1	+3 dBA

ROADWAY	SEGMENT	DBA CNEL AT 50 FEET			INCREASE THRESHOLD
		WITHOUT GENERAL PLAN BUILDOUT	WITH GENERAL PLAN BUILDOUT	PROJECT CONTRI-BUTION	
BRIDGEWAY	South of Johnson Street	59	60	1	+3 dBA
BRIDGEWAY	South of Napa Street	60	61	1	+2 dBA
BRIDGEWAY	South of Marinship Way	66	67	1	+1 dBA
BRIDGEWAY	South of Nevada Street	66	67	1	+1 dBA
BRIDGEWAY	South of Coloma Street	67	68	1	+1 dBA
BRIDGEWAY	South of Gate 5 Road	68	69	1	+1 dBA
RICHARDSON STREET	West of 2nd Street	48	49	1	+7 dBA
PRINCESS STREET	West of Bridgeway	50	52	2	+5 dBA
JOHNSON STREET	South of Bridgeway	52	53	1	+5 dBA
NAPA STREET	South of Bridgeway	54	55	1	+5 dBA
EASTERBY STREET	South of Bridgeway	51	51	0	+5 dBA
SPRING STREET	South of Bridgeway	51	51	0	+5 dBA
NEVADA STREET	South of Bridgeway	53	54	1	+5 dBA
HARBOR DRIVE	South of Bridgeway	49	49	0	+7 dBA
COLOMA STREET	South of Bridgeway	53	53	0	+5 dBA
EBBTIDE AVENUE	South of Bridgeway	50	52	2	+5 dBA

Notes: The calculated noise levels do not consider existing noise barriers.
Source: FCS 2020.

Table 3.11-11 shows that at General Plan Buildout, noise generated by traffic along study area roadway segments would be expected to increase by 0 to 2 dBA CNEL above the Without General Plan Buildout conditions. Table 3.11-11 also shows that the proposed 2040 General Plan's permanent roadway noise increases to the nearby sensitive receptors from the generation of additional vehicular traffic would not exceed any of the thresholds detailed above. Therefore, implementation of the proposed 2040 General Plan would not result in a permanent increase in ambient noise levels above established standards and will have a ***less than significant*** impact.

Impact NOI-2 **Development facilitated by the proposed 2040 General Plan would not generate excessive groundborne vibration or groundborne noise levels.**

Groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of groundborne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Construction activities and the operation of heavy trucks, buses and trains can produce vibration that may be felt by adjacent uses. New development under the proposed 2040 General Plan could result in up to 304 new residential units, 587,961 new square feet of commercial uses and 146,124 new square feet of industrial uses within the Sausalito Planning Area. The city contains several historic structures that have been identified in Figure 4-1 of the proposed 2040 General Plan and have the potential of being damaged from exposure to substantial vibration levels. The short-term and long-term groundborne vibration impacts associated with construction and operations are discussed separately below.

Construction-Related Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings in the vicinity of the construction site respond to these vibrations with varying results ranging from no perceptible effects at the low levels to slight damage at the highest levels. Table 3.11-12 gives approximate vibration levels from various construction equipment. The data in Table 3.11-12 provides a reasonable estimate for a wide range of soil conditions.

TABLE 3.11-12: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

EQUIPMENT	PPV (INCHES/SECOND)	APPROXIMATE VIBRATION LEVEL AT 25 FEET
PILE DRIVER (IMPACT)	1.518 (upper range) 0.644 (typical)	112 104
PILE DRIVER (SONIC)	0.734 (upper range) 0.170 (typical)	105 93
CLAM SHOVEL DROP (SLURRY WALL)	0.202	94
HYDROMILL (SLURRY WALL)	0.008 (in soil) 0.017 (in rock)	66 75
VIBRATORY ROLLER	0.210	94
HOE RAM	0.089	87
LARGE BULLDOZER	0.089	87
CAISSON DRILL	0.089	87

EQUIPMENT	PPV (INCHES/SECOND)	APPROXIMATE VIBRATION LEVEL AT 25 FEET
LOADED TRUCKS	0.076	86
JACKHAMMER	0.035	79
SMALL BULLDOZER	0.003	58

Source: Federal Transit Administration. 2018.

Since the city does not have a quantitative vibration standard in the proposed 2040 General Plan or Sausalito Municipal Code, this analysis has utilized guidance provided by Caltrans, which identifies a standard for historical structures of 0.12 inch per second PPV for transient sources (see Table 3.11-5). As shown in Table 3.11-12, potential vibration levels from representative construction equipment that occur in close proximity to an existing historic structure, could potentially damage the structure.

Since development facilitated by the proposed 2040 General Plan may result in construction activities that occur immediately adjacent to existing historical structures, there is a possibility that vibration from construction equipment would exceed the 0.12 inch per second PPV threshold. Therefore, groundborne vibration impacts from construction activities would result in a ***significant impact.***

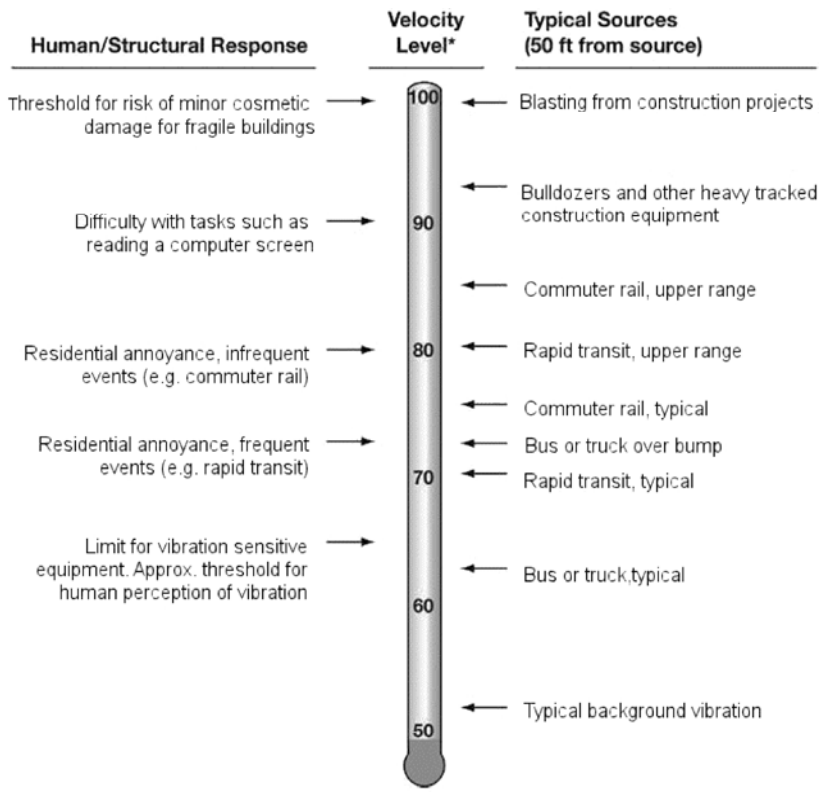
The proposed 2040 General Plan includes Policy HS-3.6 and Program HS-3.6.1, which require that any property owner or developer of any new construction project located within 150 feet of a historical structure identified in Figure 4-1 of the General Plan, to submit a vibration analysis for potential impacts from vibration generated by construction equipment prior to issuance of grading permits. The projects that have the potential to impact historical structures during construction activities include those that will either: (1) conduct pile driving within 150 feet; or (2) utilize mobile construction equipment within 50 feet of any existing structure with sensitive receptors. Therefore, with implementation of Program HS-3.6.1, construction-related vibration impacts would not expose persons to excessive vibration and will have a ***less than significant*** impact.

Operation-Related Vibration

The primary source of vibration created from on-going operation of development facilitated by the proposed 2040 General Plan, would be from additional vehicle and truck trips on the city roadways. Since, the city does not have a quantitative vibration standard in the proposed 2040 General Plan or Sausalito Municipal Code, this analysis has utilized guidance provided by Caltrans in Table 3.11-5 for historical structures of 0.12 inch per second PPV for transient sources.

The FTA Transit Noise and Vibration Impact Assessment Manual includes typical levels of groundborne vibration from various sources. As shown in Exhibit 3.11-1, the threshold for human perception of vibration is below many source levels including transportation and construction sources. Other factors impacting groundborne vibration from transportation sources include the condition of the roadbed, vehicle speed, suspension, and wheel condition and type.

EXHIBIT 3.11-1: TYPICAL LEVELS OF GROUND-BORNE VIBRATION

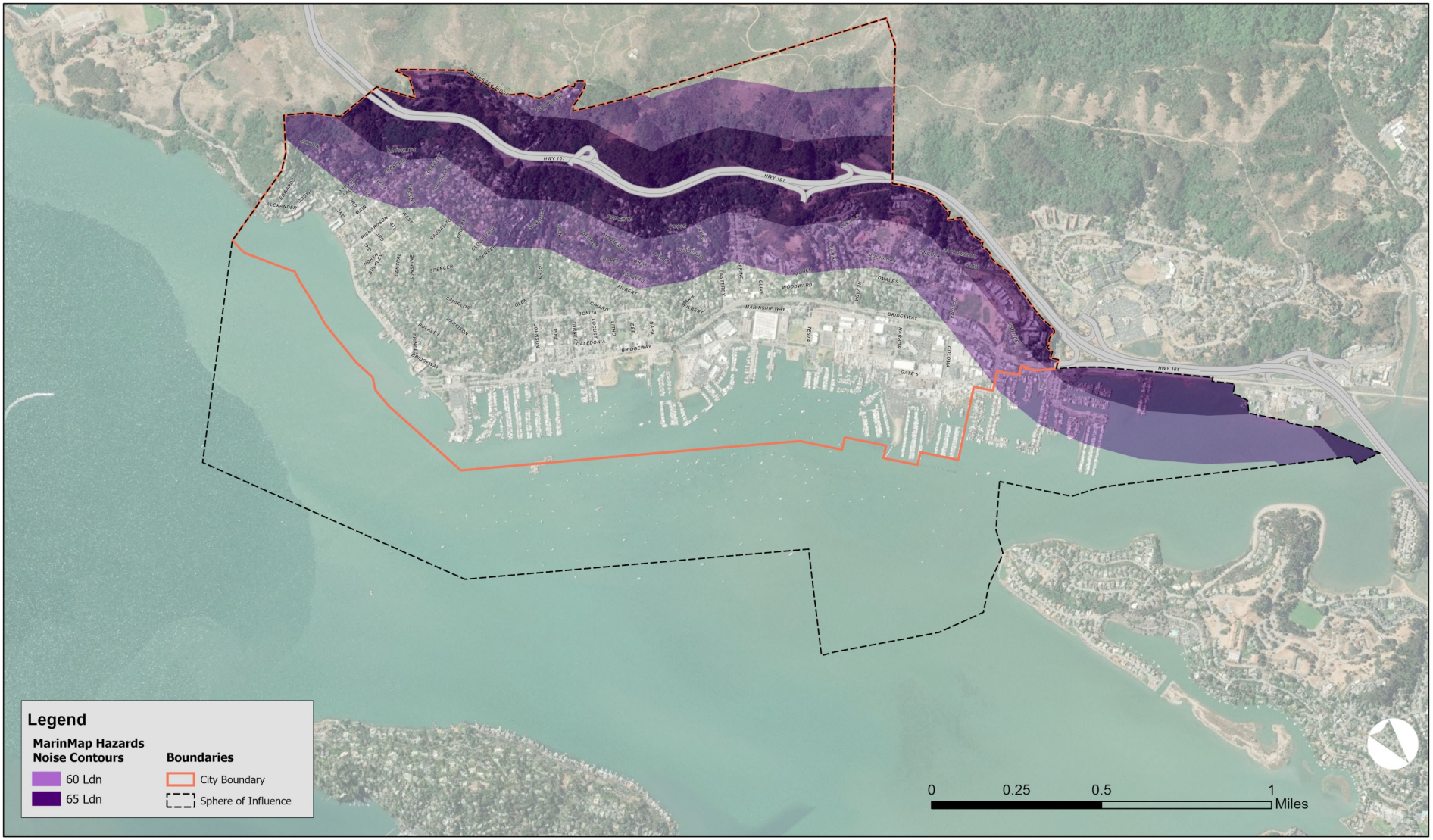


As detailed in Exhibit 3.11-1, a bus or truck over a bump may create a vibration level as high as 72 VdB (0.015 inch per second PPV), with typical bus and truck vibration in the range of 62 VdB (0.005 inch per second PPV). Both the typical and maximum vibration levels created from a bus or truck operating on a city roadway would be within the Caltrans threshold for historical structures of 0.12 inch per second PPV for transient sources. As such, any operational vibration impacts from increased vehicle traffic are expected to be less than significant. Therefore, operation-related vibration impacts would not expose persons to excessive vibration and impacts will be ***less than significant***.

Impact NOI-3	**Implementation of the proposed 2040 General Plan would not result in cumulatively substantial increases in ambient noise levels and vibration in excess of standards established by the local general plan, noise ordinance, or applicable standards of other agencies.**

The geographic context for the analysis of cumulative impacts related to noise includes the incorporated and unincorporated lands comprising the Sausalito Planning Area. This analysis evaluates whether the impacts of the proposed 2040 General Plan, together with the impacts of cumulative development, could result in a cumulatively significant impact related to noise, or result in a cumulatively significant impact related to noise. This analysis then considers whether the incremental contribution of the impacts associated with the implementation of the proposed 2040 General Plan would be significant. Both conditions must apply for a project's cumulative effects to rise to the level of significance.

As discussed in the Section 3.12, Population, Housing, and Employment, regional growth is expected to continue at least through 2040. While Sausalito is one of many local governmental jurisdictions in the region, its small size and substantially developed character mean that any cumulative impacts from the adoption of the proposed 2040 General Plan will be minimal and is not expected to trigger substantial construction that could result in a cumulative impact in the Planning Area. The limited scope and scale of the construction and other activities envisioned by the proposed 2040 General Plan will also result in a cumulative noise impact. Given the scale and coverage of the proposed 2040 General Plan, any cumulative impacts will be ***less than significant***.



Source: City of Sausalito.

FIRSTCARBON SOLUTIONS™

Exhibit 3.11-1
Noise Contours

49150001 • 05/2020 | 3.11-1_noise_contours.cdr

CITY OF SAUSALITO
GENERAL PLAN UPDATE EIR

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3.12 POPULATION, HOUSING, AND EMPLOYMENT

This section of the EIR describes the existing population and housing characteristics in the Sausalito Planning Area and evaluates the potential environmental consequences from development that could occur by adopting and implementing the proposed 2040 General Plan.

Information in this section is based on information provided by the following reference materials:

- Plan Bay Area 2040, Land Use Modeling Report, Metropolitan Transportation Commission and Association of Bay Area Governments (ABAG), adopted July 2017;
- City of Sausalito 2015-2023 Housing Element, adopted January 13, 2015;
- E-1 Population Estimates for Cities, Counties and the State with Annual Percent
- Change — January 1, 2018 and 2019, California Department of Finance, May 2019;
- E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011-2019, California Department of Finance, May 2019; and
- E-8 Historical Population and Housing Estimates for Cities, Counties, and the State, 2000-2010, California Department of Finance, November 2012.

3.12.1 EXISTING SETTING

Population

The City of Sausalito is one of 11 Cities and Towns in the County of Marin. Table 3.12-1 compares Sausalito's population growth trends with the County's from 2000 to 2019. The population of Sausalito grew from 7,330 in 2000 to 7,416 in 2019, a 1.2 percent increase. The County grew from 247,289 in 2000 to 262,879 in 2019, a 6.3 percent increase. In 2019, Sausalito had a smaller population than the nearby City of Mill Valley (13,903) and the Town of Tiburon (8,962), and a larger population than nearby the City of Belvedere (2,068).[1]

Housing

Sausalito has an expensive housing market due to the area's proximity to San Francisco and greater Bay Area, and natural landscapes consisting of open space, the waterfront, and the Marin Hills. Two types of housing data for the city are described below, total housing units and household size.

[1] California Department of Finance. 2019. E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011-2019. May.

TABLE 3.12-1: POPULATION GROWTH 2000 – 2019

JURISDICTION	YEAR			2000-2019 CHANGE
	2000	2010	2019	
SAUSALITO	7,330	7,061	7,416	1.2%
MARIN COUNTY	247,289	252,409	262,879	6.3%
SAUSALITO SHARE OF COUNTY	3.0%	2.8%	2.8%	-0.3%

Sources: United States Census Bureau. 2000; California Department of Finance. 2019. May.

The U.S. Census Bureau defines a "household" as all persons living in a single housing unit, whether or not they are related. One person living alone is considered a household, as is a group of unrelated people living in a single housing unit. The U.S. Census Bureau defines "family" as related persons living within a single housing unit.[2]

Housing Units

Table 3.12-2 shows growth in housing units in Sausalito and the County from 2000 to 2019. The number of housing units in Sausalito grew from 4,511 in 2000 to 4,582 in 2019, a 1.6 percent increase. The County grew from 104,990 housing units in 2000 to 112,394 in 2019, a 7.6 percent increase. During the same period, Sausalito's number of housing units comprised approximately 4.2 percent of the County's housing units. As part of its Housing Element update, the city sought to create an average of two new ADUs per year from 2015-2023, which is the planning period of the 2015 Housing Element.[3]

TABLE 3.12-2: HOUSING UNITS 2000 – 2019

JURISDICTION	YEAR			2000–2019 CHANGE
	2000	2010	2019	
SAUSALITO	4,511	4,536	4,582	1.6%
MARIN COUNTY	104,990	111,214	112,394	7.6%
SAUSALITO SHARE OF COUNTY	4.3%	4.1%	4.1%	4.2%

Sources: United States Census Bureau. 2000; California Department of Finance. 2019. May.

[2] United States Census Bureau. 2019. Subject Definitions. August 7. Website: https://www.census.gov/programs-surveys/cps/technical-documentation/subject-definitions.html. Accessed March 24, 2020.

[3] City of Sausalito. 2015. City of Sausalito 2015-2023 Housing Element. January 13.

Household Size

Small households (one to two persons/household) commonly reside in units with zero to two bedrooms; family households (three to four persons/household) normally reside in units with three to four bedrooms. Large households (five or more persons/household) typically reside in units with four or more bedrooms. However, the number of units in relation to the household size may also reflect preference and economics. Many small households obtain larger units and some large households live in small units for economic reasons.

Table 3.12-3 compares household sizes in Sausalito and the County from 2000 to 2019. Average household size in Sausalito increased slightly from 1.7 persons/household in 2000 to 1.78 in 2019. Average household size in the County increased from 2.3 persons/ household in 2000 to 2.44 in 2019. Overall, the city has maintained a lower average household size than the County over the last 19 years.

TABLE 3.12-3: PERSONS PER HOUSEHOLD SIZE 2000 – 2019

JURISDICTION	YEAR		
	2000	2010	2019
SAUSALITO	1.7	1.71	1.78
MARIN COUNTY	2.3	2.36	2.44

Sources: United States Census Bureau. 2000; California Department of Finance. 2019. May.

Employment

Sausalito is near regional employment centers and major transportation thoroughfares. Two types of employment data are described below: total jobs within the community; and employed residents, including the number of residents of working age who actively participate in the civilian labor force. A comparison of these data can indicate commute patterns (i.e., whether significant out-commuting or in-commuting occurs).

The civilian labor force includes those who are employed (except in the armed forces) and those who are unemployed but actively seeking employment. Those who have never held a job, stopped looking for work, or have been unemployed for a long period of time are not considered to be in the labor force.

Total Jobs

In the City of Sausalito, the top industries as tabulated by ABAG in 2015 were financial and professional services; and health, educational, and recreational services.[4] The city has

[4] Association of Bay Area Governments. 2015. Plan Bay Area 2040 Projections.

limited opportunities for extensive employment growth because there are few remaining vacant parcels in the Planning Area.

Table 3.12-4 shows job growth in Sausalito and the County from 2002 to 2017. The number of jobs in Sausalito grew from 5,286 in 2002 to 5,659 in 2017, representing a 7.1 percent increase. The County grew from 105,571 jobs in 2002 to 113,255 jobs in 2017, representing a 7.3 percent increase. From 2002 to 2017, Sausalito's number of jobs comprised an average of approximately 5.1 percent of the County's total jobs.[5]

TABLE 3.12-4: JOBS 2002 – 2017

JURISDICTION	YEAR			2002–2017 CHANGE
	2002	2010	2017	
SAUSALITO	5,286	5,350	5,659	7.1%
MARIN COUNTY	105,571	101,475	113,255	7.3%
SAUSALITO SHARE OF COUNTY	5.0%	5.3%	5.0%	5.1%

Sources: United States Census Bureau. 2019. Onthemap Version 6.7.

Employed Residents

Table 3.12-5 shows employment growth in Sausalito from 2010 to 2019, and in the County from 2000 to 2019. Employed residents in Sausalito totaled 4,400 in both 2010 and 2019. Between 2010 and 2019, employment never dropped below 4,300 and never exceeded 4,800.[6] Employed residents in the County fell from 140,900 in 2000 to 137,900 in 2019, representing a 2.1 percent decrease. However, employment grew 11.5 percent in the County from 2010 to 2019. During this same period, the number of employed residents in Sausalito comprised an average of approximately 3.4 percent of the County's total employed residents. Note that employment dropped from 2000 to 2010 as a result of the recession that lasted from 2007 to 2009.

TABLE 3.12-5: EMPLOYMENT 2000 – 2019

JURISDICTION	YEAR			2010–2019 CHANGE
	2000	2010	2019	
SAUSALITO	N/A	4,400	4,400	0%
MARIN COUNTY	140,900	123,700	137,900	11.5%

[5] United States Census Bureau, Center for Economic Studies. 2019. OnTheMap Version 6.7: Work Area Profile Analysis. August 29. Website: https://onthemap.ces.census.gov/. Accessed March 24, 2020.

[6] California Employment Development Department. 2019. Local Area Unemployment Statistics. December 1. Website: https://data.edd.ca.gov/Labor-Force-and-Unemployment-Rates/Local-Area-Unemployment-Statistics-LAUS-/e6gw-gvii/data. Accessed March 24, 2020.

JURISDICTION	YEAR			2010–2019 CHANGE
	2000	2010	2019	
SAUSALITO SHARE OF COUNTY	N/A	3.6%	3.2%	3.4%

Note: At time of writing, only December 2019 data is finalized for the year, so data from December of 2000 and 2010 are also used.
Source: California Employment Development Department. 2019. Local Area Unemployment Statistics. December 1.

Jobs to Housing Ratio

The jobs-to-housing ratio is used to evaluate whether a community has an adequate number of jobs available to provide employment for residents seeking employment. The jobs-to-housing ratio can be useful in understanding interconnections among housing affordability, traffic flows, congestion, and air quality within a city and larger region.

However, the jobs-to-housing ratio is best analyzed at the sub-regional or regional level due to the tendency of people to commute to jobs outside of their community. A jobs-to-housing ratio of 1.5 takes into account residents who do not participate in the labor force (e.g., those who are retired, disabled, or students) and indicates that a community has an adequate number of jobs to meet its residents' demand for employment.

Jobs to Employed Resident Ratio

Another helpful indicator is the relationship between the number of jobs provided to the number of employed residents within a community. An ideal jobs-to-employed residents ratio is 1.0, which implies that there is a job in the community for every employable resident. A jobs-to-employed residents ratio greater than 1.0 indicates that the community provides more jobs than it has employable residents. In this situation, the community is likely to experience traffic congestion associated with employees travelling to jobs from outside the area, as well as intensified pressure for additional residential development to house the labor force. A jobs-to-employed residents ratio of less than 1.0 indicates that a community has fewer jobs than employable residents, and that many residents would need to commute outside of the community for employment. The resulting commuting patterns can also lead to traffic congestion and affect both local and regional air quality.

Table 3.12-6 shows the jobs-to-housing ratio as well as the jobs-to-employed residents ratio in Sausalito and the County from 2000 to 2019. Sausalito's average jobs-to-housing ratio from 2000 to 2019 was 1.2. The city's jobs-to-employed residents ratio for the same period was approximately 1.3, which indicates that the city has more jobs than employable residents, and that many people commute to the city for employment and that there is not enough housing for the labor force.

The County's average jobs-to-housing ratio from 2000 to 2019 was approximately 1.0, which indicates that there are a relatively adequate number of jobs in the County to meet its residents' demand for employment. The County's average jobs-to-employed residents

ratio for the same time period was 0.8, which indicates that there are not enough jobs in the County for every employable resident.

TABLE 3.12-6: JOBS HOUSING COMPARISONS

	YEAR		
	2000	2010	2019
SAUSALITO			
HOUSING UNITS	4,511	4,536	4,582
JOBS	5,286[a]	5,350	5,659[b]
EMPLOYED RESIDENTS	N/A	4,400	4,400
JOBS-TO-HOUSING RATIO	1.2	1.2	1.2
JOBS-TO-EMPLOYED RESIDENTS	N/A	1.2	1.3
MARIN COUNTY			
HOUSING UNITS	104,990	111,214	112,394
JOBS	105,571[a]	101,475	113,255[b]
EMPLOYED RESIDENTS	140,900	123,700	137,900
JOBS-TO-HOUSING RATIO	1.0	0.9	1.0
JOBS-TO-EMPLOYED RESIDENTS	0.8	0.8	0.8

Notes:

a 2002 Value

b 2017 Value

Sources: California Department of Finance. 2019; California Employment Development Department. 2019; United States Census Bureau. 2000, 2019.

Future Housing Needs

In 2013, ABAG identified Sausalito's fair share of regional housing needs for the 2015–2023 planning period as 26 units affordable to very low income households, 14 units affordable to low income households, 16 units affordable to moderate income households, and 23 units affordable to above moderate income households, for a total of 79 units.[7] The city recognizes that ADUs offer options for addressing lower income housing needs. In the

[7] Association of Bay Area Governments. 2013. Regional Housing Need Plan, San Francisco Bay Area: 2015-2023. December.

2015 Housing Element, the city sought to develop an average two new ADUs per year between 2015 and 2023, for a total of 16 by 2023.[8]

Projections

Despite a slower growth rate over the past decade, ABAG predicts that city and County growth rates will decrease in coming decades. Regional projections estimate that the city will have approximately 7,765 residents by 2040 (Table 3.12-7). Typical of a community with few areas to expand and no Priority Development Areas, the projected city population growth rate is slower than County projections as a whole.

TABLE 3.12-7: POPULATION PROJECTIONS 2010 - 2040

POPULATION PROJECTIONS				
	2010	**2020**	**2030**	**2040**
SAUSALITO	7,061	7,510	7,590	7,765
MARIN COUNTY	252,409	265,875	274,530	282,670
NUMERICAL CHANGE				
	-	**2010-2020**	**2020-2030**	**2030-2040**
SAUSALITO	-	449	80	75
MARIN COUNTY	-	13,466	8,655	8,140
PERCENT CHANGE				
	-	**2010-2020**	**2020-2030**	**2030-2040**
SAUSALITO	-	6.4%	1.1%	1.0%
MARIN COUNTY	-	5.3%	3.2%	3.0%

Sources: California Department of Finance. 2019. May; Association of Bay Area Governments. 2015.

ABAG predicts that job opportunities in Sausalito will grow from 5,350 in 2000 to 5,885 in 2040. Table 3.12-8 shows the ABAG projections for job growth in Sausalito and the County from 2020 to 2040. The largely residential character of Sausalito does not provide significant land area for commercial and employment growth. Job growth is more likely to take place elsewhere in the County.

[8] City of Sausalito. 2015. City of Sausalito 2015-2023 Housing Element. January 13.

TABLE 3.12-8: EMPLOYMENT PROJECTIONS 2010 - 2040

EMPLOYMENT PROJECTIONS				
	2010	**2020**	**2030**	**2040**
SAUSALITO	5,350	5,690	5,825	5,885
MARIN COUNTY	101,475	129,900	133,480	134,960
NUMERICAL CHANGE				
		2010-2020	**2020-2030**	**2030-2040**
SAUSALITO	-	340	135	60
MARIN COUNTY	-	28,425	3,580	2,480
PERCENT CHANGE				
		2010-2020	**2020-2030**	**2030-2040**
SAUSALITO	-	6.4%	2.4%	1.0%
MARIN COUNTY	-	28%	2.8%	1.9%

Sources: United States Census Bureau. 2019. OnTheMap Version 6.7; Association of Bay Area Governments. 2015.

3.12.2 REGULATORY SETTING

State

State Housing Element Statutes

State housing element statutes (Government Code Sections 65580-65589.9) mandate that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community. The law recognizes that for the private market to adequately address housing needs and demand, local governments must adopt land use plans and regulatory systems that provide opportunities for, and do not unduly constrain, housing development. As a result, State housing policy rests largely upon the effective implementation of local general plans and in particular, housing elements. Additionally, Government Code Section 65588 dictates that housing elements must be updated at least once every eight years. The City of Sausalito's General Plan Housing Element is described under the Local Subsection below.

Senate Bill 375

Senate Bill 375, adopted in October 2008, calls upon each of California's Metropolitan Planning Organizations (MPOs) to develop an integrated transportation, land use, and housing plan known as a Sustainable Communities Strategy (SCS). This SCS must demonstrate how the region will reduce greenhouse gas emissions through long-range

planning. It also requires the Regional Housing Needs Allocation, which anticipates housing need for local jurisdictions, to conform to the SCS, which is an opportunity to advocate for increased access to and distribution of affordable housing across the region.

2019 Housing Bills

Governor Gavin Newsom signed 18 bills in October 2019 to address the statewide housing crisis.[9] The bills incentivize affordable housing, make ADUs easier to build, and streamline permitting and approvals to address the California housing crisis. The Governor signed SB 113 by the Committee on Budget and Fiscal Review, which will enable the transfer of $331 million in state funds to the National Mortgage Special Deposit Fund, and establishes the Legislature's intent to create a trust to manage these funds to provide an ongoing source of funding for borrower relief and legal aid to vulnerable homeowners and renters.

The Governor signed the following bills to remove barriers and boost housing production:

- SB 330 by Senator Nancy Skinner (D-Berkeley) establishes the Housing Crisis Act of 2019, which will accelerate housing production in California by streamlining permitting and approval processes, ensuring no net loss in zoning capacity and limiting fees after projects are approved.
- AB 1763 by Assemblymember David Chiu (D-San Francisco) creates more affordable housing by giving 100 percent affordable housing developments an enhanced density bonus to encourage development.
- AB 116 by Assemblymember Philip Ting (D-San Francisco) removes the requirement for Enhanced Infrastructure Financing Districts to receive voter approval prior to issuing bonds.
- AB 1485 by Assemblymember Buffy Wicks (D-Oakland) will build on existing environmental streamlining law and encourage moderate-income housing production.
- AB 1255 by Assemblymember Robert Rivas (D-Hollister) requires cities and counties to report to the state an inventory of its surplus lands in urbanized areas. The bill then requires the state to include this information in a digitized inventory of state surplus land sites.
- AB 1486 by Assemblymember Philip Ting (D-San Francisco) expands Surplus Land Act requirements for local agencies, requires local governments to include specified information relating to surplus lands in their housing elements and annual progress reports, and requires the state Department of Housing and Community Development to establish a database of surplus lands, as specified.
- SB 6 by Senator Jim Beall (D-San Jose) requires the state to create a public inventory of local sites suitable for residential development, along with state surplus lands.

[9] Office of Governor Gavin Newsom, Governor Gavin Newsom Signs 18 Bills to Boost Housing Production. October 9, 2019. Website: https://www.gov.ca.gov/2019/10/09/governor-gavin-newsom-signs-18-bills-to-boost-housing-production/. Accessed May 23, 2020.

- SB 751 by Senator Susan Rubio (D-Baldwin Park) creates the San Gabriel Valley Regional Housing Trust to finance affordable housing projects for homeless and low-income populations and address the homelessness crisis in the region.
- AB 1483 by Assemblymember Tim Grayson (D-Concord) requires local jurisdictions to publicly share information about zoning ordinances, development standards, fees, exactions, and affordability requirements. The bill also requires the Department of Housing and Community Development to develop and update a 10-year housing data strategy.
- AB 1010 by Assemblymember Eduardo Garcia (D-Coachella) will allow duly constituted governing bodies of a Native American reservation or Rancheria to become eligible applicants to participate in affordable housing programs.
- AB 1743 by Assemblymember Richard Bloom (D-Santa Monica) expands the properties that are exempt from community facility district taxes to include properties that qualify for the property tax welfare exemption, and limits the ability of local agencies to reject housing projects because they qualify for the exemption.
- SB 196 by Senator Jim Beall (D-San Jose) enacts a new welfare exemption from property tax for property owned by a Community Land Trust and makes other changes regarding property tax assessments of property subject to contracts with Community Land Trusts.

The construction of accessory dwelling units (ADUs) can also help cities meet their housing goals and increase the state's affordable housing supply. The Governor signed the following bills to eliminate barriers to building ADUs:

- AB 68 by Assemblymember Philip Ting (D-San Francisco) makes major changes to facilitate the development of more ADUs and address barriers to building. The bill reduces barriers to ADU approval and construction, which will increase production of these low-cost, energy-efficient units and add to California's affordable housing supply.
- AB 881 by Assemblymember Richard Bloom (D-Santa Monica) removes impediments to ADU construction by restricting local jurisdictions' permitting criteria, clarifying that ADUs must receive streamlined approval if constructed in existing garages, and eliminating local agencies' ability to require owner-occupancy for five years.
- AB 587 by Assemblymember Laura Friedman (D-Glendale) provides a narrow exemption for affordable housing organizations to sell deed-restricted land to eligible low-income homeowners.
- SB 13 by Senator Bob Wieckowski (D-Fremont) creates a tiered fee structure which charges ADUs more fairly based on their size and location. The bill also addresses other barriers by lowering the application approval timeframe, creating an avenue

to get unpermitted ADUs up to code, and enhancing an enforcement mechanism allowing the state to ensure that localities are following ADU statute.

- AB 671 by Assemblymember Laura Friedman (D-Glendale) requires local governments' housing plans to encourage affordable ADU rentals and requires the state to develop a list of state grants and financial incentives for affordable ADUs.

Regional

Regional Housing Needs Plan

A Regional Housing Needs Plan is required under California Government Code Section 65584 to enable regions to address housing issues and meet housing needs based on future growth projections for the area. The State determines the number of total housing units needed for each region. ABAG allocates housing needs among cities and counties in the nine-county ABAG region for each jurisdiction to use in drafting its housing element. The allocation comes after projection modeling based on current general plan policies, land use designations, and zoning. The allocations are based on "smart growth" assumptions in the modeling and aim to shift development patterns from historical trends (suburban sprawl) toward a better jobs/housing balance, increased preservation of open space, and development of mixed-use, transit-accessible areas. The regional housing need allocations are based on an analysis of the available housing stock and vacancy rate in each community, any existing unmet needs for housing, the projected growth in the number of households (population growth and household formation rate), the local and regional distribution of income, and the need for housing generated by local job growth.

Plan Bay Area 2040: Strategy for a Sustainable Region

ABAG is the official comprehensive planning agency for the San Francisco Bay region, which is composed of the nine counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma, and contains 101 jurisdictions. On July 26, 2017, ABAG and the Metropolitan Transportation Commission (MTC), which is the region's MPO, adopted Plan Bay Area 2040, an integrated transportation and land-use strategy through 2040 that marks the nine-county region's first long-range plan to meet the requirements of SB 375.[10] Working in collaboration with cities and counties, Plan Bay Area 2040 advances initiatives to expand housing and transportation choices, create healthier communities, and build a stronger regional economy. Plan Bay Area 2040 remains on track to meet a 16 percent per capita reduction of GHG emissions by 2035 and a 10 percent per capita reduction by 2020 from 2005 conditions.

To achieve ABAG's and MTC's sustainable vision for the Bay Area, the Plan Bay Area 2040 Land Use Concept Plan concentrates most new population and employment growth in and

[10] Metropolitan Transportation Commission and Association of Bay Area Governments. 2017. Plan Bay Area 2040. July 26.

around Priority Development Areas (PDAs). Under this Plan, PDAs are described as transit-oriented, infill development opportunity areas within existing communities. Two-thirds of all regional growth by 2040 is allocated within PDAs. The PDAs are also expected to accommodate 80 percent (or over 525,570 units) of new housing and 66 percent (or about 744,230) of new jobs. There are no designated PDAs in the Sausalito Planning Area. The nearest PDA is the Urbanized Corridor PDA in unincorporated Marin City adjacent to the northeastern Planning Area boundary.[11]

Local

Sausalito General Plan

The proposed 2040 General Plan includes the following policies and programs that assist in reducing or avoiding impacts related to population and housing:

Land Use and Growth Management Element

Policy LU-6.4: Shoreline Houseboats. Enhance and maintain the diverse housing stock outside the city's immediate jurisdiction by continuing to allow houseboat uses on Richardson's Bay.

Policy LU-9.1: Policy Enforcement. Enforce the Land Use policies and programs to promote a desired array of land uses in appropriate areas of Sausalito.

Housing Element

Policy 1.3: Maintenance and Management of Quality Housing. Support good management practices and the long-term maintenance and improvement of existing housing through code enforcement and housing rehabilitation programs.

Policy 1.4: Rental Housing Conservation. Continue to conserve the existing rental housing stock by limiting the conversion of rental units to ownership or non-residential uses.

Policy 1.5: Protection of Existing Affordable Housing. Ensure the continued affordability of income-restricted housing for lower and moderate income households.

Policy 2.1: Variety of Housing Choices. Encourage diversity in the type, size, price, and tenure of residential development in Sausalito, while maintaining quality of life goals.

Policy 2.2: Adequate Sites. Provide adequate housing sites through appropriate land use and zoning designations, consistent with Sausalito's regional housing growth needs.

[11] Association of Bay Area Governments and Metropolitan Transportation Commission. 2020. Priority Development Areas (current). January 31. Website: http://opendata.mtc.ca.gov/datasets/priority-development-areas-current?geometry=-122.585%2C37.840%2C-122.341%2C37.887. Accessed March 25, 2020.

Policy 2.4: Legalization of Existing Accessory Dwelling Units. Provide amnesty for existing accessory dwelling units by establishing a period of time for owners of un-permitted units to register their units and make them legal.

Policy 2.5: Creation of New Accessory Dwelling Units. Enable the construction and/or creation of new accessory dwelling units in residential zoning districts to increase the supply of affordable housing and address a portion of Sausalito's regional housing needs. Ensure accessory dwelling units are designed to be compatible with the surrounding neighborhood.

Policy 2.6: Liveaboard Housing. Protect liveaboards as a source of affordable housing and officially recognize them as part of the community's housing stock. Work with residents, marine operators and owners, agencies and non-profit groups to identify ways to assist in the long-term affordability and maintenance of this unique form of housing in Sausalito.

Policy 3.3: Homeownership Assistance. Encourage the provision of financial assistance to low and moderate income first-time homebuyers through County and State programs.

Policy 3.4: Rental Assistance. Support and publicize available rental assistance programs for lower income and special needs households.

Policy 4.1: Regulatory Incentives for Affordable Housing. Support the use of various incentives to offset the costs of affordable housing while ensuring that potential impacts are addressed.

Policy 4.2: Flexible Development Standards. Provide flexibility in development standards to accommodate new models and approaches to providing housing, such as transit-oriented development, mixed use and co-housing.

Policy 4.3: Efficient Use of Multi-Family Zoning. Encourage the sustainable use of land and promote affordability by encouraging development of two-family and multi-family housing within the city's multi-family zoning districts (R-2-5, R-2-2.5, R-3).

Policy 4.4: Development Review. Explore continued improvements to the entitlement process to streamline and coordinate the processing of development permits, design review and environmental clearance.

Policy 4.5: Zoning for Special Needs. Provide for transitional and supportive housing, emergency shelters, and single room occupancy uses, consistent with State law.

Sausalito Municipal Code

The Sausalito Municipal Code includes several provisions to address the location and design of new housing units. Mixed use development standards are addressed within Chapter 10.24, Chapter 10.44 regulates ADUs and junior ADUs, and Chapter 10.54 addresses design review. Chapter 10.28.070 Senior Housing promotes housing for senior

citizens and disabled persons. Chapter 10.44.170 Liveaboards establishes standards for allowing and regulating liveaboards on private vessels in recreational marinas or harbors. Chapter 16.08 Houseboats provides provisions to houseboats and regulations for persons residing in houseboats within the city.

3.12.3 THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines Appendix G, the proposed project would have a significant impact related to population and housing if it would:

- Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); or
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

3.12.4 ANALYSIS, IMPACTS, AND MITIGATION MEASURES

Impacts related to a substantial increase in or displacement of population and housing resulting from implementation of the proposed 2040 General Plan are discussed below. The analysis is based upon changes to the existing General Plan that are being proposed as part of the proposed 2040 General Plan.

Impact POP-1	**Development facilitated by the proposed 2040 General Plan would not induce substantial unplanned population growth either directly or indirectly (for example, through extension of roads or other infrastructure) and would not displace a substantial number of people requiring the construction of new housing. This impact is less than significant.**

At a program level, specific impacts resulting from the construction of new residential units and ADUs cannot be determined, as the proposed 2040 General Plan does not propose specific development. New development accommodated under the proposed 2040 General Plan would result in an incremental increase in new residential, commercial, and industrial uses. As described in Section 2, Project Description, buildout of the proposed 2040 General Plan could yield up to 16 new, very low density units, three new low density units, 19 new medium low density units, two new medium density units, 29 new medium high density units, 59 new high density units, 45 new mixed residential and commercial units, six new neighborhood commercial units, 31 new waterfront units, and 94 new ADUs. Assuming an average household size of 1.53, a total of approximately 467 new persons could be accommodated under the proposed 2040 General Plan. In contrast, ABAG growth projections estimate that during this same period the city's population would increase by approximately 349 persons.

The proposed 2040 General Plan identifies areas for future residential development and includes a range of policies and programs to ensure that new development would not induce substantial unplanned population growth either directly or indirectly. Policy LU-9.1 requires that all Land Use policies be enforced. Housing Element Policies 1.3-1.5 protect existing housing stock in the city, including rental and affordable housing. Housing Element Policies 2.4-2.6 legalize and allow for construction of ADUs and protect liveaboards as part of the city's housing stock, allowing for distributed population growth. Lastly, Housing Element Policies 4.2-4.4 address residential development standards and review and zoning to properly manage population growth.

The Sausalito Housing Element provides a more detailed look at potential sites suitable for residential development. The inventory prepared for the Housing Element identified 87 parcels as vacant or underutilized, including current commercial use parcels. These 87 parcels represent 16.97 acres and could potentially accommodate development of 179 new dwelling units. Based on Sausalito's historic development patterns, it is projected that 304 new units would be built over the proposed 2040 General Plan time horizon. Additionally, the inventory identified capacity for an additional 31 liveaboard permits at the city's existing marinas. There are no additional houseboat units projected in the proposed 2040 General Plan.

The proposed 2040 General Plan also contains policies to address displacement of residents. Housing Element Policy 1.3 encourages repair and rehabilitation of existing housing stock. Implementation of this policy is expected to reduce displacement of residents from substandard or unsafe housing. Housing Element Policy 1.4 protects existing rental housing from conversion to non-residential use or ownership. Implementation of this policy will reduce potential for non-residential uses to displace residential units. While development envisioned by the proposed 2040 General Plan would result in an incremental increase in housing units and population in the Planning Area, future development would be required to comply with requirements of the proposed 2040 General Plan and Sausalito Municipal Code protecting against substantial unplanned growth and displacement of existing residential uses. Therefore, impacts from these additional residential units and population would be ***less than significant***.

Impact POP-2	**Development facilitated by the proposed 2040 General Plan would not cumulatively induce substantial unplanned population growth either directly or indirectly and would not cumulatively displace a substantial number of people requiring the construction of new housing. This impact is less than significant.**

As demonstrated in Table 3.12-7, ABAG projects that from 2020 to 2040 the population of Marin County will increase from approximately 265,875 to 282,670, an increase of almost 17,000 people, or less than 0.5 percent per year. Many other Counties in the Bay Area have higher projected growth rates. In contrast, the city's population is projected to increase by

only about 467 people during the same period. This increase in population would result in a rate of increase similar to the countywide rate. The limited number of sites to accommodate additional housing within the City of Sausalito indicates that regional growth will continue to occur in other parts of the region.

Adoption of the proposed 2040 General Plan would not affect cumulative regional growth or result in substantial displacement of people or the need to construct additional housing. Therefore, cumulative impacts from any additional residential units and increase in population would be ***less than significant***.

3.14 TRANSPORTATION

This section of the Draft EIR describes the regulatory framework and existing conditions in the City of Sausalito related to transportation and evaluates the potential impacts on the local and regional circulation system that would result from implementation of the proposed 2040 General Plan. This section includes an analysis of the potential for the proposed 2040 General Plan to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities; conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b); increase hazards due to a design feature; or interfere with emergency access. The analysis was conducted in accordance with the standards and methodologies set forth by the City of Sausalito and Transportation Authority of Marin (TAM).

The information in this section is based on the following reference materials:

- Sausalito 2040 General Plan;
- Future Circulation Conditions Report prepared by Parisi Transportation Consulting, April 21, 2020 (see Appendix F); and
- 2019 Congestion Management Plan (CMP) Update prepared by the TAM, October 2019.

3.14.1 EXISTING SETTING

The Sausalito transportation network consists of one highway (Highway 101); one arterial street (Bridgeway Corridor or Bridgeway); several collector streets that connect Highway 101 with Bridgeway, but which primarily serve the hillside residential areas; and many residential serving local streets. In addition to streets, Sausalito is served by bus and ferry public transit systems and by several private tour bus operators, as well as other vehicular transportation such as Taxis, Uber, Lyft, and the C.A.R.S.S. (Call a Ride Sausalito Seniors) program The city has developed an extensive system of bicycle and pedestrian paths and routes, as well as marinas and boat access to the city via marinas and a public boat ramp.

Existing Roadway Network

The city street system is composed of streets which were installed over periods of time throughout the city's development and are composed of varying widths and compositions depending on when the area was developed. Pavement width, sight distance, and travel speed generally increase as one moves from local streets to collector streets and arterials. Street capacity and travel speed generally increase as one moves from minor local streets to collectors and arterials. Steep slopes and rough terrain limit street capacity due to narrow pavement width and short sight distance.

The classification of streets and highways along with typical standards and functions are described in Table 3.14-1. Note that many streets in Sausalito do not conform with typical

standards due to their age and slope. A map of the existing roadway network is presented on Exhibit 3.14-1.

TABLE 3.14-1: STREETS AND HIGHWAYS CLASSIFICATION SYSTEM

CATEGORY	TYPICAL STANDARDS FOR TYPE OF STREET		FUNCTION
LOCAL STREET	No. of Lanes	2	Provide access to property and carry local traffic.
	ROW Width	<40 feet	
	Daily Traffic	<500 vehicles	
MINOR COLLECTOR STREET	No. of Lanes	2	Provide access to property and carry traffic to arterials
	ROW Width	40-60 feet	
	Daily Traffic	500-2000 vehicles	
MAJOR COLLECTOR STREET	No. of Lanes	2	Carry local traffic to the arterial system.
	ROW Width	40-60 feet	
	Daily Traffic	2000-5000 vehicles	
SECONDARY ARTERIAL STREET	No. of Lanes	2+	Connect major activity centers and important traffic routes
	ROW Width	60+ feet	
	Daily Traffic	5000-20,000 vehicles	
PRIMARY ARTERIAL STREET	No. of Lanes	4+	Connect the most important activities and travel routes
	ROW Width	60+ feet	
	Daily Traffic	20,000-50,000 vehicles	
HIGHWAY	No. of Lanes	4+	Carry regional, interurban, and interstate traffic
	ROW Width	100+ feet	
	Daily Traffic	50,000-100,000 vehicles	

Source: Sausalito 2040 General Plan.

Local Streets

Local streets in Sausalito serve specific residential areas, that extend up steep slopes and drainage ravines. The city's topography creates circulation constraints. The strong desire to preserve native trees and brush cover and avoid erosion problems, combined with the topographical constraints discourages the construction of anything other than minor local access ways in hilly residential areas.

Collector Streets

Typically, local collectors are two lanes with improvements and width depending on age and terrain. Local streets feed into local collectors which, in turn, lead to arterials. The following are the collector streets within the Planning Area:

- Caledonia Street is a two-lane, undivided street with no median that runs east/west through the downtown area of Sausalito.
- Harbor Drive is a northeast/southwest trending, two-lane street that provides access from Bridgeway to the industrial uses in the northern portion of the city.
- Marinship Way is a two-lane, north/south street that connects land uses in the Marinship to Bridgeway. This roadway is divided in some locations and does not provide full two-way travel throughout the length of the roadway.
- Monte Mar Drive is a two-lane street that provides access to Highway 101. This roadway does not have a median and connects to smaller local roadways in the city.
- San Carlos Avenue is a north/south, two-lane roadway in the southern portion of the city that provides access to Bridgeway.
- Spencer Avenue is a two-lane roadway that provides access to Highway 101 and Monte Mar Drive.

Arterial Streets

Arterials carry large volumes of traffic between concentrated traffic generators in the city. Bridgeway is the major arterial city street in Sausalito and is located generally along or near to the waterfront from south of Downtown to the north city limits, where it connects with Highway 101. This main roadway travels through the center of the City and was utilized as the main roadway system prior to the installation of Highway 101 in the late 1930's. Bridgeway was also a main connector for the rails service prior to the installation of Highway 101. Between Napa Street and Richardson Street, Bridgeway is classified as a secondary arterial. As shown in Exhibit 3.14-1, at Richardson Street, Bridgeway transitions to Second Street, South Street, and Alexander Avenue while functioning as a Secondary Arterial roadway. The speed limit along Bridgeway ranges from 25 to 35 miles per hour (mph).

Highways

Highways are limited access facilities designed with four to ten travel lanes for routing traffic through Marin County. Highway 101 provides regional access through Sausalito. Highway 101 is an eight-lane highway located along the western edge of the city and provides a bypass for traffic traveling from the North Bay Area to the Golden Gate Bridge and San Francisco, located south of Sausalito. Four interchanges on Highway 101 serve Sausalito: Alexander Avenue, Spencer Avenue, Rodeo Avenue (northbound only), and the Marin City interchange, which connects with Bridgeway at Gate 6 Road. The Rodeo Avenue interchange is accessible via northbound Highway 101 only; the other interchanges are accessible from both the southbound and northbound directions of Highway 101.

Existing Bicycle Facilities

Bicycle facilities in the Sausalito Planning Area include a mix of bicycle lanes and bicycle routes. Exhibit 3.14-2 shows the location of existing and proposed bicycle facilities. The three basic types of bikeways are described below:[1]

- Class I Bikeway – Variously called a bike path or multi-use trail. Provides for bicycle travel on a paved right of way completely separated from any street or highway.
- Class II Bikeway – Referred to as a bike lane. Provides a striped and stenciled lane for one-way travel on a street or highway.
- Class III Bikeway – Referred to as a bike route. Provides for shared use with pedestrian or motor vehicle traffic and is identified only by signing and sometimes "Shared Roadway Bicycle Marking" stencils.

As shown in Exhibit 3.14-2, there are no existing Class I Bikeways within the Planning Area. A Class II Bikeway is located on Bridgeway that connects from Donahue Street, near Highway 101 in the northern portion of the city, south to Richardson Street. There is a Class III Bikeway in the southern portion of the city on Second Street, South Street, and Alexander Avenue where Bridgeway ends.

Regional bicycle access to and from the City of Sausalito occurs via three main gateways:

- Mill Valley – Sausalito Path (Class I Bikeway) (via Bridgeway/Gate 6 intersection)
- Alexander Avenue (Class III Bikeway) (to and from Fort Baker and the Golden Gate Bridge)
- Ferry Landing (via Ferry Service)

Sausalito's bicycle network currently encompasses approximately 3.6 miles of bikeways. Throughout the city, the bicycle network runs almost exclusively in a north-south direction. Bridgeway is a major bicycle route for commuter, tourist, and recreational cyclists. Many of the neighborhood streets west of Bridgeway and east of Highway 101 are extremely narrow and lack dedicated bicycle and pedestrian facilities; thus, bicyclists and pedestrians are forced to share the roadway with motor vehicles.

Steady increases in bicycle tourism has led to a demand for bicycle parking that has exceeded the Downtown supply. In order to address the impacts created in the downtown area caused by bicycle visitors parking their bicycles by attaching them to/leaning them against items not intended for bicycle parking, e.g., street sign poles, parking meters, trees, etc. the city created downtown bicycle parking regulations to enhance the bicycle enforcement provisions in the Vehicle Code (California Vehicle Code § 21211).[2]

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[1] City of Sausalito Bicycle Master Plan, 2008 Update. Prepared by Alta Planning and Design.
[2] Sausalito Municipal Code Chapter 15.13.

Class II bike lanes are incorporated into Bridgeway and 2nd Street. With increased volumes of cyclists and a general mode shift for alternative modes of travel, some modifications to the current Class II bike facilities may be needed in the future. This can include the installation of Class IV bike facilities and traffic calming measures in the areas where cyclists share the roadway with vehicles.

Existing Pedestrian Facilities

The existing and proposed trails, sidewalks, and other pedestrian facilities are shown on Exhibit 3.14-3. Pedestrian access within Sausalito is facilitated via sidewalks and multi-use pathways adjacent to major roadways in the city. Along Bridgeway and Caledonia, sidewalks of varying widths and cross-slopes are provided along both sides of the street. Curb ramps are provided to facilitate accessibility for persons with impaired mobility, persons using a stroller, or persons using another wheeled device. During summer months and weekends, volumes of pedestrians increase compared to non-summer months and weekdays. In addition, there are stairways that are located throughout the areas in the city hills.

Sausalito also has a variety of steps, lanes, and stairs. Some of these facilities were developed prior to vehicular access. These facilities add to the character of the community and also serve as emergency exit routes and recreation access to other trail systems for Golden Gate National Recreation Area (GGNRA) and other open space areas.

Existing Transit Service

The main transit service in Sausalito is provided by Golden Gate Bridge, Highway and Transportation District that provides bus (Golden Gate Transit) and ferry (Golden Gate Ferry) service between the City of Sausalito, San Francisco, and regional centers in Marin County.[3] Marin County Transit District (MCTD) provides both local and regional bus service within the County of Marin and also operates the seasonally variable Muir Woods Shuttle with a stop in Sausalito.

Golden Gate Transit operates buses at a minimum of 30-minute headways throughout the day on Bridgeway, and also provides service along Highway 101 at the Spencer Avenue bus pad. A major transit transfer facility is operated by Golden Gate Transit just north of town at Marin City. Downtown Sausalito also functions as a transfer facility between buses, and as the location where ferry feeder buses meet ferry passengers.

Golden Gate Ferry provides service to and from Sausalito via the Ferry Landing located in Downtown Sausalito. Ferry service at the terminal provides a connection between Sausalito and the City of San Francisco. Monday through Friday there are nine scheduled departures and arrivals. The Blue & Gold Fleet also provides ferry service connecting Sausalito with Pier 41 in

[3] Golden Gate Bridge, Highway, and Transportation District. 2020. Website: https://www.goldengate.org/district/about-the-district/. Accessed May 5, 2020.

San Francisco. Many ferry passengers take bicycles onto the ferry to provide connections between the Ferry Landing and subsequent destinations.

Bus service to the San Francisco International Airport is provided by the Marin Airporter which stops at the Spencer Avenue bus pad on Highway 101, with 30-minute headways throughout the day.

The use of public transit for commuting and other daily trips is higher in Sausalito than in any other Marin community. The city does not directly provide any public transit services but works with Golden Gate Transit to provide necessary support services such as transit shelters, which improve the quality of transit service.

The tradition of higher public transit use is based on the early days of the city when it served as the transfer point for the Marin County commuter railroad and ferry system. Average monthly Golden Gate Transit ridership was approximately 263,256 riders during the 2018/2019 fiscal year.[4] Average monthly Golden Gate Ferry ridership in Sausalito was approximately 60,500 riders during the 2018/2019 fiscal year.[5]

Study Intersections and Roadway Segments

The following study intersections, roadway segments, and highway segments were selected for inclusion in this analysis by the City of Sausalito and Parisi Transportation Consulting.

Study Intersections

Intersections are typically the most critical element within a roadway system because they are the points where opposing and intersecting streams of traffic must all be served, and the locations where the majority of vehicular delay occurs along a corridor. A variety of right-of-way controls exist to direct traffic through intersections. The study intersections for the proposed 2040 General Plan are identified in Table 3.14-2. Table 3.14-2 also includes the appropriate level of service (LOS) standard for each intersection as well as the average delay in seconds.

TABLE 3.14-2: STUDY INTERSECTIONS

STUDY INTERSECTION	INTERSECTION	CONTROL	EXISTING CONDITIONS	
			PM PEAK HOUR	
			LOS	DELAY
1	Bridgeway/Gate 6 Road	Signal	C	24.5
2	Bridgeway/Gate 5 Road	Signal	A	9.9

[4] Golden Gate Bridge, Highway, and Transportation District. 2020. Website: https://www.goldengate.org/bus/history-research/statistics-ridership/. Accessed May 6, 2020.

[5] Golden Gate Bridge, Highway, and Transportation District. 2020. Website: https://www.goldengate.org/ferry/history-research/statistics-ridership/. Accessed May 6, 2020.

STUDY INTERSECTION	INTERSECTION	CONTROL	EXISTING CONDITIONS	
			PM PEAK HOUR	
			LOS	DELAY
3	Bridgeway/Coloma Street	Signal	B	10.8
4	Bridgeway /Harbor Drive	Signal	C	21.3
5	Bridgeway /Nevada Street	Signal	A	6.9
6	Bridgeway/ Spring Street	Signal	A	9.6
7	Bridgeway /Easterby Street/Marinship Way	Signal	B	14.0
8	Bridgeway / Napa Street	TWSC	A	8.0
9	Bridgeway /Johnson Street	Signal	C	21.5
10	Bridgeway / Bay Street	Signal	A	6.7
11	Bridgeway /Princess Street	Signal	B	17.7
12	Richardson/Second Street	OWSC	A	<5.0

Notes: TWSC = Two-Way Stop-Controlled, OWSC=One-Way Stop-Controlled. Delay Is Measured In Seconds Per Vehicle.
Source: Parisi Transportation Consulting, 2017, 2020.

Study Roadway Segments

The following city Gateways were selected for inclusion in this analysis because they are the main entrances into the Sausalito Planning Area. For existing average daily traffic (ADT) volumes and PM peak hour traffic volumes at each of the Gateway locations, see Impact TRANS-1.

Gateway 1: Bridgeway between Gate 6 Road & Gate 5 Road

Gateway 2: Rodeo Avenue east of Highway 101 northbound ramps

Gateway 3: Monte Mar Avenue east of Highway 101 northbound ramps

Gateway 4: Spencer Avenue east of Monte Mar/Spencer Frontage intersection

Gateway 5: Alexander Avenue north of Edwards Avenue

3.14.2 REGULATORY SETTING

State

California Department of Transportation (Caltrans)

Caltrans is charged with managing and maintaining the State's highway system. Caltrans directly manages more than 50,000 lane miles of State and federal highways, as well as over 12,000 highway bridges; permits more than 400 public-use airports; and operates three of the top five

Amtrak intercity rail services.[6] Caltrans' Strategic Management Plan 2015 – 2020 defines five primary goals: Safety and Health; Stewardship and Efficiency; Sustainability, Livability, and Economy; System Performance; and Organizational Excellence. Within the Sausalito Planning Area, Caltrans maintains Highway 101.

Caltrans Deputy Directive 64-R1: Complete Streets – Integrating the Transportation System

In 2001, Caltrans adopted Deputy Directive 64: a policy directive related to non-motorized travel throughout the state. In October 2008, Deputy Directive 64 was strengthened to reflect changing priorities and challenges. Deputy Directive 64-R1 states:

> The Department views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system. Providing safe mobility for all users, including motorists, bicyclists, pedestrians and transit riders, contributes to the Department's mission/vision: "Improving Mobility across California."

Successful long-term implementation of this policy is intended to result in more options for people to go from one place to another, less traffic congestion and greenhouse gas emissions, more walkable communities (with healthier, more active people), and fewer barriers for older adults, children, and people with disabilities.

Caltrans Director's Policy 22: Director's Policy on Context Sensitive Solutions

Director's Policy 22, a policy regarding the use of "Context Sensitive Solutions" on all State highways, was adopted by Caltrans in November of 2001. The policy reads:

> The Department uses "Context Sensitive Solutions" as an approach to plan, design, construct, maintain, and operate its transportation system. These solutions use innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals. Context sensitive solutions are reached through a collaborative, interdisciplinary approach involving all stakeholders.

The context of all projects and activities is a key factor in reaching decisions. Context is considered for all State transportation and support facilities when defining, developing, and evaluating options. When considering the context, issues such as funding feasibility, maintenance feasibility, traffic demand, impact on alternate routes, impact on safety, and relevant laws, rules, and regulations must be addressed.

[6] Caltrans Strategic Management Plan 2015-2020. Website: https://dot.ca.gov/programs/risk-and-strategic-management. Accessed April 9, 2020.

The policy recognizes that "in towns and cities across California, the State highway may be the only through street or may function as a local street," that "these communities desire that their main street be an economic, social, and cultural asset as well as provide for the safe and efficient movement of people and goods," and that "communities want transportation projects to provide opportunities for enhanced non-motorized travel and visual quality." The policy acknowledges that addressing these needs will assure that transportation solutions meet more than just traffic and operational objectives.

Complete Streets Act (AB 1358)

On September 30, 2008, Governor Schwarzenegger signed into law Assembly Bill (AB) 1358, the California Complete Streets Act of 2008. As of January 2011, AB 1358 requires any substantive revision of the circulation element of a city or county's general plan to identify how it will safely accommodate the circulation of all users of the roadway including pedestrians, bicyclists, children, seniors, individuals with disabilities, and transit riders, as well as motorists.

Senate Bill 743

On September 27, 2013, California Governor Jerry Brown signed SB 743 into law, which changes the way that transportation impacts are analyzed under CEQA. Specifically, SB 743 requires the Governor's Office of Planning and Research to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts. Particularly within areas served by transit, those alternative criteria must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." (New Public Resources Code § 21099(b)(1).)

The Office of Planning and Research identified Vehicle Miles Traveled (VMT) per capita, VMT per employee, and net VMT as the new metric to analyze transportation related impacts. In December 2018 OPR released a revised Technical Advisory, which provides advice and recommendations regarding the assessment of VMT, thresholds of significance, and mitigation measures.[7] Although originally scheduled to be fully implemented in guidelines by January 1, 2016, an extension has allowed cities more time to establish an analysis methodology. Under the latest guidelines, all cities and jurisdictions in California are supposed to adopt new VMT guidelines by July 1, 2020.

In addition, SB 743 adds Public Resources Code Section 21099, which provides that "aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment." A transit priority area is defined as an area within 0.5 miles of an existing or planned major transit stop. Public Resources Code Section 21064.3 defines a major transit stop as a "site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon commute periods."

[7] OPR. 2018. Technical Advisory: On Evaluating Transportation Impacts in CEQA.

The Caltrans Interim Guide suggests the approach with which Caltrans can recommend improvements to enhance pedestrian safety and increase pedestrian accessibility to help meet the goals and targets of Caltrans Strategic Management Plan 2015-2020[8] and California Transportation Plan 2040.[9] The Caltrans Interim Guide directs lead agencies to consider "multi-modal solutions from existing regional transportation plans, regional plans, transit plans, bicycle plans, and pedestrian plans."

Regional

Metropolitan Transportation Commission

The Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating, and financing agency for the nine-county Bay Area, including Marin County. It also functions as the federally mandated metropolitan planning organization (MPO) for the region. It is responsible for regularly updating the Regional Transportation Plan (RTP), a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities.

As stated in Section 3.7, Greenhouse Gas Emissions, SB 375 was adopted as the means for achieving regional transportation-related GHG targets. Among the requirements of SB 375 is the creation of a Sustainable Communities Strategy (SCS) that provides a plan for meeting regional targets. The SCS and the RTP must be consistent with one other, including action items and financing decisions. MPOs must use transportation and air emissions modeling techniques consistent with guidelines prepared by the California Transportation Commission. The current RTP, Plan Bay Area 2040: Strategy for a Sustainable Region, is described below.

The MTC has established its policy on Complete Streets in the Bay Area. The policy states that projects funded all, or in part, with regional funds (e.g., federal, State Transportation Improvement Program, and bridge tolls) must consider the accommodation of bicycle and pedestrian facilities, as described in Caltrans Deputy Directive 64. These recommendations do not replace locally adopted policies regarding transportation planning, design, and construction. Instead, these recommendations facilitate the accommodation of pedestrians, including wheelchair users, and bicyclists into all projects where bicycle and pedestrian travel is consistent with current adopted regional and local plans.

Transportation Authority of Marin

The MTC requires the local transportation authority, in this case TAM, to establish transportation plans that are incorporated into the larger RTP. In Marin County, the TAM is also the Congestion Management Agency tasked with preparing a comprehensive transportation improvement program among local jurisdictions that describes the strategies to reduce traffic congestion and improve land use decision-making.

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8 Caltrans. March 2015. Strategic Management Plan 2015-2020.

9 Caltrans. June 2016. Transportation Plan 2040.

TAM is required to prepare, update, and monitor the Congestion Management Program (CMP). The CMP consists of monitoring, performance measurement, and a capital improvement plan for roadways, bicycle and pedestrian facilities, and transit services. As required by State legislation, TAM maintains a travel demand model to forecast proposed changes to the transportation network. The 2019 CMP Update includes a TDM element that outlines projects and strategies that promote alternate modes of transportation and thereby help reduce traffic congestion and improve air quality, as required by the State of California Government Code Section 65089(b) Subsection (3).[10] Local governments have an opportunity to ensure that TDM measures are adequately factored into this decision making process as they review new development proposals and make key decisions on planning and zoning matters. Local governments may also choose to support (through resolution or other means) regional TDM measures, including carpool lanes and ridesharing facilities and programs, which could be implemented by other agencies, such as TAM or MTC.

Plan Bay Area 2040: Strategy for a Sustainable Region

ABAG is the official comprehensive planning agency for the San Francisco Bay region, which is composed of the nine counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma, and also contains Highway 101 jurisdictions. On July 26, 2017, ABAG and the Metropolitan Transportation Commission (MTC), which is the region's MPO, adopted Plan Bay Area 2040, an integrated transportation and land-use strategy through 2040 that marks the nine-county region's first long-range plan to meet the requirements of SB 375.[11] Working in collaboration with cities and counties, Plan Bay Area 2040 advances initiatives to expand housing and transportation choices, create healthier communities, and build a stronger regional economy. Plan Bay Area 2040 remains on track to meet a 16 percent per capita reduction of GHG emissions from 2005 conditions by 2035 and a 10 percent per capita reduction from 2005 conditions by 2020.

To achieve ABAG's and MTC's sustainable vision for the Bay Area, the Plan Bay Area 2040 Land Use Concept Plan concentrates most new population and employment growth in and around Priority Development Areas (PDAs). Under this Plan, PDAs are described as transit-oriented, infill development opportunity areas within existing communities. Two-thirds of all regional growth by 2040 is allocated within PDAs. The PDAs are also expected to accommodate 80 percent (or over 525,570 units) of new housing and 66 percent (or about 744,230) of new jobs. There are no designated PDAs in the Sausalito Planning Area. The nearest PDA is the Urbanized Corridor PDA in unincorporated Marin City adjacent to the northeastern Planning Area boundary.[12]

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[10] Transportation Authority of Marin. 2019. 2019 Congestion Management Plan Update, page 32.

[11] Metropolitan Transportation Commission and Association of Bay Area Governments. 2017. Plan Bay Area 2040. July 26.

[12] Association of Bay Area Governments and Metropolitan Transportation Commission. 2020. Priority Development Areas (current). January 31. Website: http://opendata.mtc.ca.gov/datasets/priority-development-areas-current?geometry=-122.585%2C37.840%2C-122.341%2C37.887. Accessed March 25, 2020.

Golden Gate Bridge, Highway and Transportation District

The Golden Gate Bridge, Highway and Transportation District operates the Golden Gate Bridge and two public transit systems: Golden Gate Transit buses and the Golden Gate Ferry. Several Golden Gate Transit routes connect Sausalito with regional centers, including destinations within Marin and in San Francisco. The Golden Gate Ferry provides service between the City of Sausalito and San Francisco.

Marin County Transit District

The Marin County Transit District (MCTD) provides local transit service within Marin County. Although MCTD has responsibility for local services, it does not own any buses or facilities and does not employ its own drivers. Instead, MCTD contracts with other providers, including Golden Gate Transit and Whistlestop Wheels, for local bus and paratransit services.

Local

Sausalito General Plan

The proposed 2040 General Plan includes the following policies and programs to manage transportation within the Planning Area:

Circulation and Parking Element

Policy CP-1.1: Street Network. Emphasize maintenance and improvements to the street network which will not require construction of major roadway widening.

Program CP-1.1.1: Budget for Roadway Improvements and Maintenance. Maintain an annual Capital Improvement Program (CIP) which funds necessary roadway improvements and maintenance.

Program CP-1.1.2: Roadway Improvements. Implement the roadway improvements as described in the Circulation and Parking Element Background and Context.

Policy CP-1.2: Level of Service (LOS) Standard. Maintain a letter grade level of service of "D" for signalized intersections for the P.M. weekday peak hour except for Johnson, Bay, and Princess Streets, which are not given an LOS Standard.

Program CP-1.2.1: Periodic Monitoring. Establish and maintain a monitoring system that would perform periodic traffic counts to determine the operating Level of Service status for the city's signalized intersections.

Program CP-1.2.2: Roadway Improvements. Implement the roadway improvements as described in the Circulation and Parking Element Background when the monitoring program identifies any signalized intersection along Bridgeway that is approaching a level of service greater than the letter grade "D".

Program CP-1.3.1: Commuter Through Traffic. Investigate methods to minimize commuter through traffic in residential areas including the consideration of expanding the current regional bike facilities through Sausalito.

Program CP-1.4.4: Signal Timing. Optimize the timing of signalized intersections and install necessary equipment.

Policy CP-1.6: Traffic Report Card. Produce annual report on data to improve transparency of Level of Service-to-Vehicle Miles Traveled transition.

Program CP-1.6.1: VMT Transition. Fund and maintain a program that supplies an annual Traffic Report Card that provides both Level of Service and Vehicle Miles Traveled data throughout the LOS-to-VMT Transition process.

Policy CP-2.4: Cooperation with Local Businesses. Work cooperatively with local business interests in developing programs to reduce traffic, emissions, vehicle miles traveled, and parking impacts.

Program CP-2.4.1: Employee Parking Program. Consider feasibility of employee parking program in worker-rich areas of the City (Downtown and the Marinship) to reduce employee parking impacts on neighboring residential and commercial areas.

Program CP-2.4.2: Employer Outreach. Develop a list of commuter VMT reduction strategies and work with City business groups to inform businesses of them.

Program CP-2.4.3: Trip Reduction Ordinance. Update the adopted Trip Reduction Ordinance to require employers with 50 or more employees to provide incentives for their employees to use transportation alternatives to get to work, and continue to enforce it.

Program CP-2.4.4: Downtown Shared Parking Model. Continue to update and implement the Downtown Shared Parking Model.

Policy CP-3.1: Public Bus Service. Encourage the maintenance of a safe, efficient, and reliable bus service.

Policy CP-3.2: Alternative Transportation. Improve the efficiency of the existing transportation system and reduce the reliance on the private automobile by emphasizing alternative transportation modes.

Policy CP-3.4: First/Last Mile Programs. Expand first- and last-mile programs to connect transit to destinations, aligning with Metropolitan Transportation Commission goals.

Policy CP-4.1: Ferry System. Promote increased patronage of the ferries while protecting the area near the ferry terminal from overly intensive use.

Policy CP-5.1: Bicycle Master Plan. Plan, design, implement, and maintain bicycle infrastructure in Sausalito according to a Bicycle Master Plan.

Policy CP-5.2: North-South Greenway. Link Sausalito to County-wide bicycle routes such as the North-South Greenway.

Program CP-5.2.5: Bicycle Parking Standards. Amend the Zoning Ordinance to require bicycle parking facilities and standards for new development, redevelopment, and/or intensification of existing developed sites.

Program CP-5.2.7: Fort Baker Shuttle. Work with the National Park Service to develop a shuttle system between Fort Baker and Sausalito that, aside from reducing automobile trips in Sausalito, can be used by bicyclists to bypass the most constrained portions of the Bridgeway corridor from the Downtown to the south city limits

Program CP-5.2.8: Electric Bike Charging Stations. Consider installation of electric bike charging stations in key areas of the city to support alternative modes of travel.

Policy CP-5.3: Bridgeway Bikeway South: Long-Term Solutions. Investigate and study long-term solutions to either ameliorate or bypass the most constricted and/or congested conditions at Alexander Avenue, South Street, and Bridgeway south of the Downtown.

Policy CP-5.5: Regional Bicycle and Pedestrian Trails. Continue to support the San Francisco Bay Trail, Bay Area Ridge Trail, and other agencies and jurisdictions in their efforts to provide bicycle and pedestrian trails throughout the nine counties of the San Francisco Bay Area.

Program CP-5.5.2: South Connector Trail. Work with ABAG and the San Francisco Bay Trail Project to provide a connector trail from the Ferry Terminal south to East Fort Baker.

Program CP-5.5.3: Regional Bike Route Alternative. Work with the County of Marin, GGNRA, Caltrans, GGBHTD, and other relevant agencies to establish an alternate north-south connector bike route to bypass the urbanized areas of Sausalito and alleviate bicycle through-traffic on Bridgeway, particularly in the south corridor.

Policy CP-5.6: Pedestrian Trails and Paths. Maintain, improve, and extend existing public paths and stairways for use by residents and establish new pathway connections to complete the system.

Policy CP-5.7: Bicyclist Safety. Provide a safe biking environment along city streets and bicycle trails.

Program CP-5.7.2: Safe Routes to School. Support Safe Routes to School Program.

Policy CP-5.8: Pedestrian Safety. Provide a safe walking environment along city streets and pathways.

Program CP-5.8.1: Coordination with School District. Coordinate with the School District to identify Safe Routes for children on the way to school.

Policy CP-5.10: Accessibility. Ensure city sidewalks and pathways are accessible for people with physical disabilities.

Program CP-5.12.1: Complete Streets Implementation. Implement a complete streets policy to include multi-modal aspects of access improvements, including but not limited to bicycle access, pedestrian improvements and accessibility improvements, to all a capital projects where ever practicable.

Policy CP-5.13: Development Plan Review. New development and substantial remodels in the Marinship should give special attention to the establishment and enhancement of pedestrian and bicycle pathways.

Policy CP-6.1: Development Requirements. Require developers of new and redevelopment projects to contribute to the cost of needed traffic and transit improvement.

Policy CP-7.1: Regional Transportation. Support the preparation of a regional transportation plan for the Highway 101 Corridor which includes projects that divert traffic from Sausalito streets.

Program CP-7.2.1: Regional Traffic Mitigation Fee. Consider adopting an ordinance which permits collection of regional traffic mitigation fees from local development when a model ordinance is proposed by the Countywide Planning Agency.

Program CP-7.3.1: Marin City Development Improvements. In the short term, work with Marin County and Caltrans to ensure that the signals at the Highway 101 southbound off-ramp and Bridge Boulevard intersection and the Bridge Boulevard and Bridgeway intersection are coordinated to provide congestion relief on Bridgeway both north and south bound.

Sausalito Municipal Code

Title 15 (Vehicles and Traffic) of the Sausalito Municipal Code constitutes the city's local traffic ordinance and incorporates rules and regulations as set forth in the California Vehicle Code. Title 15 establishes regulations with respect to parking, traffic, and circulation.

Chapter 15.28.050 (Trip Reduction Requirements) establishes methods to reduce the number of vehicle trips at employer work sites with 100 or more employees at one site. Employers are required to provide information about transportation alternatives, including carpools, transit, and multi-modal transport, to employees. In addition, employers must conduct trip surveys to identify their employee trip methods and submit the results to the city.

City of Sausalito Bicycle Master Plan

The City of Sausalito Bicycle Master Plan was last updated in 2008.[13] The Bicycle Master Plan aims to establish Sausalito as a transportation junction to all modes of travel and improve its facilities as the gateway to bicycle transportation in the North Bay for commuters and visitors. In order to encourage visitors to walk or bike to and from Sausalito (rather than drive), the bicycling and walking environment in Sausalito must be enhanced. The Bicycle Master Plan identifies facility priorities that will enable the city to create an attractive and usable infrastructure. Safety is a primary reason to improve bicycling conditions in Sausalito. Concerns

[13] City of Sausalito Bicycle Master Plan, 2008 Update. Prepared by Alta Planning and Design.

about safety are the single greatest reason people do not choose to commute by bicycle. Addressing those concerns for bicyclists through physical and program improvements is another major objective of the Master Plan.

3.14.3 THRESHOLDS OF SIGNIFICANCE

CEQA Guidelines Appendix G

According to the CEQA Guidelines Appendix G, the proposed project would have a significant impact on transportation if it would:

- Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

Intersection and VMT Impact Criteria

Significance criteria are used to establish what constitutes an impact by a project. In addition to the CEQA Guidelines Appendix G significance thresholds above, the following impact criteria was used to evaluate impacts related to transportation from the proposed 2040 General Plan.

As indicated in proposed 2040 General Plan Policy CP-1.2, signalized intersections are to maintain an LOS of D for the PM weekday peak hour except for except for Johnson, Bay, and Princess Streets, which do not have an assigned LOS standard.

Consideration of VMT as a threshold for traffic impact studies as an alternative to LOS is required by California State law (Senate Bill 743) effective July 2020. VMT impact criteria are discussed below.

Levels of Service Definitions

Signalized intersection LOS is defined in terms of the average total motor vehicle delay for all movements through an intersection. Vehicle delay is a method of quantifying several intangible factors, including driver discomfort, frustration, and lost travel time. Specifically, LOS criteria is stated in terms of average delay per vehicle during a specified period. Vehicle delay is based on many variables, including signal phasing (i.e., the order of movements through the intersection), signal cycle length, and traffic volumes with respect to intersection capacity.

Unsignalized intersection LOS criteria can be further reduced to three intersection types: all-way stop-controlled, two-way stop-controlled, and one-way stop-controlled. All-way stop-controlled intersection LOS is expressed in terms of the average vehicle delay of all the movements, much like that of a signalized intersection.

Two-way and one-way stop-controlled intersection LOS is defined in terms of the average vehicle delay for individual movement(s). This is because the performance of the stop-controlled approach is more closely reflected in terms of its specific movements, rather than its performance overall. Intersection average vehicle delay (i.e., average delay of all movements) for a one-way and two-way stop-controlled intersection should be viewed with discretion.

Table 3.14-3 lists the criteria used to define LOS for signalized and unsignalized intersections.

TABLE 3.14-3: LEVEL OF SERVICE DEFINITIONS FOR INTERSECTION CONTROL DELAY

LEVEL OF SERVICE	LEVEL OF SERVICE DEFINITIONS FOR INTERSECTIONS		
	AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)		DESCRIPTION
	SIGNALIZED	UNSIGNALIZED	
A	≤ 10	≤ 10	Free flow
B	> 10 – 20	> 10 – 15	Stable flow (slight delays)
C	> 20 – 35	>1 5 – 25	Stable flow (slight delays)
D	> 35 – 55	> 25 – 35	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	> 55 – 80	> 35 – 50	Unstable flow (intolerable delay)
F	> 80	> 50	Forced flow (jammed)

Source: Parisi Transportation Consulting, 2020.

Vehicle Miles Traveled

VMT is a performance measure that relates motor vehicle trip mobility to the performance of traffic facilities within a predefined location. While VMT only includes vehicle trip counts, the metric inherently accounts for the benefits of transit and active transportation trips that reduce motor vehicle travel.

Consideration of VMT as a threshold for traffic impact studies as an alternative to LOS is required by California State law (Senate Bill 743) effective July 2020. In response to SB 743 the State's Office of Planning and Research (OPR) updated the existing methods for evaluating transportation impacts under the California Environmental Quality Act (CEQA). OPR established a Vehicle-Miles-Travelled (VMT) metric to assess traffic impacts instead of the prevailing LOS standard. However, although auto delay must no longer be considered a significant impact under CEQA, SB 743 does not prevent local jurisdictions from establishing locally appropriate metrics as a standard outside of the CEQA process.

The use of VMT as a performance measure allows for the evaluation of traffic impacts associated with greenhouse gas emissions. It can be measured as a total or on a *per-capita* basis and can be used to estimate fuel consumption by motor vehicles for distances traveled. Increase in VMT for gasoline-powered vehicles would cause an increase in the GHG emissions from vehicles making these trips.

Guidance from OPR states that using a travel forecasting model is preferred because a travel model would account for both 'project generated VMT' and the 'project effect on VMT', which would include the effect of the project on operating speeds that would further influence VMT.

TAM developed the Transportation Authority of Marin Demand Model (TAMDM), a tour-based assessment of travel behavior that produces VMT estimates for cities through Marin County, including Sausalito. While both Caltrans and MTC have also produced VMT estimates for the region, including Sausalito, these regional models may not contain a level of accuracy and sensitivity for local area applications and should include a sub-area validation process, to calibrate and validate the model within the study area. This process was conducted for Marin County as part of the TAMDM development process.

The TAMDM presents VMT as per resident, per worker and per service population.

- VMT per resident includes all home-based trips which include discretionary trips, eating out, maintenance, school, shopping, university and visiting trip types. This VMT type would not include work-based trips such as going out to lunch or running an errand where work location is the origin of the trip.
- VMT per worker includes all work-related trip purposes including home-base work, and work based but not other home-based trip types.
- VMT per service population better measures the full VMT effects of the general plan by including all vehicle trip types, including trips taken by residents, people employed in Sausalito, students and visitors.

At the project level, OPR gives the lead agency discretion in determining an appropriate methodology for evaluating a project's VMT, including whether to express the change in absolute terms, per capita, or another measure, as long as assumptions are documented. However, OPR recommends setting land use project VMT thresholds at fifteen percent below existing VMT per capita based on regional VMT per capita. Another approach is for the lead agency to develop their own jurisdiction-specific VMT thresholds. Since the City of Sausalito has not set significance thresholds for acceptable versus unacceptable levels of VMT for CEQA analysis; therefore, this analysis is based on the OPR recommended threshold of fifteen percent below existing per capita VMT per service population for the region, which will be defined as Marin County.

The significance threshold defines what constitutes an acceptable level of VMT and what requires mitigation measures to reduce VMT. Thresholds should be consistent with key transportation planning documents such as Plan Bay Area 2040, which contains regional and local projections of VMT growth associated with expected changes in population, employment, and the regional transportation network. Additional VMT reduction may be achieved at the project level through TDM strategies and active transportation network expansion which are not fully accounted for in regional level travel forecasting models.

3.14.4 ANALYSIS, IMPACTS, AND MITIGATION MEASURES

Impacts related to transportation resulting from implementation of the proposed 2040 General Plan are discussed below. The impact analysis is based on the Future Circulation Conditions Report prepared by Parisi Transportation Consulting (Appendix F).

Travel demand for the proposed 2040 General Plan buildout conditions was forecasted in order to estimate the number of vehicle trips generated by the proposed 2040 General Plan land uses and the routes that these vehicle trips will take to access the proposed land uses. The traditional four-step model (trip generation, trip distribution, mode choice, and trip assignment), was used to forecast vehicle trips so that future roadway impacts resulting from implementation of the proposed 2040 General Plan can be determined. Detailed descriptions of Travel Demand Forecasting are included in the Future Circulation Conditions Report (Appendix F).

Impact TRANS-1 Implementation of proposed 2040 General Plan would not conflict with a program, plan, ordinance, or policy of the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Daily Traffic Volumes

The existing and forecasted additional weekday daily and PM peak hour trips associated with the proposed 2040 General Plan Buildout scenario are summarized in Table 3.14-4.

TABLE 3.14-4: EXISTING AND PROJECTED VEHICLE TRIPS

VEHICLE TRIPS	EXISTING CONDITIONS	GP BUILDOUT TRIPS	FUTURE CONDITIONS WITH GP BUILDOUT	% CHANGE
WEEKDAY	39,000	10,100	49,100	+26%
PM PEAK HOUR	2,900	900	3,800	+31%
PM PEAK HOUR IN	*1,400*	*400*	*1,750*	*+25%*
PM PEAK HOUR OUT	*1,500*	*500*	*2,050*	*+37%*

Source: Parisi Transportation Consulting, 2020.

The number of total weekday daily trips forecasted to be generated by the proposed 2040 General Plan land use buildout would represent a 26 percent increase over existing daily traffic volumes. Similarly, the proposed 2040 General Plan Buildout scenario would be expected to increase the number of vehicles in the weekday PM peak hour by 31 percent, with a corresponding increase in the number of vehicles entering (29 percent) and exiting (31 percent) Sausalito.

Trips By Traffic Analysis Zone

The number of estimated trips associated with buildout of the proposed 2040 General Plan for each of the city's 19 Traffic Analysis Zones (TAZs) are summarized in Table 3.14-5. The city's TAZs and estimated number of daily and PM peak hour trips to be generated per TAZ under proposed 2040 General Plan buildout conditions are illustrated in Exhibit 3.14-4.

TABLE 3.14-5: PROJECTED VEHICLE TRIPS BY TRAFFIC ANALYSIS ZONE (TAZ)

TAZ	PROPOSED LAND USES	PROPOSED 2040 GENERAL PLAN LAND USE QUANTITIES		WEEKDAY (DAILY) PROJECT TRIPS	WEEKDAY PM PEAK HOUR PROJECT TRIPS		
		# RESIDENTIAL UNITS/# ADUs	# S.F. NON-RESIDENTIAL	TOTAL TRIPS	TOTAL TRIPS	INBOUND	OUTBOUND
TAZ 1	Residential; ADUs	3/1		18	2	1	1
TAZ 2	Waterfront; Central Comm.; Comm. Waterfront	--	52,084	1050	70	37	33
TAZ 3	Waterfront; Comm. Waterfront	--	77,178	719	71	16	55
TAZ 4	Waterfront	--	18,343	57	8	3	5
TAZ 5	Industrial; Waterfront	--	28,793	133	19	4	15
TAZ 6	Industrial	--	6,087	38	6	1	5
TAZ 7	Industrial	--	66,710	411	57	7	50
TAZ 8	Industrial; Waterfront	--	283,301	967	129	41	88
TAZ 9	Industrial	--	25,175	155	22	3	19
TAZ 10	Industrial; Waterfront; General Comm.	--	23,887	243	23	6	17
TAZ 11	Residential; ADUs; Neighborhood Comm.	38/21	7,077	501	39	24	15
TAZ 12	Residential; ADUs; Central Comm.	1/13	21,325	749	47	27	20
TAZ 13	Residential; ADUs; Central Comm.; Mixed Residential & Comm.; Neighborhood Comm.	32/36	32,963	1407	98	58	40
TAZ 14	Residential; ADUs; Mixed Residential & Comm.	27/0	65,020	2228	141	80	61
TAZ 15	Residential; ADUs;	48/9	3,847	384	32	20	12

TAZ	PROPOSED LAND USES	PROPOSED 2040 GENERAL PLAN LAND USE QUANTITIES		WEEKDAY (DAILY) PROJECT TRIPS	WEEKDAY PM PEAK HOUR PROJECT TRIPS		
		# RESIDENTIAL UNITS/# ADUs	# S.F. NON-RESIDENTIAL	TOTAL TRIPS	TOTAL TRIPS	INBOUND	OUTBOUND
	Neighborhood Comm.						
TAZ 16	Residential; ADUs	20/10		147	14	9	5
TAZ 17	Residential; ADUs; Neighborhood Comm.	30/2	22,294	876	59	34	25
TAZ 18	Residential; ADUs	11/3	--	85	9	6	3
TAZ 19	N/A	--	--	4	2	1	1

Source: Parisi Transportation Consulting, 2020.

Proposed land use changes in TAZ 14 (Old Town area generally bounded by Bridgeway, Napa Street and Johnson Street) are projected to generate the most number of daily and PM peak hour vehicle trips, primarily due to the increase in square footage of the Mixed Residential and Commercial land use category.

Collectively, TAZs representing the Marinship properties (TAZs 4-9) would be expected to generate approximately 20 percent of total daily vehicle trips at proposed 2040 General Plan buildout. Given that the proposed land uses in these TAZs, which include Waterfront Commercial, and Industrial, Waterfront, would be expected to result in an increase in workers, these TAZs would generate a disproportionate percentage of weekday PM peak hour trips. Outbound trips from the Marinship TAZs in the PM peak hour would be projected to generate approximately 30 percent of total new PM peak hour trips and 40 percent of the total number of new outbound trips in this time period.

Gateway Traffic Volumes

Table 3.14-6 summarizes the total average daily traffic (ADT) volumes at city Gateways under each of the three scenarios: Existing Conditions, Future Conditions Without General Plan Buildout, and Future Conditions With General Plan Buildout. The Existing Conditions average daily weekday volumes for all inbound and outbound vehicles traveling to and from Sausalito is illustrated in Exhibit 3.14-5.

TABLE 3.14-6: GATEWAY TRAFFIC VOLUMES (TOTAL DAILY ADT)

TOTAL DAILY ADT	EXISTING CONDITIONS	FUTURE CONDITIONS WITHOUT GP BUILDOUT	FUTURE CONDITIONS WITH GP BUILDOUT	% CHANGE
BRIDGEWAY/ N. BRIDGEWAY	26,500	26,500	33,400	+26%
RODEO AVE	1,800	1,800	2,100	+17%
MONTE MAR DR	1,700	1,700	2,000	+18%
SPENCER AVE	3,200	3,200	3,900	+22%
ALEXANDER AVE	5,800	5,800	7,700	+33%
TOTAL – FIVE GATEWAYS	**39,000**	**39,000**	**49,100**	**+26%**

Source: Parisi Transportation Consulting, 2020.

Under the Existing Conditions scenario, Sausalito generates approximately 39,000 vehicle trips into and out of the city each average weekday. As already noted, the number of daily (weekday) vehicle trips into and out of Sausalito would be estimated to increase by 26 percent to approximately 49,100 under the Future Conditions With General Plan Buildout scenario.

Under the Future Conditions With General Plan Buildout scenario, daily traffic volumes at the Bridgeway/North Bridgeway and Alexander Avenue Gateway locations would represent approximately 84 percent of the total daily volume; volumes at these two Gateway locations would increase by 26 percent and 33 percent, respectively, from existing volumes. Under the Future Conditions With General Plan Buildout scenario, the Rodeo Avenue, Monte Mar Drive, and Spencer Avenue Gateway locations collectively represent about 16 percent of daily traffic volumes; volumes at these three Gateway locations would increase by 17 percent, 18 percent, and 22 percent, respectively, from existing volumes.

Bridgeway is categorized as a primary arterial street designed to accommodate 20,000 daily vehicle trips in its two-lane segment and 50,000 daily vehicle trips in its four-lane segment. Based on existing traffic patterns, approximately 70 percent of motor vehicle traffic coming into and going out of Sausalito use the Bridgeway/Gate 6 Road intersection. The segment of Bridgeway just south of Gate 6 Road experiences average daily traffic of 26,500 motor vehicles under existing conditions. Under the Future Conditions With General Plan Buildout scenario, the number of motor vehicles would increase to approximately 33,400 average daily vehicle trips (26 percent increase). Since this section of Bridgeway has been designed for 50,000 vehicles; Bridgeway would still be operating under capacity under the Future Conditions With General Plan Buildout scenario. As a result, the additional average daily trips from implementation of the proposed 2040 General Plan would not result in a significant increase in traffic volumes. Therefore, impacts would be ***less than significant***.

Alexander Avenue from Second Street to the city Limit is categorized as a Secondary Arterial Street designed to accommodate between 5,000 and 20,000 daily vehicle trips. During an average weekday, Alexander Avenue experiences average daily traffic of about 5,800 total motor vehicles. Under the Future Conditions With General Plan Buildout scenario, the number of vehicles would increase to approximately 7,700 trips (33 percent increase). The anticipated additional vehicle volumes under the Future Conditions With General Plan Buildout scenario are not expected to result in a capacity in excess of Alexander Avenue's existing design capacity. Therefore, impacts would be ***less than significant***.

Although the anticipated additional vehicle volumes under the Future Conditions With General Plan Buildout scenario are not expected to result in a capacity in excess of Alexander Avenue's existing design capacity, large numbers of bicyclists, particularly in the northbound direction along Alexander Avenue, may slow vehicular speeds at times. Total weekday bicycle volumes in the PM peak hour average about 200 in the springtime and about 300 in summertime. To address multimodal conflicts in the South Gateway corridor, the City of Sausalito initiated the City of Sausalito South Gateway Complete Street Study in 2016. This study proposed improvement concepts along the Alexander Avenue/South Street/Second Street/Richardson Street corridor intended to reduce conflicts and improve safety and comfort for all modes in this area. Implementation of improvement concepts identified in the South Gateway Complete Street Study would ensure that significant impacts would not occur with buildout of the proposed 2040 General Plan. Therefore, impacts would be ***less than significant***.

PM Peak Hour Gateway Traffic Volumes

Table 3.14-7 summarizes the Gateway traffic volumes during the PM peak hour under each of the three scenarios: Existing Conditions, Future Conditions Without General Plan Buildout, and Future Conditions With General Plan Buildout. The Future Conditions With General Plan Buildout PM weekday peak hour traffic volumes are depicted in Exhibit 3.14-6.

TABLE 3.14-7: GATEWAY TRAFFIC VOLUMES (PM PEAK HOUR)

PM PEAK HOUR	EXISTING CONDITIONS	FUTURE CONDITIONS WITHOUT GP BUILDOUT	FUTURE CONDITIONS WITH GP BUILDOUT	% CHANGE
BRIDGEWAY/ N. BRIDGEWAY	2,000	2,000	2,600	+30%
RODEO AVE	100	100	150	+50%
MONTE MAR DR	100	100	150	+50%
SPENCER AVE	200	200	250	+25%
ALEXANDER AVE	500	500	650	+30%
TOTAL – FIVE GATEWAYS	**2,900**	**2,900**	**3,800**	**+31%**

Source: Parisi Transportation Consulting, 2020.

Based on the collected counts at the five city Gateways, the city experiences a total volume of approximately 2,900 vehicles entering and exiting the city (1,300 inbound and 1,600 outbound) on an average weekday evening between 5:00 and 6:00 PM.

By comparison, on an average weekday evening under the Future Conditions With General Plan Buildout scenario, the city is projected to experience a PM peak hour traffic volume of approximately 3,800 vehicles (1,750 inbound and 2,050 outbound) during the PM peak hour at the five city gateways. The PM peak hour volumes are expected to increase by 30 percent at the Bridgeway/North Bridgeway location and at the Alexander Avenue location. Volumes at the Rodeo Avenue and Monte Mar Drive gateway locations are each expected to increase in the PM peak hour by 50 percent, from approximately 100 to 150 vehicles. The Spencer Avenue location would be expected to experience a 25 percent increase in PM peak hour traffic volumes, representing an increase of 50 vehicles in the PM peak hour.

At the Bridgeway/North Bridgeway location, the peak hour with the highest traffic volumes generally occurs between 4:00 and 5:00 PM with a total of approximately 2,000 vehicles under the Existing Conditions scenario. However, congestion can be present from 4:00 PM to 7:00 PM. Under the Future Conditions With General Plan Buildout scenario, Bridgeway just south of Gate 6 Road, is projected to have a total of approximately 2,600 vehicles in the PM peak hour, which represents a 30 percent increase over the Existing Conditions scenario.

At the Alexander Avenue location, the Future Conditions With General Plan Buildout scenario, the weekday evening peak hour occurs between 4:30 and 5:30 PM with an average of 500 vehicles under the Existing Conditions scenario. Under the Future Conditions With General Plan Buildout scenario, the number of vehicles at the Alexander Avenue location would be expected to increase to approximately 650 in the evening peak hour, which represents a 30 percent increase over the Existing Conditions scenario.

The Circulation and Parking Element of the proposed 2040 General Plan contains a number of policies and programs that assist in reducing peak hour traffic volumes. Program CP-1.3.1 requires the city to investigate methods to minimize commuter through traffic in residential areas including the consideration of expanding the current regional bike facilities through Sausalito. Program CP 1.4.4 requires the city to optimize the timing of signalized intersections and install necessary equipment. Program CP-2.4.3 requires the city to update the adopted Trip Reduction Ordinance to require employers with 50 or more employees to provide incentives for their employees to use transportation alternatives to get to work. Policy CP-3.1 encourages the maintenance of a safe, efficient, and reliable bus service. Policy CP-3.2 seeks to promote alternative transportation modes to reduce the reliance on private automobiles. Policy CP-3.3 supports park and ride areas within the city and Policy CP-3.4 expands the first- and last-mile programs to connect transit to destinations. Policy CP-5.1 calls for the city to implement and maintain bicycle infrastructure in Sausalito according to the Bicycle Master Plan. Policy CP-5.6 seeks to maintain, improve, and extend pedestrian trails. Policy CP-5.13 requires that new development and substantial remodels in the Marinship give special attention to the establishment and enhancement of pedestrian and bicycle pathways. Policy CP-7.1 requires the

city to support the preparation of a regional transportation plan for the Highway 101 Corridor which includes projects that divert traffic from Sausalito streets. Program CP-7.2.1 encourages the city to consider adopting an ordinance which permits collection of regional traffic mitigation fees from local development when a model ordinance is proposed by the Countywide Planning Agency.

While development facilitated by the proposed 2040 General Plan would increase traffic volumes during the PM peak hour, compliance with the proposed 2040 General Plan policies and programs in the Circulation and Parking Element, would ensure that impacts remain ***less than significant.***

Highway 101 Off-Ramp Traffic Volumes

Average motor vehicle traffic volumes at the three on-ramp/off-ramp locations from Highway 101 (i.e., Rodeo Avenue from northbound Highway 101, and Monte Mar Avenue and Spencer Avenue from both northbound and southbound Highway 101) are much lower than the volume along Bridgeway and Alexander Avenue, with a cumulative total of 6,700 daily vehicle trips. Under the Future Conditions With General Plan Buildout scenario, daily traffic volumes would be expected to increase to approximately 8,000 average daily vehicle trips (19 percent increase).

At the Highway 101 off-ramps, the evening peak hour occurs between 5:30 and 6:30 PM with 400 vehicles under existing conditions. Under Future Conditions With General Plan Buildout scenario, the three Highway 101 interchange locations would have a total of approximately 550 vehicles (38 percent increase) in the evening peak hour. The anticipated additional vehicle volumes under the Future Conditions With General Plan Buildout scenario are not expected to result in a capacity in excess of the existing design capacity of Rodeo Avenue, Monte Mar Drive or Spencer Avenue. As a result, the vehicle trips from implementation of the proposed 2040 General Plan would not result in a significant increase in traffic volumes. Therefore, impacts would be ***less than significant***.

Further, in response to congestion concerns along Highway 101 in Marin County, TAM and Caltrans are managing three projects intended to improve conditions and reduce congestion:

- Northbound Highway 101 to Eastbound I-580 Direct Connector Project – TAM has begun the planning and environmental phase of a potential direct highway connection between northbound Highway 101 to eastbound I-580. If completed, this project would relieve congestion and delays on northbound Highway 101.
- Ramp Metering – Caltrans is installing ramp metering along Highway 101 in Marin County, starting with the northbound direction from Spencer Avenue to Sir Francis Drake Boulevard. Ramp metering is expected to reduce congestion by regulating the flow of traffic entering the freeway, thereby increasing the speed of travel by breaking up platoons of cars.
- Richmond-San Rafael Bridge Improvement Project – a PM peak hour (2:00 – 7:00pm) auxiliary lane in the eastbound direction on the Richmond-San Rafael Bridge and

associated upstream improvements were recently constructed to improve peak hour traffic flow and reduce delays on the eastbound approach to the bridge.

Level of Service

Intersection LOS analysis was conducted at the 12 study intersections within Sausalito using motor vehicle turning movement counts that were conducted at the intersections during the evening peak period (4:00 PM to 6:00 PM) and during the morning peak period (7:00 AM to 9:00 AM) at two study intersections (Bridgeway/Harbor Drive and Bridgeway/Easterby Street/Marinship Way). The existing roadway segment vehicle counts were collected over a seven-day period at four Gateway locations from September 12 to September 18, 2017. Vehicle counts on Alexander Avenue were collected from September 20 to September 26, 2017. Additional vehicle counts were collected in 2019 and compared to the 2017 counts. In order to provide a conservative approach, the 2017 traffic volumes were used as part of this analysis because they were generally higher than the 2019 volumes. The counts captured school-related motor vehicle traffic as well as tourist-related motor vehicle traffic. The peak hour volumes can be considered representative of the highest intersection volumes experienced at each intersection on an average weekday.

The study intersections and peak hour turning movement counts for each scenario for the AM and PM peak periods are shown in Exhibit 3.14-7 (Existing Conditions), Exhibit 3.14-8 (Future Conditions Without General Plan Buildout), and Exhibit 3.14-9 (Future Conditions With General Plan Buildout).

Table 3.14-8 summarizes the intersection LOS for the PM peak hour under each of the three scenarios: Existing Conditions, Future Conditions Without General Plan Buildout, and Future Conditions With General Plan Buildout. As shown in Table 3.14-8, development under the Future Conditions With General Plan Buildout scenario would slightly increase delay at most of study intersections. However, no intersections would exceed LOS D. Proposed 2040 General Plan Policy CP-1.2 requires that roadways maintain a letter grade LOS of "D" for signalized intersections for the PM weekday peak hour except for Johnson, Bay, and Princess Streets, which are not given an LOS standard. Therefore, impacts related to LOS for the PM peak hour from implementation of the proposed 2040 General Plan would be considered ***less than significant***.

TABLE 3.14-8: INTERSECTION LEVEL OF SERVICE (PM PEAK HOUR)

INTERSECTION	CONTROL	EXISTING CONDITIONS		FUTURE CONDITIONS WITHOUT GP BUILDOUT		FUTURE CONDITIONS WITH GP BUILDOUT	
		PM PEAK HOUR		PM PEAK HOUR		PM PEAK HOUR	
		LOS	DELAY	LOS	DELAY	LOS	DELAY
BRIDGEWAY / GATE 6 RD	Signal	C	24.5	C	25.8	C	30.5

INTERSECTION	CONTROL	EXISTING CONDITIONS		FUTURE CONDITIONS WITHOUT GP BUILDOUT		FUTURE CONDITIONS WITH GP BUILDOUT	
		PM PEAK HOUR		PM PEAK HOUR		PM PEAK HOUR	
		LOS	DELAY	LOS	DELAY	LOS	DELAY
BRIDGEWAY / GATE 5 RD / EBBTIDE RD	Signal	A	9.9	A	9.9	B	11.1
BRIDGEWAY / COLOMA ST	Signal	B	10.8	B	10.8	B	11.9
BRIDGEWAY / HARBOR DR	Signal	C	21.3	C	21.3	C	24.6
BRIDGEWAY / NEVADA ST	Signal	A	6.9	A	6.9	A	7.3
BRIDGEWAY / SPRING ST	Signal	A	9.6	A	9.6	B	10.0
BRIDGEWAY / EASTERBY ST / MARINSHIP WAY	Signal	B	14.0	B	14.0	B	13.4
BRIDGEWAY / NAPA ST	TWSC	A	8.0	A	8.0	A	32.7
BRIDGEWAY / JOHNSON ST	Signal	C	21.5	C	21.5	C	25.9
BRIDGEWAY / BAY ST	Signal	A	6.7	A	6.7	A	6.8
BRIDGEWAY / PRINCESS ST	Signal	B	17.7	B	17.7	B	19.9
RICHARDSON / 2ND ST	OWSC	A	< 5.0	A	< 5.0	A	< 5.0

Notes: TWSC= two-way stop-controlled, OWSC=one-way stop-controlled. Delay is measured in seconds per vehicle.
Source: Parisi Transportation Consulting, 2017, 2020.

Table 3.14-9 summarizes the intersection LOS for the AM peak hour for the Bridgeway/Harbor and Bridgeway/Easterby/Marinship intersections under each of the three scenarios: Existing Conditions, Future Conditions Without General Plan Buildout, and Future Conditions With General Plan Buildout. As shown in Table 3.14-9, under the Existing Conditions scenario, both intersections function at LOS C and B, respectively, during the AM peak hour. Levels of service would remain at LOS C and B. Under the Future Conditions With General Plan Buildout scenario, with only slight increases in overall intersection delay. As a result, implementation of the proposed 2040 General Plan would not result in significant delays to study intersections. Therefore, impacts related to LOS for the AM peak hour from implementation of the proposed 2040 General Plan would be considered ***less than significant***.

TABLE 3.14-9: INTERSECTION LOS (AM PEAK HOUR)

INTERSECTION	CONTROL	EXISTING CONDITIONS		FUTURE CONDITIONS WITHOUT GP BUILDOUT		FUTURE CONDITIONS WITH GP BUILDOUT	
		AM PEAK HOUR		AM PEAK HOUR		AM PEAK HOUR	
		LOS	DELAY	LOS	DELAY	LOS	DELAY
BRIDGEWAY / HARBOR DR	Signal	C	21.2	C	21.2	C	27.1
BRIDGEWAY / EASTERBY ST / MARINSHIP WAY	Signal	B	16.9	B	16.9	B	17.0

Source: Parisi Transportation Consulting, 2017, 2020.

Table 3.14-10 provides a comparison of LOS, average vehicle delay, and 95 percent queue lengths in the AM peak period between the Existing Conditions scenario and the Future Conditions With General Plan Buildout scenario for the southbound-to-eastbound movement that has been identified as a concern. The table also displays the approximate length of the southbound to eastbound left-turn pocket at each of the intersections that provide access for vehicles from the north into the Marinship properties.

TABLE 3.14-10: LEFT-TURN LOS AND QUEUEING SUMMARY (AM PEAK HOUR)

INTERSECTION	CONTROL	LEFT TURN POCKET LENGTH (FT)	EXISTING CONDITIONS				FUTURE CONDITIONS WITH GP BUILDOUT			
			AM PEAK HOUR				AM PEAK HOUR			
			LEFT-TURN VOLUME	LOS	DELAY	95% QUEUE (FT)	LEFT-TURN VOLUME	LOS	DELAY	95% QUEUE (FT)
BRIDGEWAY/ HARBOR DR	SB Left Turn	300	276	D	35.3	170	363	D	48.3	440
BRIDGEWAY/ EASTERBY ST/ MARINSHIP WAY	SB Left Turn	60	92	E	68.3	120	106	E	69.4	130

Source: Parisi Transportation Consulting, 2017, 2020.

Under the Existing Conditions scenario, the southbound to eastbound left-turn movements at the Bridgeway/Harbor and Bridgeway/Easterby/Marinship intersections operate at LOS D and E, respectively. Levels of service remain at LOS D and E under the Future Conditions With General Plan Buildout scenario, although average delay for left-turning vehicles would increase at the Bridgeway/Harbor Drive and Bridgeway/Easterby Street/Marinship Way intersections. In particular, average delay for the left-turn movement at the Bridgeway/Harbor Drive intersection would increase from 35.3 seconds under the Existing Conditions scenario to 48.3 seconds under the Future Conditions With General Plan Buildout scenario. Average left-turn delay at the Bridgeway/Easterby/Marinship intersection would increase from 68.3 to 69.4 seconds. The increase in the average delay at these intersections would not result in a significant delay to the

intersections during the AM peak hour. Therefore, impacts from implementation of the proposed 2040 General Plan would be considered ***less than significant***.

Under the Existing Conditions scenario, the 95 percent queue lengths (i.e., the vehicle queue that may be exceeded five percent of the time, which is considered the "design queue") for the southbound left-turn movement at Bridgeway/Easterby/Marinship (120 feet) are longer than the length of the left-turn pocket (approximately 60 feet), indicating that queued left-turning vehicles can block one of the through lanes on southbound Bridgeway during the AM peak hour. At the Bridgeway/Harbor Drive intersection, the 95 percent vehicle queue length for the southbound left-turn movement is 170 feet, which can be accommodated within the existing 300-foot left-turn pocket length. However, queuing at the intersections would increase with the additional volume under the Future Conditions With General Plan Buildout scenario.

At the Bridgeway/Harbor Drive intersection, the 95 percent queue in the AM peak period would increase from 170 feet under the Existing Conditions scenario to 440 feet in the Future Conditions With General Plan Buildout scenario. Similarly, at the Bridgeway/Easterby/Marinship Way intersection, 95 percent queues would extend from 120 feet under the Existing Conditions scenario to 130 feet under the Future Conditions With General Plan Buildout scenario. This indicates that in the AM peak hour vehicles making left-turn movements into the Marinship properties at both intersections may exceed the length of the left-turn pocket and spill into the adjacent southbound through travel lanes, potentially resulting in safety-related impacts.

In order to accommodate estimated weekday AM peak hour left-turn vehicular queuing from southbound Bridgeway into Harbor Street, the left-turn lane could be extended to 440 feet by removing a portion of the center median, which includes street lights and landscaping. The city's six-year Capital Improvement Program includes a project at the intersection of Harbor and Bridgeway which originally was intended to improve the signal equipment and efficiency of the intersection. Other projects may have a higher priority that this specific intersection; however, as this project gets developed the inclusion of improvements for the southbound left onto Harbor from Bridgeway will be examined. Other improvements to the Marinship Way and Harbor intersection, which is within 100 feet of the Bridgeway intersection, will also need to be analyzed.

In addition, the southbound left-turn pocket from Bridgeway to Marinship Way at Easterby has also been identified as needing additional queueing length. As a result, the city's six-year Capital Improvement Program includes evaluating this intersection and making improvements to better accommodate vehicular safety. A full analysis of the intersection, including signal upgrades and turn pocket alignments and lengths as potential geometric modification, should be pursued in the future. This project would ensure that infrastructure is upgraded to prevent queuing conflicts. Therefore, impacts would be ***less than significant***.

Bicycle and Pedestrian Facilities

Development accommodated under the proposed 2040 General Plan would result in an incremental increase in new residential, commercial, and industrial uses. As described in Section 2, Project Description, the proposed 2040 General Plan is expected to accommodate

approximately 304 new residential dwelling units, 587,961 square feet of new commercial space, and 146,124 square feet of new industrial space within the Planning Area. This new growth would increase the city's population by approximately 467 residents and approximately 1,762 employees. Some of these new employees are expected to be residents of the Planning Area.

Development and growth in the city under the proposed 2040 General Plan would result in an incremental increase in the demand for pedestrian and bicycle facilities. As the demand for bicycle and pedestrian facilities increases, there would likely be a need to improve, expand, or construct new facilities. Existing and proposed bicycle and pedestrian facilities are shown on Exhibit 3.14-2 and Exhibit 3.14-3. A Class I Bikeway is proposed east of, and parallel to Bridgeway from North Bridge Boulevard to Main Street. A Class II Bikeway is proposed along Marinship Way from Testa Street to Liberty Ship Way. A Class III Bikeway is proposed along Spring Street, Woodward Avenue, Rodeo Avenue, Gate 5 Road, and Harbor Drive.

The proposed 2040 General Plan includes a range of policies and programs to ensure that bicycle and pedestrian facilities are maintained, improved, and expanded. Policy CP-5.1 requires the city to plan, design, implement, and maintain bicycle infrastructure in Sausalito according to a Bicycle Master Plan. Policy CP-5.2 would link Sausalito to County-wide bicycle routes such as the North-South Greenway. Program CP-5.2.5 requires the city to amend the Zoning Ordinance to require bicycle parking facilities and standards for new development, redevelopment, and/or intensification of existing developed sites. Program CP-5.5.2 requires the city to work with ABAG and the San Francisco Bay Trail Project to provide a connector trail from the Ferry Terminal south to East Fort Baker. Policy CP-5.6 requires the city to maintain, improve, and extend existing public paths and stairways for use by residents and establish new pathway connections to complete the system.

In conclusion, development envisioned by the proposed 2040 General Plan could result in an incremental increase in new development, which could result in an increased use of existing bicycle and pedestrian facilities, thus accelerating the physical deterioration of existing facilities. However, compliance with the proposed 2040 General Plan policies and programs would ensure that development facilitated by the proposed 2040 General Plan would not conflict with a program, plan, ordinance, or policy related to bicycle and pedestrian facilities. Impacts would be ***less than significant***.

Transit Facilities

Development accommodated under the proposed 2040 General Plan would result in an incremental increase in new residential, commercial, and industrial uses. As described in Section 2, Project Description, the proposed 2040 General Plan is expected to accommodate approximately 304 new residential dwelling units, 587,961 square feet of new commercial space, and 146,124 square feet of new industrial space within the Planning Area. This new growth would increase the city's population by approximately 467 residents and approximately 1,762 employees. Some of these new employees are expected to be residents of the Planning Area.

Development and growth in the city under the proposed 2040 General Plan would result in an incremental increase in the demand for transit service, including bus and ferry transit. Golden Gate Transit provides bus service throughout the Planning Area. Golden Gate Ferry provides service to and from Sausalito via the Ferry Landing located in Downtown Sausalito.

In 2018, Marin County voters approved Measure AA, the Marin County Transportation Sales Tax Renewal Expenditure Plan, which extended the 0.5 cent transportation sales tax for an additional 20 years, through 2039. Fifty-five percent of Measure AA funding is distributed towards funding four categories of service, including the provision of efficient and effective local bus service to reduce congestion and meet community needs, enhanced bus services to schools, and specialized services for seniors and people with disabilities. As such, some of the Measure AA funding would provide more efficient bus service throughout the Sausalito Planning Area.

The Golden Gate Bridge, Highway and Transportation District prepares a Short-Range Transit Plan (SRTP) every 2 years and serves as a blueprint for transit services. The most recent SRTP covers fiscal years 2018/19 to 2027-28.[14] The SRTP establishes a set of set of goals and objectives for its transit services; most are established internally while some are required by MTC. The success of each goal and objective is measured through a series of performance measures that should meet specific standards. The SRTP is the principal means by which these goals and objectives are created and modified. The goals of the plan include: 1) Provide reliable, safe, and effective regional transit services, and 2) Improve transit system performance. The SRTP also includes a CIP to support the replacement and rehabilitation of equipment and facilities. Lastly, the SRTP includes an operations plan and budget to ensure that Golden Gate Transit bus service and Golden Gate Ferry are provided in accordance with the plan. The operations plan includes a framework for considering service changes and identifies future service changes. As such, as development and growth occur under the proposed 2040 General Plan, increased demand for transit service will be reviewed every 2 years under the SRTP to ensure that Sausalito continues to be adequately served by transit facilities.

In conclusion, development envisioned by the proposed 2040 General Plan could result in an incremental increase in new development, which could result in an increased demand for transit service, including bus and ferry transit. However, with the use of Measure AA funding for local bus service, as well as the Golden Gate Bridge, Highway and Transportation District's preparation of a SRTP every 2 years to review transit services and transit system performance, development facilitated by the proposed 2040 General Plan would not conflict with a program, plan, ordinance, or policy related to transit facilities. Impacts would be ***less than significant***.

Impact TRANS-2 Development facilitated by the proposed 2040 General Plan would not conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b).

The Transportation Authority of Marin Demand Model (TAMDM) presents VMT as per resident, per worker, and per service population.

[14] Golden Gate Bridgem Highway and Transportation District, Short-Range Transit Plan, Fiscal Years 2018/19 – 2027/29. September 2019.

- VMT per resident includes all home-based trips which include discretionary trips, eating out, maintenance, school, shopping, university, and visiting trip types. This VMT type would not include work-based trips such as going out to lunch or running an errand where work location is the origin of the trip.
- VMT per worker includes all work-related trip purposes including home-base work, and work based but not other home-based trip types.
- VMT per service population better measures the full VMT effects of the general plan by including all vehicle trip types, including trips taken by residents, people employed in Sausalito, students and visitors.

This analysis is based on a per capita VMT per service population which captures all vehicle trips taken by all people who live, work, and visit Sausalito.

The City of Sausalito has not established significance thresholds for acceptable versus unacceptable levels of VMT for CEQA analysis, and what level of significance requires mitigation measures to reduce VMT. Therefore, this analysis is based on guidance from OPR, which recommends setting land use project VMT thresholds at fifteen percent below baseline VMT per capita for the region, in this case defined as Marin County. However, while this threshold is based on the maximum potential VMT reductions associated with vehicle travel reduction strategies, most travel forecasting models are not sensitive to Travel Demand Management (TDM) strategies so additional VMT reduction is possible through proposed 2040 General Plan implementation and TDM strategies applied at the project level. For General Plans, OPR's guidance is not to quantitatively analyze the total VMT reduction to fifteen percent below baseline VMT per capita for the city. Rather, OPR's guidance includes describing what level of development the proposed 2040 General Plan foresees and how that level of development could meet the fifteen percent reduction below baseline VMT per capita for the region.

Existing and projected future VMT for Sausalito and Marin County per service population is shown in Table 3.14-11.

TABLE 3.14-11: EXISTING AND PROJECTED FUTURE VMT PER SERVICE POPULATION FOR SAUSALITO AND MARIN COUNTY

SAUSALITO	TOTAL VMT - SAUSALITO	SERVICE POPULATION (POPULATION + EMPLOYMENT + VISITORS) - SAUSALITO	TOTAL VMT PER SERVICE POPULATION - SAUSALITO	TOTAL VMT PER SERVICE POPULATION – MARIN COUNTY
EXISTING VMT	623,781	21,460	29.1	33.1
2040 GENERAL PLAN VMT	785,940	27,008	29.1	33.1

Note: Existing VMT from TAMDM.
Source: Parisi Transportation Consulting, 2020.

This VMT analysis makes a conservative assumption that adding similar land uses to existing areas would create similar VMT outcomes. Proposed land uses that incorporate similar features

to existing areas would tend to exhibit similar VMT as existing conditions, as travel behavior is largely affected by location-based characteristics that would largely be similar in both existing and future conditions, such as transit accessibility, proximity to job centers, roadway design, roadway connectivity, density, regional accessibility and housing and jobs mix (Victoria Transportation Policy Institute, 2020).[15] Thus, this analysis assumes that future trips associated with existing and future land uses as part of the proposed 2040 General Plan would exhibit a similar VMT as estimated in Existing Conditions by the TAM Model. However, this is likely to over-estimate VMT and the impacts from the proposed increases in land uses in Sausalito given that increased infill development, combined with proposed 2040 General Plan policies and programs that reduce VMT, would be expected to result in a decrease in VMT.

Further, OPR states that lead agencies should presume that certain land use projects, including residential, retail, office, and mixtures of these land uses, that are proposed within 0.5 mile of an existing major transit stop or an existing stop along a high-quality transit corridor will have a less-than-significant impact on VMT. OPR has defined a 'major transit stop' as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. A high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

This assumption may not apply if project-specific or location-specific information indicates that the project may still be anticipated to general significant levels of VMT. For example, this assumption may not be appropriate if a project:

- Has a Floor Area Ratio of less than 0.75;
- Includes more parking for use by residents, employees, or customers of the proposed project that required by the jurisdiction;
- Is inconsistent with Plan Bay Area 2040; and/or
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

Since approximately 95 percent of the land uses under the proposed 2040 General Plan would be located within 0.5 mile of the Bridgeway and Highway 101 corridors that provide high-quality transit service, it can be assumed that implementation of the proposed 2040 General Plan would result in less-than-significant VMT impacts.

Development accommodated under the proposed 2040 General Plan would result in an incremental increase in new residential, commercial, and industrial uses. As described in Section 2, Project Description, the proposed 2040 General Plan is expected to accommodate approximately 304 new residential dwelling units, 587,961 square feet of new commercial space,

[15] Litman, Todd. March 2020. Land Use Impacts on Transportation: How Land Use Factors Affect Travel Behavior. Victoria Transportation Policy Institute.

and 146,124 square feet of new industrial space within the Planning Area. This new growth would increase the city's population by approximately 467 residents and approximately 1,762 employees. Some of these new employees are expected to be residents of the Planning Area.

The Circulation and Parking Element of the proposed 2040 General Plan contains a number of policies and programs that assist in reducing VMT. Program CP-1.6.1 requires the city to fund and maintain a program that supplies an annual Traffic Report Card that provides both LOS and VMT data throughout the LOS-to-VMT Transition process. Policy CP-2.4 requires the city to work cooperatively with local business interests in developing programs to reduce traffic, emissions, VMT, and parking impacts. Program CP-2.4.1requires the city to consider the feasibility of an employee parking program in worker-rich areas of the city (Downtown and the Marinship) to reduce employee parking impacts on neighboring residential and commercial areas. Program CP-2.4.2 requires the city to develop a list of commuter VMT reduction strategies and work with city business groups to inform businesses of them. Program CP-2.4.3 requires the city to update the adopted Trip Reduction Ordinance to require employers with 50 or more employees to provide incentives for their employees to use transportation alternatives to get to work. Program CP-2.4.4 requires the city to continue to update and implement the Downtown Shared Parking Model. Policy CP-3.1 encourages the maintenance of a safe, efficient, and reliable bus service. Policy CP-5.1 calls for the city to implement and maintain bicycle infrastructure in Sausalito according to the Bicycle Master Plan. Policy CP-5.6 seeks to maintain, improve, and extend pedestrian trails.

While development facilitated by the proposed 2040 General Plan may increase VMT within the Sausalito Planning Area, compliance with the proposed 2040 General Plan policies and programs in the Circulation and Parking Element, would ensure that impacts are ***less than significant***.

Impact TRANS-3 Development facilitated by the proposed 2040 General Plan would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Development anticipated by the proposed 2040 General Plan could result in an incremental increase in new residential, commercial, and industrial uses. The proposed 2040 General Plan would retain the existing roadway patterns and does not propose any new major roadways or other physical features that would substantially increase hazards or incompatible uses. Furthermore, development under the proposed 2040 General Plan would be located on sites either developed and/or underutilized, and/or in close proximity to existing residential, commercial, and industrial uses.

The majority of development under the proposed 2040 General Plan is expected to be located on developed lots in areas where existing infrastructure (including highways and local roadways) are already in place. An incremental increase in development could occur in the western portions of the Planning Area, which may require the installation of new infrastructure, such as roads and fire access roads; however, any new infrastructure would be limited to serving new development. As such, the proposed 2040 General Plan does not propose any significant

changes to land use patterns or the roadway network such that new roadways would substantially increase hazards due to a geometric design feature. Proposed development, land use activities, and roadway network improvements that occur pursuant to the proposed 2040 General Plan would be reviewed for compliance with State and local requirements of site distance, and similar issues, as relevant. As such, development facilitated by the proposed 2040 General Plan would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) and impacts would be ***less than significant***.

Impact TRANS-4 Implementation of the proposed 2040 General Plan would not result in inadequate emergency access.

Development anticipated by the proposed 2040 General Plan could result in an incremental increase in new residential, commercial, and industrial uses. The proposed 2040 General Plan would retain the existing roadway patterns and does not propose any new major roadways or other physical features that would result in inadequate emergency access. Further, development under the proposed 2040 General Plan would be located on sites either developed and/or underutilized, and are not expected to inhibit emergency access. An incremental increase in development could occur in the western portions of the Planning Area, which may require the installation of new infrastructure, such as roads and fire access roads; however, any new infrastructure would be limited to serving new development and would be reviewed by the City of Sausalito to ensure adequate emergency access is provided.

The proposed 2040 General Plan includes policies and programs to ensure that adequate emergency access is provided and maintained. Policy HS-2.4 requires the city to provide and maintain adequate access for emergency vehicles and equipment, particularly fire-fighting equipment. Program HS-2.4.1 requires the city to maintain a temporary street encroachment permit process so that construction and other large pieces of equipment or vehicles occupying the public right-of-way may be regulated.

In conclusion, development facilitated by the proposed 2040 General Plan does not propose any significant changes to land use patterns or the roadway network such that potential impairments to emergency access would be created (road closures, road narrowing, new roadways with steep grades, etc.). Proposed development and land use activities that occur pursuant to the proposed 2040 General Plan would be reviewed for compliance with State and local requirements for emergency access by the City of Sausalito. For example, buildings 30 feet in height or higher would need to provide a minimum of two access points suitable for fire apparatus. As such, development and land use activities contemplated by the 2040 General Plan would not result in inadequate emergency access. Impacts would be ***less than significant***.

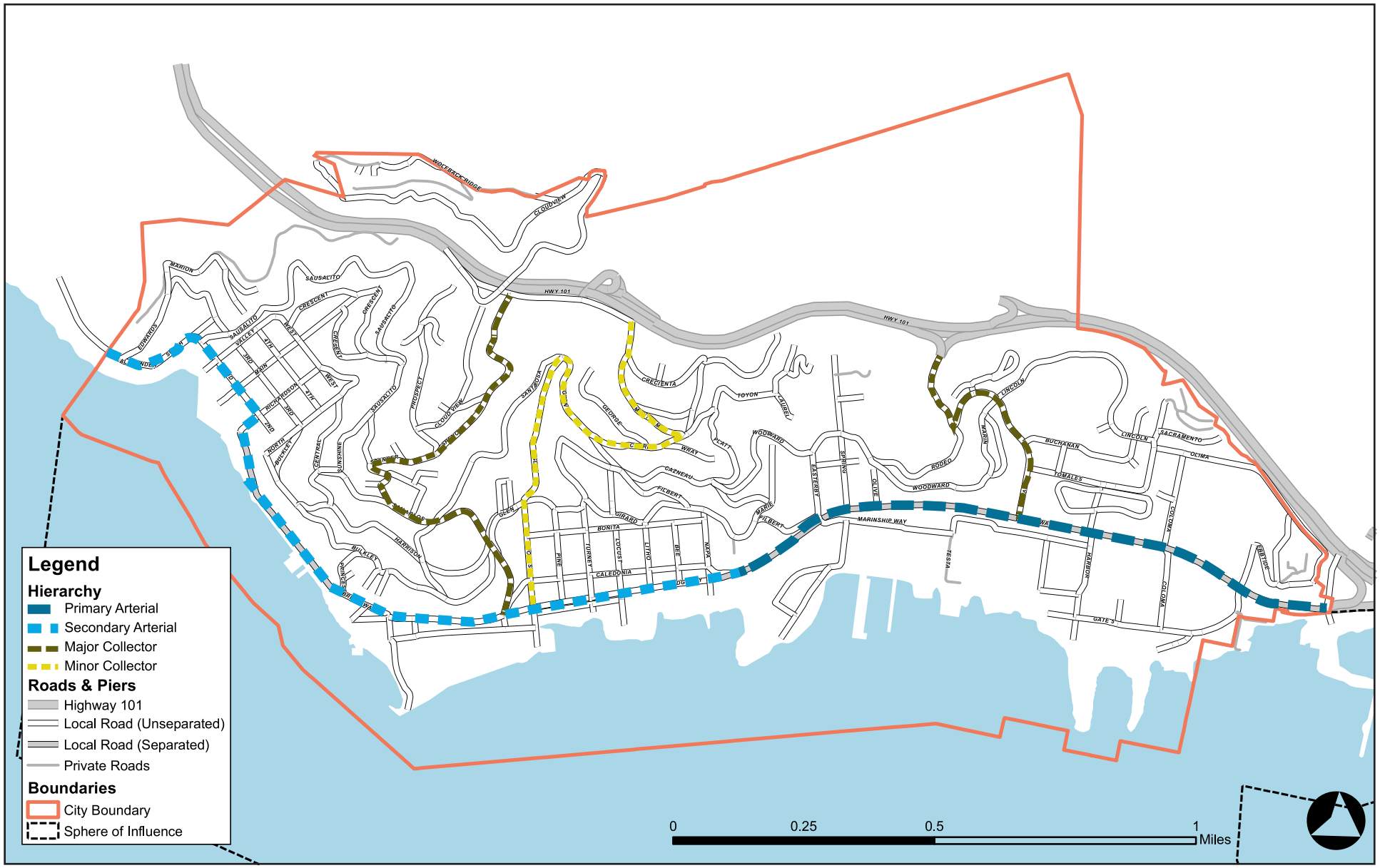
Impact TRANS-5 Development facilitated by the 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to transportation.

This analysis evaluates whether the impacts of the proposed 2040 General Plan, together with the impacts of cumulative development, could result in a cumulatively significant impact with respect to transportation. This analysis then considers whether the incremental contribution of the impacts associated with the implementation of the proposed 2040 General Plan would be significant. Both conditions must apply in order for a project's cumulative effects to rise to the level of a significant impact.

The geographic context for this analysis includes the Sausalito Planning Area, Marin City, Mill Valley, Tiburon, Belvedere, and other adjacent unincorporated areas. Past, present, and future development projects contribute to transportation impacts. If the project is determined to have a significant transportation impact, it is concluded that the impact is a cumulative impact

Development envisioned by the proposed 2040 General Plan would contribute to an incremental cumulative increase in traffic volumes on area roadways, VMT, and demand for transit, bicycle, and pedestrian facilities. However, as discussed under Impact TRANS-1, implementation of the proposed 2040 General Plan would not result in a significant increase in traffic volumes and is not expected to result in a roadway capacity in excess of existing design capacity. The proposed 2040 General Plan would not conflict with a program, plan, ordinance, or policy related to bicycle, pedestrian or transit facilities. As discussed under Impact TRANS-2, development facilitated by the proposed 2040 General Plan would not conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b). As such, development anticipated under the proposed 2040 General Plan would not create substantial impacts related to transportation.

Regional growth within unincorporated Marin County and in the surrounding communities of Marin City, Mill Valley, Tiburon, and Belvedere, would result in increased traffic volumes on area roadways, VMT, and demand for transit, bicycle, and pedestrian facilities. All cumulative projects would be required to comply with city ordinances and proposed 2040 General Plan policies that address potential impacts related to transportation. Therefore, impacts of the proposed 2040 General Plan on transportation are not cumulatively considerable and the cumulative impact would be ***less than significant***.



Source: City of Sausalito, Marin County. BKF Engineers, Surveyors, Planners.

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Exhibit 3.14-1
Roadway Hierarchy

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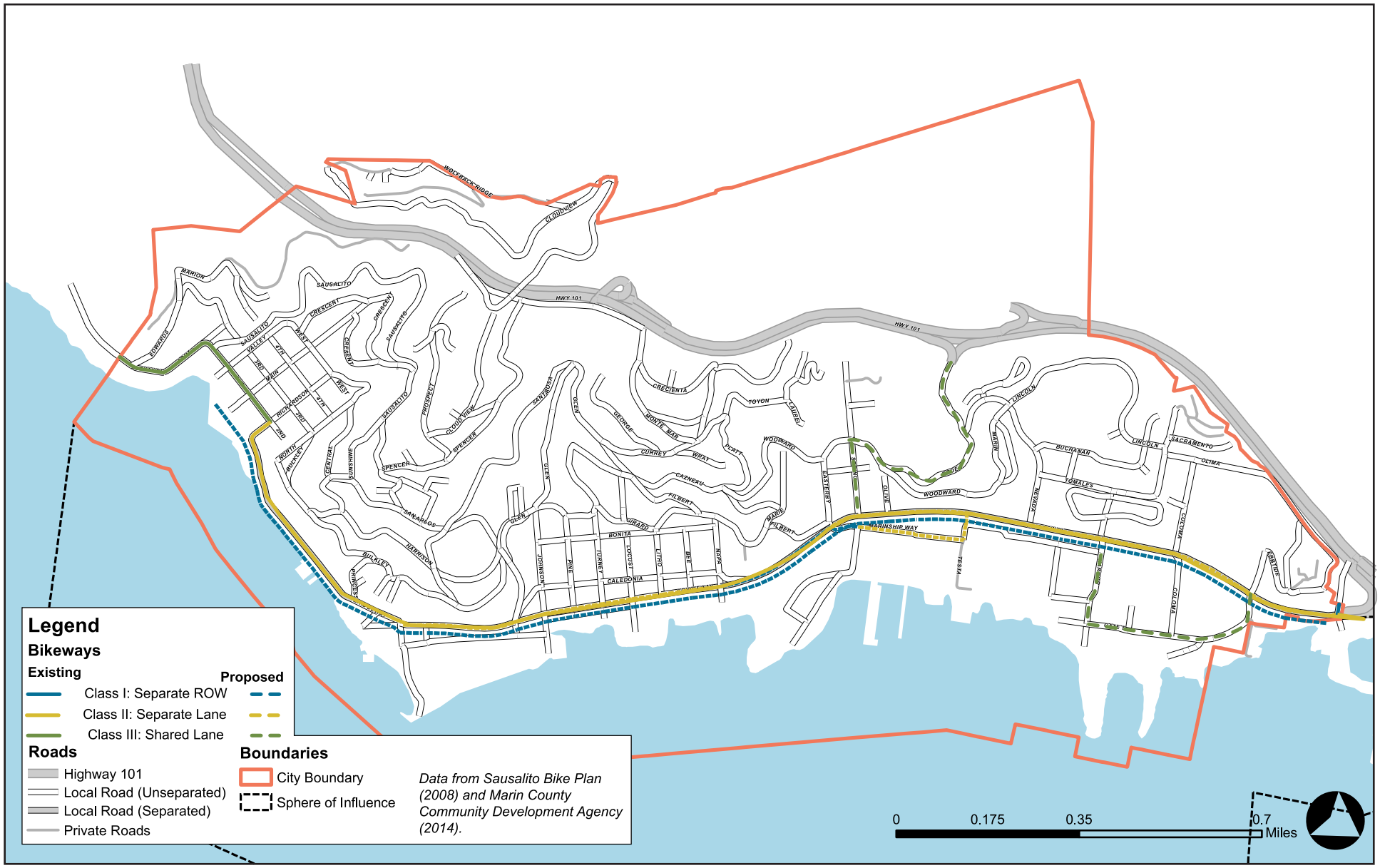

Source: City of Sausalito, Marin County. BKF Engineers, Surveyors, Planners.

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Exhibit 3.14-2
Existing Bicycle Facilities

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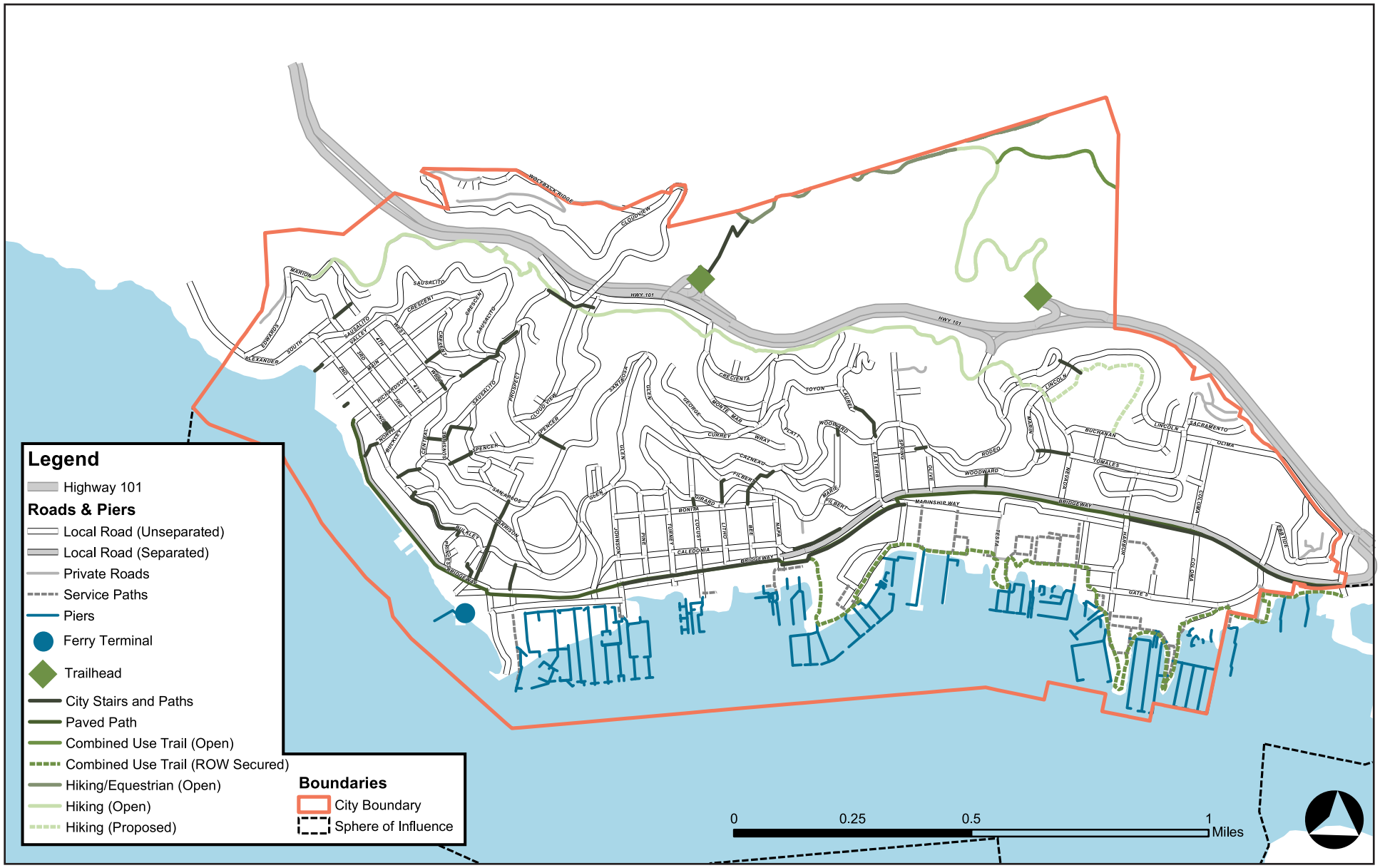

Source: City of Sausalito, Marin County. BKF Engineers, Surveyors, Planners.

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Exhibit 3.14-3
Existing Pedestrian Facilities

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(#) Traffic Analysis Zone # Daily Trips # PM Peak Hour Trips

Source: Parisi Transportation Consulting, April 2020.

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Exhibit 3.14-4
Project Trips Per Traffic Analysis Zone

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Study Intersection turning movement counts location

24-hour ADT Counts location

Source: Parisi Transportation Consulting, April 2020.

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Exhibit 3.14-5
Existing Conditions - Average Daily Traffic Volumes (Weekday)

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LEGEND

Study Intersection turning movement counts location

24-hour ADT Counts location

Source: Parisi Transportation Consulting, April 2020.

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Exhibit 3.14-6
Future Conditions With General Plan Buildout PM Peak Hour Traffic Volumes (Weekday)

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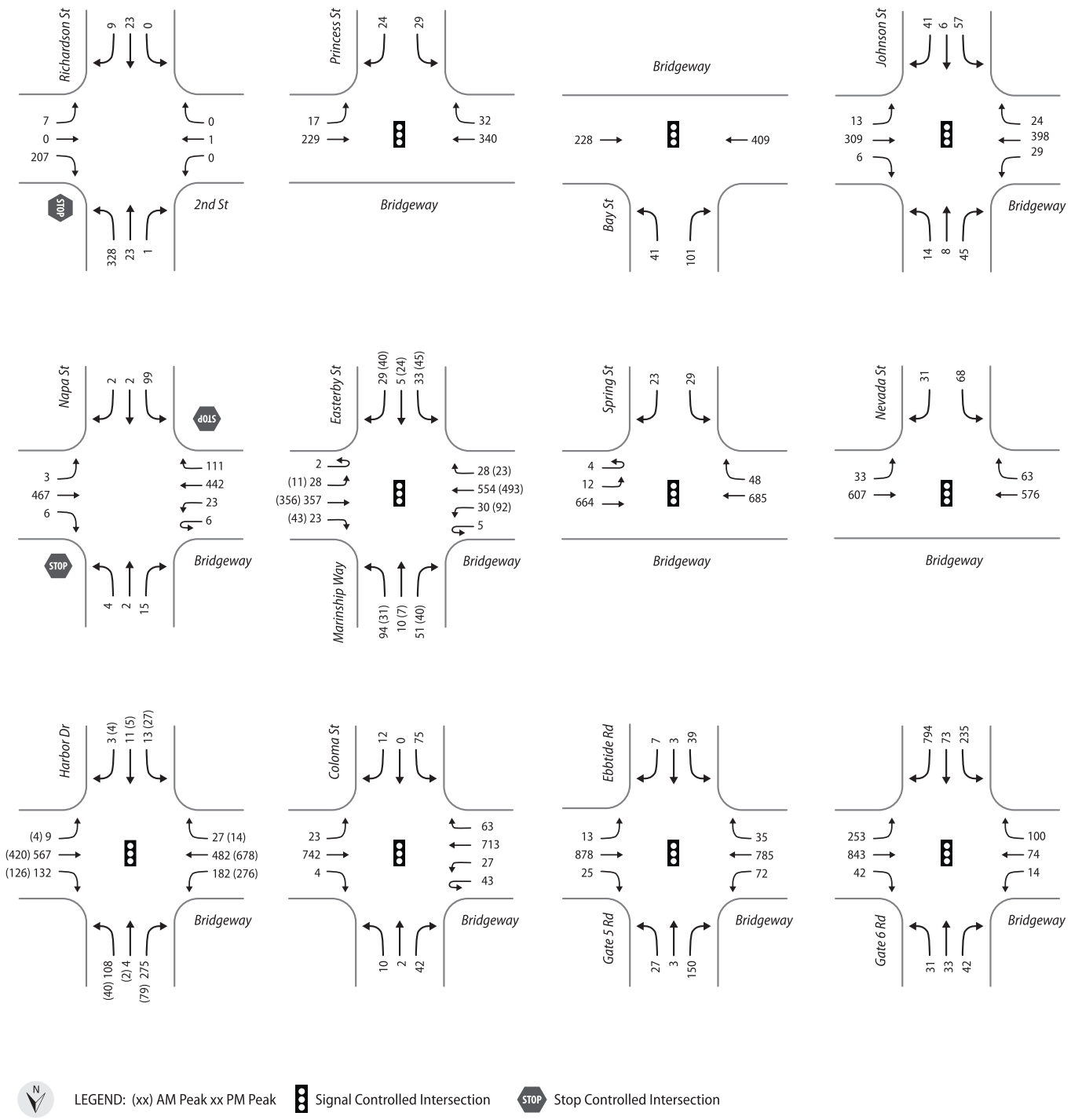

Source: Parisi Transportation Consulting, April 2020.

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Exhibit 3.14-7
Existing Conditions - Vehicle Trips

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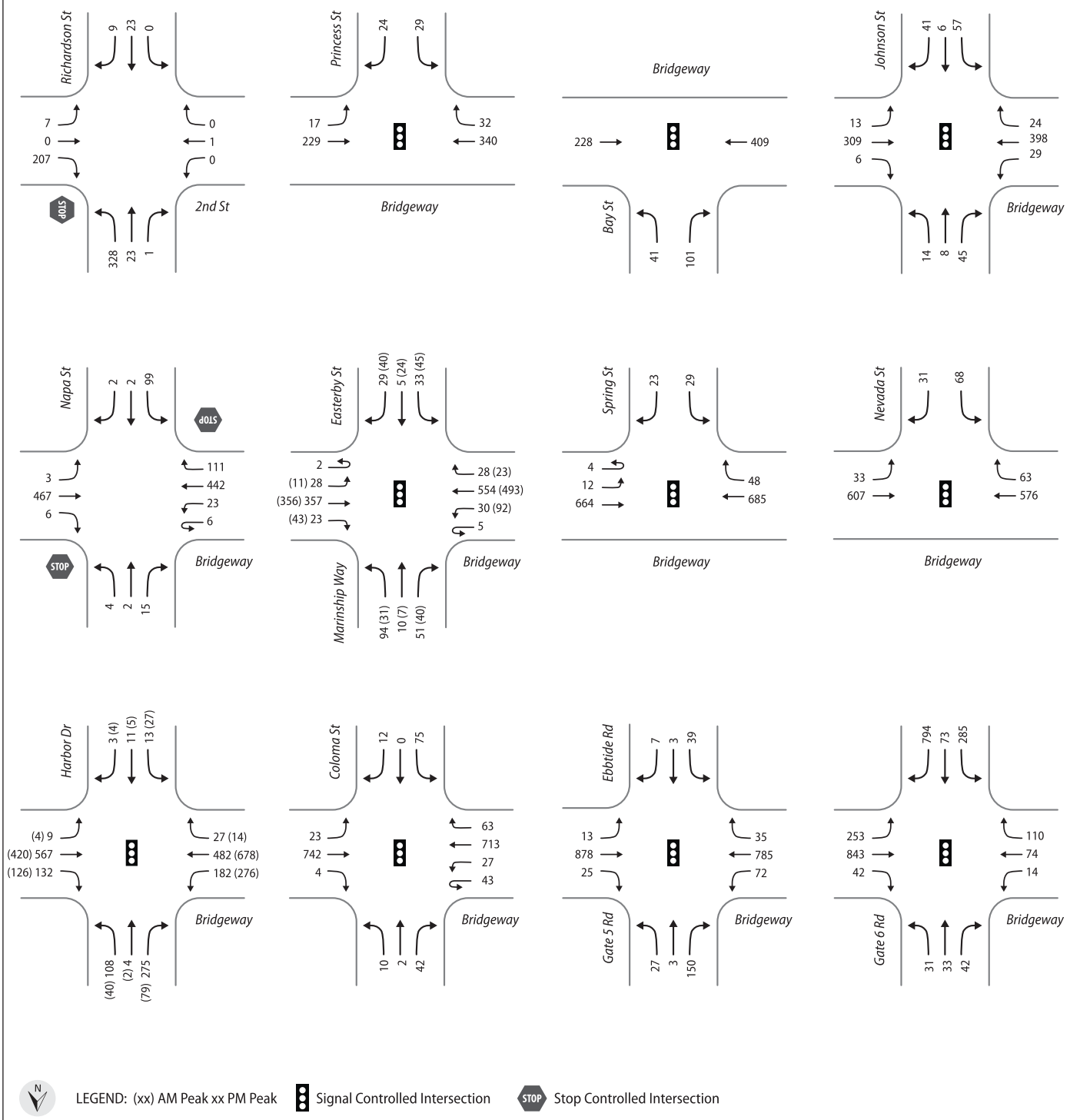

Source: Parisi Transportation Consulting, April 2020.

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Exhibit 3.14-8
Future Conditions Without General Plan Buildout - Vehicle Trips

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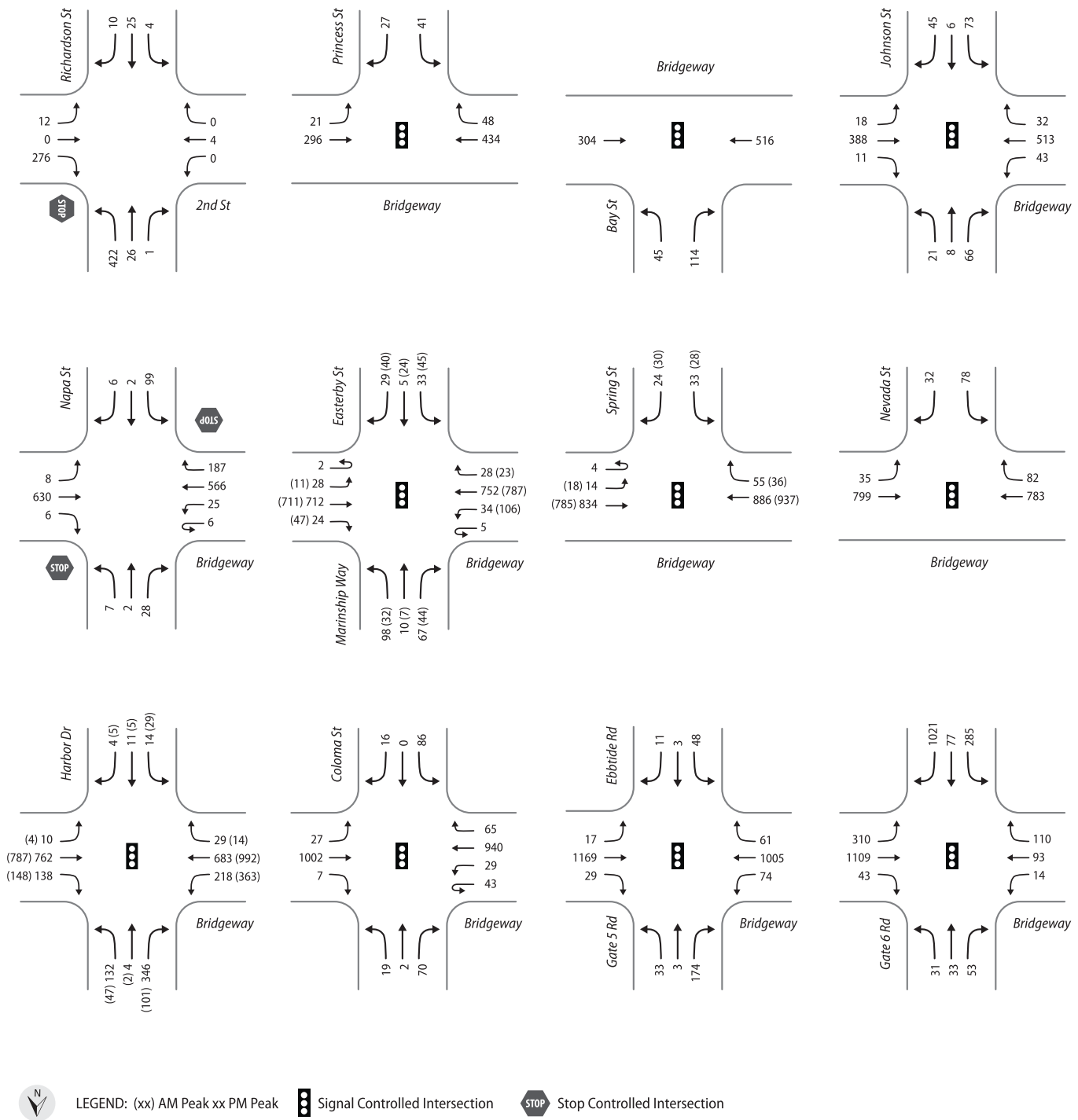

Source: Parisi Transportation Consulting, April 2020.

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Exhibit 3.14-9
Future Conditions With General Plan Buildout - Vehicle Trips

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3.15 UTILITIES AND SERVICE SYSTEMS

This section of the Draft EIR evaluates the potential effects on utilities related to implementation of the proposed 2040 General Plan by identifying anticipated demands and existing and planned service availability. For the purposes of this Draft EIR, utilities consist of water supply; wastewater; solid waste; and storm drain facilities. Information in this section is based on information provided by the following reference materials:

Water Supply

- Urban Water Management Plan (UWMP) 2015 Update, Marin Municipal Water District, June 2016;
- Water Resources Plan 2040, Marin Municipal Water District, March 2017; and
- Marin County Groundwater Elevation Monitoring Program, Marin Municipal Water District, December 2011.

Wastewater

- Sewer System Management Plan, Sausalito-Marin City Sanitary District, Adopted August 2013;
- Strategic Plan 2019-2024, Sausalito-Marin City Sanitary District West Valley Sanitation District, adopted May 2019; and
- San Francisco Bay Regional Water Quality Control Board, Sausalito-Marin City Sanitary District Wastewater Treatment Plant and collection system, Order No. R-2-2018-0025, National Pollutant Discharge Elimination System No. CA0038067.

Solid Waste

- California Department of Resources Recycling and Recovery (CalRecycle) website.

3.15.1 ENVIRONMENTAL SETTING

Water Supply

Water for the City of Sausalito is provided by MMWD, which serves the populous eastern corridor of Marin County from the Golden Gate Bridge northward up to, but not including, Novato, Muir Woods, Stinson Beach, Olema, Pt. Reyes Station, Nicasio or other West Marin communities, which are served by North Marin Water District. The MMWD's service area

covers approximately 147 square miles and serves a population of approximately 190,000 customers.[1,2]

Surface Water

The MMWD 2015 UWMP describes existing and future sources of water available to the MMWD. As indicated in its 2015 UWMP, the MMWD's water supply comes primarily from a network of seven local, rain-fed reservoirs, supplemented with water from the Sonoma County Water Agency (SCWA). In the 2015 UWMP, MMWD estimated that the "operational yield" of its water supplies totaled approximately 28,500 acre-feet per year (afy). Of this total, approximately 20,000 afy was provided by MMWD surface reservoirs, and 8,500 afy provided by SCWA. Operational yield is defined as the maximum annual demand that can be met by the MMWD's local water supply system during the hydrologic record, assuming 25 percent of supply capacity (beyond unusable storage) is reserved for emergency purposes.[3] The baseline operational yield of the MMWD's reservoir system is reported is 29,020 afy.[4]

According to the SCWA 2015 Urban Water Management Plan, almost all SCWA's water supply (98 percent) comes from surface reservoirs, with the remainder provided by groundwater. Since 1975, the MMWD has contracted with SCWA for a supplemental supply of water, primarily from Lake Sonoma via the Russian River. Russian River water is diverted by SCWA at a series of sub-surface radial collectors near Wohler Bridge in Sonoma County. The majority of the SCWA's water supply comes from a network of seven local, rain-fed reservoirs. The contract allows MMWD to take deliveries of up to 14,300 afy subject to availability.

Total reservoir storage operated by MMWD is 25.9 billion gallons (79,566 afy), but MMWD estimates that operational yield of the reservoirs is just under 30,000 afy with an assumed 20,000 afy from the MMWD reservoirs and 8,500 afy from SCWA. According to the MMWD's UWMP, no future potable water supply projects are considered necessary at this time, as conservation measures are projected to maintain the water demand at a level that can be supplied from existing water sources. Further, the MMWD Water Resources Plan 2040 was developed to identify and assess water resiliency; the plan recommended that MMWD evaluate expanding its existing water conservation programs, invest in watershed management, and explore groundwater partnering opportunities to improve water supply resiliency.

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1 Marin Municipal Water District Billing Areas. 2016. Website: http://www.marinwater.org/documentcenter/view/601. Accessed March 25, 2020.

2 RMC Water and Environment. 2016. Marin Municipal Water District Urban Water Management Plan: 2015 Update. June.

3 Marin Municipal Water District. 2017. Water Resources Plan 2040.

4 Ibid.

Groundwater

There are three groundwater basins identified in Department of Water Resources' Bulletin 118 that are at least partially within the MMWD's service area. These three basins include Ross Valley, San Rafael Valley, and part of the Novato Basin. All three basins are categorized by the California Statewide Groundwater Elevation Monitoring program as very low priority basins. Groundwater use within the MMWD's service area is limited to small, domestic use through private groundwater pumping wells. The MMWD has studied the potential for municipal groundwater use since the 1970s. Several studies since that time have determined that the potential for municipal groundwater use within the boundaries of the MMWD's service area is very limited due to limited production capabilities, water quality constraints, and potential water rights issues. As a result of these studies, groundwater is not currently or planned to be used as a municipal water supply source by the MMWD, though private groundwater wells are used in the MMWD's service area.[5]

Recycled Water

MMWD began the use of recycled water during the drought of 1976–77. In 1981, a direct filtration plant with a capacity to produce 1.0 million gallons per day (mgd) of recycled water was completed as a joint project with the Las Gallinas Valley Sanitary District. In 1989, the MMWD upgraded this facility to full conventional treatment and expanded its capacity to 2.0 mgd. The MMWD 2015 Urban Water Management Plan indicates that MMWD's recycled water system currently delivers about 650 afy through 343 service connections and has 1.7 million gallons of storage. Irrigation for parks, playgrounds, and landscaping uses 95 percent of the recycled water produced by MMWD.

There are five wastewater treatment plants (WWTPs) within the area that collectively treat roughly 17,000 afy. Of this amount, just over 2,000 afy is recycled for non-potable purposes such as landscape irrigation. Most recycled water production occurs at MMWD's facility co-located at the Las Gallinas Valley Sanitary District (LGVSD). The wastewater originates from within the LGVSD service area, which is also within MMWD's service area. The collected wastewater is treated to secondary level at LGVSD's WWTP and then receives further treatment at MMWD's Las Gallinas Valley Water Recycling Facility before being distributed to customers. As previously noted, most of the recycled water is used for irrigation of parks, playgrounds, and other landscapes.

In 2014, the LGVSD began supplying approximately 150 afy of tertiary-treated recycled water produced at the newly constructed LGVSD recycled water membrane plant to North Marin Water District. It is anticipated that MMWD will partner with LGVSD to expand recycled water production at the LGVSD facility to replace MMWD's aging recycled water treatment plant.

[5] RMC Water and Environment. 2016. Marin Municipal Water District Urban Water Management Plan: 2015 Update. June.

Water Distribution System

The MMWD's potable water distribution system includes approximately 886 miles of water mains, 94 pump stations, and 127 treated water storage tanks with a total storage capacity of 81.9 million gallons. MMWD treats water at its three treatment plants, the Bon Tempe Treatment Plant west of Ross, the San Geronimo Treatment Plant in Woodacre, and the Ignacio Water Quality and Pumping Station.

Water from SCWA flows through SCWA pipelines to Petaluma. From Petaluma, the water flows southward in MMWD's aqueduct for 8 miles to the northern end of MMWD's pipeline facilities in Novato. Water imported from SCWA is naturally filtered in the deep sand and gravel below the riverbed and requires no further clarification. This water enters MMWD's system at the Ignacio treatment facility, where the water is further treated, and water quality is monitored continually and adjusted as needed.

MMWD's raw and potable water pipelines range from ¾-inch pipes connecting customers' water meters to the MMWD's mains, to the 42-inch transmission mains that carry source water to the treatment plants. The pipes are made of various materials depending on when and where they were installed.

The water system within Sausalito comprises 10 reservoir tanks with a total storage capacity of just over 3 million gallons. The distribution system within Sausalito consists of over 32 miles of pipeline ranging in size from ¾-inch service connections to 16-inch water mains (Exhibit 3.15-1).[6] The pipes are made of various materials depending on when and where they were installed. There are also six pump stations that serve the area.

MMWD's recycled water system consists of nearly 25 miles of pipeline, 1.7 MG of storage, 4 pump stations, and serves about 520 afy of recycled water through 342 service connections. All components of the system are located along the recycled water transmission pipeline network between the Marin County Civic Center, the Terra Linda district of the City of San Rafael and the Marinwood Community Service District area in Marin County. No recycled water is currently produced at the Sausalito-Marin City Sanitary District's Treatment Plant at Ft. Baker and the production at the Sewerage Agency of Southern Marin Plant in Mill Valley is currently very small.

Water Treatment

To treat raw water before supplying it to customers, MMWD operates three water treatment plants, as previously noted: the Bon Tempe Treatment Plant, the San Geronimo Treatment Plant, and the Ignacio Treatment Facility. Together, these facilities have a combined design capacity of 71 mgd. Observed high flows have reached 58 mgd, but the average daily maximum flow is approximately 25 mgd. In 2015, the total production of the three plants averaged 20.4 mgd.

[6] GIS database file provided by MMWD.

Wastewater

In the City of Sausalito, wastewater is collected and conveyed to the Sausalito Marin City Sanitary District sewer interceptor and then by the Sausalito Marin City Sanitary District to its WWTP for treatment and disposition (Exhibit 3.15-2). Based on the city's most recent Sewer Rate Study Report,[7] the city's sanitary sewer system serves approximately 4,000 equivalent dwelling units (EDUs) and approximately 1,200 EDUs in the form of 200 non-residential customers. Wastewater is collected through approximately 28 miles of gravity sewer pipes that are owned and operated by the City of Sausalito.

The Sausalito Marin City Sanitary District operates and maintains a WWTP on East Road just south of Sausalito city limits within the Golden Gate National Recreation Area. The WWTP provides secondary treatment of wastewater, which is subsequently discharged into San Francisco Bay. It processes an average daily dry weather flow (ADWF) of 1.8 mgd of wastewater, and a maximum daily wet weather flow of 6.6 mgd. The WWTP has a maximum design capacity of 6.0 mgd, which is currently limited by fixed-film reactor treatment capacity. Wet weather conditions sometimes cause influent flow to exceed 6.0 mgd. Under these conditions, excess flow above 6.0 mgd is diverted from a primary clarifier directly to secondary clarifiers. The City of Sausalito contributes approximately 47 percent of the daily wastewater processed by the WWTP, which is approximately 0.85 mgd.[8,9]

Capital Improvements

The Sausalito Marin City Sanitary District is engaged in construction of more than $30 million in critically needed improvements to its sewer pipelines, pumps, manholes and treatment facilities. In 2017 the Sausalito Marin City Sanitary District began construction of a major upgrade project at its treatment plant to improve capacity and reliability of the WWTP and is expected to be completed by the spring of 2019.

The City of Sausalito has been in the process of rehabilitating its aging sanitary sewer infrastructure. The 2014 Sewer Rate Study identified 32 sewer capital improvement projects totaling approximately $8 million over 9 years. Since then, four projects have been completed, another four are under construction, and four have either been designed or are currently in the design process. The status of all the sewer capital improvement projects is listed below in Table 3.15-1.

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7 NBS. 2014. Sewer Rate Study Report.

8 Calculation: (47% x 1.8 mgd) = 0.85 mgd.

9 United States Environmental Protection Agency and San Francisco Bay Regional Water Quality Control Board. 2007. Sausalito – Marin City Sanitary District (NPDES No. CA 0038067) Wastewater Treatment Plant Inspection.

TABLE 3.15-1: CITY OF SAUSALITO SANITARY SEWER CAPITAL IMPROVEMENT PROJECTS

PROJECT	PROJECT COST[a]	COMPLETE	UNDER CONSTRUCTION	DESIGN PHASE	NOT YET DESIGNED
Gate 5 Road	$826,000		X		
Spinnaker Main and Anchor Pump Station	$1,114,000	X			
Prospect to Sausalito	$15,000	X			
Woodward to Toyon	$150,000	X			
Bee Street	$110,000			X	
Whiskey Springs Generator	$100,000	X			
Alexander Ave/Beach	$550,000			X	
Bridgeway Waterfront	$881,000				X
Coloma Street	$423,000			X	
Nevada Street	$194,000		X		
Caledonia at Turney	$459,000				X
Josephine	$238,000				X
Santa Rosa Avenue	$277,000		X		
Pine Street	$212,000				X
Main Street	$260,000		X	X	
Bulkley Avenue	$259,000				X
Bridgeway at Ebbtide	$119,000				X
Filbert Avenue	$152,000				X
West Street	$138,000				X
Bridgeway at Dunphy Park	$229,000				X
Crescent Avenue	$139,000				X
Cazneau Avenue	$207,000				X
Tomales Street	$120,000				X
Bridgeway at Princess	$127,000				X
Spring Street	$192,000				X
Caledonia at Litho	$183,000				X
Woodward Avenue	$89,000				X
Sausalito Boulevard	$185,000				X

PROJECT	PROJECT COST[a]	COMPLETE	UNDER CONSTRUCTION	DESIGN PHASE	NOT YET DESIGNED
Monte Mar Drive	$112,000				X
Kendell Court	$97,000				X
Liberty Ship Way	$39,000				X
Whiskey Springs Pump Station Project[b]	$500,000			X	
Future Projects[c]	$2,872,000				X
TOTAL	**$11,568,000**				

Notes:

a. Cost estimates listed are estimated construction cost in 2013 dollars and have not been adjusted for inflation or include other project delivery costs.

b. The current estimate for the city's share of the Whiskey Springs Project is $1.5 million with design less than 50% complete.

c. The cost of otherwise necessary projects in FY 20/21 and 21/22 was estimated at $2.872 million with another $1 million per year for the period beyond FY 23/24.

Source: City of Sausalito Public Works Department. 2014. City of Sausalito Sewer Rate Study Report. February 27.

Solid Waste

Solid waste includes all materials discarded, whether they are later recycled, composted, or disposed in a landfill. Bay Cities Refuse is the City of Sausalito's provider of garbage, recycling, and green waste collection services. Bay Cities Refuse provides three bins—one for garbage, one for recyclable materials, and one for "green waste" (yard waste, plant materials, food scraps, etc.). Collection days are based on geographical location.

Bay Cities Refuse transports waste to the Golden Bear Waste Recycling Center in Richmond. The Golden Bear Waste Recycling Center is a large volume waste transfer and processing facility that also contains a composting facility. Golden Bear accepts mixed municipal, agricultural, and construction/demolition solid waste, along with biosolids, asbestos, tires, ash, and wood waste. The facility has a maximum permitted throughput of 1,000 tons per day (7-day average) and a maximum permitted capacity of 1,400 tons per day, not to exceed 7,000 tons per week.[10]

From the Golden Bear Waste Recycling Center, the recycling is transferred to the West County Resource Recovery facility in Richmond. The recycling facility has a maximum permitted throughput of 1,200 tons per day and a maximum permitted capacity of 1,200 tons per day.[11] The food waste/green waste is taken to the West Contra Costa County

[10] CalRecycle. 2020. Golden Bear Waste Recycling Center. Website: https://www2.calrecycle.ca.gov/swfacilities/Directory/07-AA-0056. Accessed June 4, 2020.

[11] CalRecycle. 2020. West County Resource Recovery Facility. Website: https://www2.calrecycle.ca.gov/SWFacilities/Directory/07-AA-0034/Detail/. Accessed June 4, 2020.

Sanitary Landfill Organic Materials Processing facility in Richmond where it is processed and turned into compost on site. The composting facility has a maximum permitted throughput of 1,134 tons per day.[12] The remainder of the solid waste is transferred to the Keller Canyon Landfill in Pittsburg. The landfill has a permitted maximum tonnage of 3,500 tons per day and a maximum permitted capacity of 75,018,280 cubic yards. As of November 16, 2004, the Keller Canyon Landfill had a remaining capacity of 63,408,410 cubic yards. The estimated closure date for this facility is December 31, 2030.[13]

Another landfill in the region that has capacity is the Potrero Hills Landfill in Suisun City. The Potrero Hills Landfill has a permitted maximum tonnage of 4,330 tons per day and a maximum permitted capacity of 83,100,000 cubic yards. As of January 1, 2006, the Potrero Hills Landfill had a remaining capacity of 13,872,000 cubic yards. The estimated closure date for this facility is February 14, 2048.[14]

The Marin Household Hazardous Waste Facility, at 565 Jacoby Street in San Rafael, accepts a wide variety of hazardous materials such as electronic products, batteries, light bulbs, cleaning products, auto care products, and pressurized containers. Hazardous waste may also be taken to the Novato Hazardous Waste Facility at 500 Davidson Street in Novato. There is also a collection bin for batteries in the central hallway on the main floor of Sausalito City Hall. The city hosts occasional e-waste collection events in the City Hall parking lot and at other locations as appropriate.

Storm Drain Facilities

Because of its steep terrain and proximity to Richardson's and San Francisco Bays, the City of Sausalito does not depend on a large storm drain network for flood control. Rather, the city's storm drainage infrastructure consists of a collection of catch basins, inlets and outlets, vaults, and storm drainage lines, both publicly and privately owned (Exhibit 3.15-3).

The public facilities were largely constructed first with property taxes enabled by the Improvement Act of 1911 and the Municipal Improvement Act of 1913 (codified in the California Street & Highways Code (SHC) in sections 5000 *et seq.*, and 10000 *et seq.*), and the Improvement Bond Act of 1915 (SHC § 8500 *et seq.*); secondly when the then California Department of Transportation constructed Highway 101 and State Route 1 as part of the

[12] CalRecycle. 2020. West Contra Costa County Sanitary Landfill Organic Materials Processing. Website: https://www2.calrecycle.ca.gov/swfacilities/Directory/07-AA-0044/. Accessed June 4, 2020.

[13] CalRecycle. 2020. Keller Canyon Landfill. Website: https://www2.calrecycle.ca.gov/swfacilities/Directory/07-AA-0032. Accessed May 31, 2020.

[14] CalRecycle. 2020. Potrero Hills Landfill. Website: https://www2.calrecycle.ca.gov/swfacilities/Directory/48-AA-0075/. Accessed May 31, 2020.

construction of the Golden Gate Bridge;[15] and finally when Bechtel constructed the Marinship Corporation Yard beginning in March, 1942.[16]

Stormwater runoff coming down from the hillside is conveyed through overland flow, along curbs and gutters, culverts, and smaller individual storm drainpipe networks. All stormwater is discharged into Richardson's or San Francisco Bay from overland flow or through one of at least 30 bay outlets. Most of the city's storm drain infrastructure is beyond its expected useful life. Storm drain facilities are rehabilitated as part of street improvement projects as funding permits and necessity dictates. Locations where capacity issues or infrastructure failures occur are rehabilitated or replaced as necessary, but the funds available are not dedicated for storm drainage. As indicated above, the fees currently collected under Sausalito Municipal Code Chapter 11.18 are used almost completely to cover the cost of the MCSTOPPP. Each MCSTOPPP member agency implements a local stormwater pollution prevention program and funds the countywide MCSTOPPP, which provides for the coordination and consistency of approaches between the local stormwater programs.[17]

Telecommunications, Electricity, and Natural Gas Facilities

The electrical power distribution system within the City of Sausalito is owned and operated by PG&E. This electrical power grid consists of both overhead and underground electrical lines located predominantly in the public street rights-of-way and easements.

Provision of electricity is through PG&E with the option of purchasing electricity through MCE which is delivered by PG&E. MCE is a public, nonprofit electricity provider established in 2008 under State legislation permitting the formation of community choice aggregation agencies. As of 2017, MCE's service area includes all of Marin and Napa Counties, along with several cities in the Easy Bay region. MCE customers have the option of receiving 50 or 100 percent of renewable electricity from solar, wind, bioenergy, geothermal, and hydroelectric sources.

The natural gas distribution system within the City of Sausalito is also owned and operated by PG&E. It consists of a pipe network that lies predominantly beneath the traveled roadway in public street rights-of-way.

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[15] Marin Magazine. 2009. Website: http://www.marinmagazine.com/May-2009/History-of-a-Highway/. Accessed March 25, 2020.

[16] Advance Design Consultants. 2011. Evaluation of Historic Resources In Compliance With the National Historic Preservation Act of 1966 (as amended) 36 CFR Part 800 – Section 106 To Consider the Potential for Historic Resources to be Affected by the Development of a U.S. Department of Veterans Affairs Medical Research Facility in Sausalito, California, Inc.

[17] County of Marin. Website: https://www.marincounty.org/depts/pw/divisions/creeks-bay-and-flood/mcstoppp/about-mcstoppp. Accessed May 1, 2020.

Sausalito residents and businesses have a growing range of telecommunications services and options to choose from today. As in communities throughout California, the shift from traditional home phone service (landlines) to wireless telephone connections and other options has been pronounced in Sausalito in recent years. Landline service is provided by ATT, ECG, and Pioneer Telephone. In 2017, wireless phone service is the most commonly used phone service in Sausalito, largely because of its portability and convenience.[18] Another option is DSL service, which runs via copper lines and makes use of a modem in the home to allow customers to connect to both the internet and a telephone line at the same time. Today, more than 90 percent of Sausalito residents make use of multiple wired providers for telephone, internet, and cable services.

Additionally, there are 17 internet providers in Sausalito with nine of them specializing in services for business. Wired broadband services are not uniformly available throughout Sausalito however, and it is estimated that approximately six percent of households in the community have limited choice of providers.

3.15.2 REGULATORY SETTING

Federal

Clean Water Act

As described in Section 3.9, Hydrology and Water Quality, the Clean Water Act authorizes the USEPA to implement water quality regulations. The NPDES permit program under Section 402 of the CWA controls water pollution by regulating soil erosion and stormwater discharges into the waters of the United States. NPDES permitting authority is administered by State Water Board and its nine RWQCBs.

The San Francisco Bay RWQCB has established wastewater treatment requirements for the Sausalito Marin City Sanitary District, which operates the WWTP for Sausalito, Marin City, and a portion of the Tamalpais Community Services District. The WWTP is currently regulated under NPDES Permit No. CA0038607.

Safe Drinking Water Act

The Safe Drinking Water Act authorizes the Environmental Protection Agency to set national standards for drinking water, called the National Primary Drinking Water Regulations, to protect against both naturally occurring and man-made contaminants. These standards set enforceable maximum contaminant levels in drinking water and require all water providers in the United States to treat water to remove contaminants, except for private wells serving fewer than 25 people. In California, the State Department of

[18] Wirefly. Home Phone Service Providers in Sausalito. Website: https://www.wirefly.com/compare-home-phone-service/california/Sausalito. Accessed May 31, 2020.

Health Services conducts most enforcement activities. If a water system does not meet standards, it is the water supplier's responsibility to notify its customers.

Title 40 of the Code of Federal Regulations

Title 40 of the CFR, Part 258 (Resource Conservation and Recovery Act RCRA, Subtitle D), contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the Federal landfill criteria.

State

Water Supply

California Water Code

The California Water Code, a section of the CCR, is the governing law for all aspects of water management in California.

Urban Water Management Planning Act

The Urban Water Management Planning Act has as its objectives the management of urban water demands and the efficient use of urban water. Under its provisions, every urban water supplier is required to prepare and adopt an urban water management plan. An "urban water supplier" is a public or private water supplier that provides water for municipal purposes either directly or indirectly to more than 3,000 connections or supplying more than 3,000 acre-feet of water annually. The plan must identify and quantify the existing and planned sources of water available to the supplier, quantify the projected water use for a period of 20 years, and describe the supplier's water demand management measures. The urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The Department of Water Resources must receive a copy of an adopted urban water management plan.

Senate Bills 610 and 221, Water Supply Assessment and Verification

SB) 610 and SB 221 amended State law to ensure better coordination between local water supply and land use decisions and confirm that there is an adequate water supply for new development. Both statutes require that detailed information regarding water availability be provided to city or County decision-makers prior to approval of large development projects. SB 610 requires the preparation of a water supply assessment (WSA) for certain types of projects, as defined by Water Code Section 10912, which are subject to the CEQA. Projects required to prepare a WSA are defined as follows:

- Residential development of more than 500 dwelling units.
- Shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor area.
- Hotel or motel, or both, having more than 500 rooms.

- Industrial, manufacturing or processing plant, or industrial park planned to employ more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- Mixed-use project that includes one or more of the projects specified above.
- Project that would demand an amount of water equivalent to, or greater than, the amount of water required for 500 dwelling units.

SB 221 establishes consultation and analysis requirements related to water supply planning for residential subdivisions including more than 500 dwelling units. The water supplier must provide written verification that sufficient water is available for a project before construction begins. The document used to determine compliance with both SB 610 and SB 221 is the adopted UWMP.

Water Conservation Act of 2009

The Water Conservation Act of 2009 (SB X7-7) requires all water suppliers to increase water use efficiency. The legislation sets an overall goal of reducing per capita water by twenty percent by 2020 in each water district. Effective in 2016, urban retail water suppliers who do not meet the water conservation requirements established by this bill are not eligible for State water grants or loans.

MMWD's 2020 daily water use target is 124 gallons per capita per day. In 2015, MMWD had already met this target with daily water use at 110 gallons per capita per day and expected to continue meeting the target through 2020 by continuing to implement demand management measures and conservation activities.[19]

State Updated Model Landscape Ordinance

Under AB 1881, the updated Model Landscape Ordinance requires cities and counties to adopt landscape water conservation ordinances by January 31, 2010 or to adopt a different ordinance that is at least as effective in conserving water as the updated Model Ordinance. In 2009, the Office of Administrative Law approved the updated MWELO, which required a retail water supplier or a county to adopt the provisions of the MWELO by January 1, 2010, or to enact its own provisions equal to or more restrictive than the MWELO provisions. The City of Sausalito Municipal Code Chapter 8.52 requires compliance with the MMWD's water conservation ordinance. The MMWD Water Conservation Code Section 13.02.021 complies with the MWELO.

2015 Updated Model Water Efficient Landscape Ordinance

Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15) directed DWR to update the State's MWELO through expedited regulation. The California Water Commission approved the revised MWELO Ordinance on July 15, 2015. The executive order required

[19] RMC Water and Environment. 2016. Marin Municipal Water District Urban Water Management Plan: 2015 Update. June.

local agencies to adopt the updated MWELO or adopt a local ordinance with at least as effective water conserving measures by December 1, 2015. The updated MWELO includes revisions that further reduce landscape water use in residential and non-residential land uses.

California Building Codes

California's Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) were first established in 1978 to reduce California's energy consumption. Energy efficient buildings require less electricity, natural gas, and other fuels, the use of which creates GHG emissions. The Title 24 standards are updated on a three-year schedule and since 2008 the standards have been incrementally moving to the 2020 goal of the zero-net-energy use. On January 1, 2020 the 2019 standards went into effect, that have been designed so that the average new home built in California will now use zero-net-energy and that non-residential buildings will use about 30 percent less energy than the 2016 standards due mainly to lighting upgrades. The 2019 standards also encourage the use of battery storage and heat pump water heaters, require the more widespread use of LED lighting, as well as improve the building's thermal envelope through high performance attics, walls, and windows. The 2019 standards also require improvements to ventilation systems by requiring highly efficient air filters to trap hazardous air particulates as well as improvements to kitchen ventilation systems.[20]

CALGreen requires all new buildings in the State to be more energy efficient and environmentally responsible, took effect in January 2011. CALGreen is also updated every three years and the current version is the 2019 CALGreen that became effective on January 1, 2020. The CALGreen Code contains requirements for construction site selection; stormwater control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency.

The CALGreen Code provides standards for bicycle parking, carpool/vanpool/electric vehicle spaces, light and glare reduction, grading and paving, energy efficient appliances, renewable energy, graywater systems, water efficient plumbing fixtures, recycling and recycled materials, pollutant controls (including moisture control and indoor air quality), acoustical controls, stormwater management, building design, insulation, flooring, and framing, among others. Implementation of the CALGreen Code measures reduces energy

[20] California Energy Commission. 2018. Building Energy Efficiency Standards for Residential and Nonresidential Buildings for the 2019 Building Energy Efficiency Standards. December.

consumption and vehicle trips and encourages the use of alternative-fuel vehicles, which reduces pollutant emissions.

Some of the notable changes in the 2019 CALGreen Code over the prior 2016 CALGreen Code include the following: an alignment of building code engineering requirements with the national standards that include anchorage requirements for solar panels, provides design requirements for buildings in tsunami zones, increases the MERV for air filters from 8 to 13, increased electric vehicle charging requirements in parking areas, and sets minimum requirements for use of shade trees.

Wastewater

Title 22 of California Code of Regulations

Title 22 regulates the use of reclaimed wastewater. In most cases, only disinfected tertiary water may be used on food crops where recycled water would encounter the edible portion of a crop. Disinfected secondary treatment may be used for food crops where the edible portion is produced below ground and will not encounter secondary effluent. Lesser levels of treatment are required for other types of crops, such as orchards, vineyards, and fiber crops.

General Waste Discharge Requirement

On May 2, 2006, the State Water Board adopted a General Waste Discharge Requirement (Order No. 2006-0003) for all publicly owned sanitary sewer collection systems in California with more than one mile of sewer pipe. The order provides a consistent statewide approach to reducing sanitary sewer overflows by requiring public sewer system operators to take all feasible steps to control the volume of waste discharged into the system, to prevent sanitary sewer waste from entering the storm sewer system, and to develop a Sewer System Management Plan (SSMP). The General Waste Discharge Requirement also requires that storm sewer overflows be reported to the State Water Bard using an online reporting system. The State Water Board delegated authority to its nine RWQCBs to enforce these requirements.

Solid Waste

Assembly Bill 341

The purpose of AB 341 is to reduce GHG emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in California. In addition to Mandatory Commercial Recycling, AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Assembly Bill 939

AB 939 (PRC 41780) requires cities and counties to prepare integrated waste management plans (IWMPs) and to divert 50 percent of solid waste from landfills beginning in calendar year 2000 and each year thereafter. AB 939 also requires cities and counties to prepare

Source Reduction and Recycling Elements as part of the IWMP. These elements are designed to develop recycling services to achieve diversion goals, stimulate local recycling in manufacturing, and stimulate the purchase of recycled products.

Senate Bill 1016

SB 1016 builds on AB 939 compliance requirements by requiring that the 50 percent solid waste diversion be measured in terms of per-capita disposal expressed as pounds per person per day. The new per capita disposal and goal measurement system moves the emphasis from an estimated diversion measurement number to using an actual disposal measurement number as a factor. Every year CalRecycle will calculate each jurisdiction's per capita (per resident and per employee) disposal rates and will review jurisdiction compliance on a case-by-case basis. Jurisdictions will not be compared to other jurisdictions or the statewide average but compared to their own 50 percent per capita disposal target.

Senate Bill 1383

As described in Section 3.7, Greenhouse Gas Emissions, SB 1383 was signed in September 2016 to reduce emissions of short-lived climate pollutants. As it pertains to CalRecycle, SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.[21] SB 1383 further supports California's efforts to achieve the statewide 75 percent recycling goal by 2020 established in AB 341.

Regional

Marin Municipal Water District

MMWD is a special district that provides water services to much of Marin County. It is overseen by an elected Board of Directors. The MMWD has developed a District Code that sets rules for connection to its water services and charging for its services. Chapter 13.02 sets forth the MMWD's Water Conservation and Dry Year Program. The MMWD adopted the 2015 UWMP that evaluates water deliveries and uses, water supply sources, efficient water uses, and demand management measures. Additionally, in 2017, MMWD adopted Water Resources Plan 2040, which seeks to enhance the resiliency of MMWD's water supply in the face of events such as earthquakes and drought.

[21] California Department of Resources Recycling and Recovery. Short-Lived Climate Pollutants: Organic Waste Methane Emissions Reductions. Website: https://www.calrecycle.ca.gov/Climate/SLCP/. Accessed March 26, 2020.

Local

City of Sausalito Climate Action Plan

Adopted in 2015, the City of Sausalito CAP notes that the city is subject to MMWD's water conservation measures, which reduce electricity use and the need for additional wastewater processing, both of which GHG emissions. The CAP recommends several actions related to water use, including increased indoor and outdoor water efficiency, promotion of rainwater catchments and rainwater storage facilities, and improvements to plumbing fixtures, pipes, and irrigation systems in city buildings, facilities, and landscaping.

Sausalito General Plan

The proposed 2040 General Plan includes the following relevant policies and programs that assist in reducing or avoiding impacts to utilities and service systems:

Sustainability Element

Policy S-4.1: Adequacy of Facilities. Allow construction to proceed for only those projects that demonstrate the availability of adequate potable water, sewer, septic leach fields, and storm drainage.

Program S-4.1.2: Marin Municipal Water District. Require written documentation from MMWD for proof of service prior to project approval for those projects subject to MMWD review.

Program S-4.1.3: Sausalito-Marin City Sanitation District. Require written documentation from the Sausalito-Marin City Sanitation District that there is available and adequate sewer capacity prior to project approval for those projects subject to SMCSD review.

Program S-4.1.4: Well Water. Require written documentation from the City Engineer of proof of adequate domestic water supply (well water) if water service is not available from MMWD prior to project approval.

Program S-4.1.5: Marin County Environmental Health Department. Require written documentation from the Marin County Environmental Health Department that there is sufficient capacity for leach fields prior to project approval in areas dependent upon septic tanks.

Program S-4.1.6: Sausalito Storm Drain System. Implement a policy that new development shall not change the drainage characteristic across property lines.

Program S-4.1.7: Sewer Ordinance. Enforce the Sausalito Sewer Ordinance.

Program S-4.1.8: Sewer System. Continue to upgrade the City's sewer system in accordance with prioritization Sausalito's Capital Improvement and Strategic Plans.

Policy S-4.2: Solid Waste Disposal. Strive to reduce the amount of solid waste generated in Sausalito in accordance with State law and Zero Waste Marin goals.

Program S-4.2.1: County Solid Waste Management Plan. Coordinate local recycling efforts and publicity efforts with those of the County Solid Waste Management Plan.

Program S-4.2.2: Residential and Commercial Recycling. Continue to implement the existing residential recycling program and establish a commercial recycling program in coordination with the Chamber of Commerce and local businesses.

Program S-4.2.3: Hazardous and Solid Waste. Continue to participate in the Marin County Hazardous and Solid Waste Joint Powers Authority program.

Policy S-6.1: Zero Waste Marin. Continue to work with the Marin Hazardous and Solid Waste Joint Powers Authority towards Zero Waste by 2025.

Policy S-6.2: Waste Education. Implement education and social media programs to change Sausalito's waste-related behavior, emphasizing composting and recycling.

Environmental Quality Element

Policy EQ-4.7: Water Conservation. Promote and encourage water conservation measures to assure that an adequate and safe supply of high-quality water is available for residents.

Program EQ-4.7.2: Local Water Conservation Ordinance. Continue to implement the local water conservation ordinance in coordination with MMWD.

Program EQ-4.7.3: Future Water Supply Planning. Continue to implement programs from MMWD's Water Resources Plan 2040.

Program EQ-4.7.4: Rainwater Catchment. Implement rainwater catchment systems, including rain barrels, on City-owned land and promote their use on residential properties.

Program EQ-4.7.5: Conservation Outreach. Collaborate with MMWD to inform water customers on water conservation techniques, services, devices, and rebates (including greywater use) through online and in-person community outreach.

Sausalito Municipal Code

Chapter 18.16 (Water Wells) of the Municipal Code is intended to protect public health and groundwater quality by assuring that wells are constructed, repaired, or destroyed in an environmentally and biologically safe manner, and to establish standards regulating the use of private water supplies for human consumption in order to protect the health, safety, and welfare of the public.

Design and construction of domestic water systems shall be in accordance with the current "Rules and Regulations for Establishing Minimum Domestic Water Supply Requirements" adopted by resolution of the City Council and the provisions of Chapter 9.10 (Subdivision Regulations). No person shall develop any well within the city without first applying to and receiving a permit from the City Engineer.

The Marin County Community Development Agency, Environmental Health Services Division also regulates water wells, groundwater monitoring wells, heat exchange or

groundwater source heat pump wells, cathodic protection wells and soil borings within the City of Sausalito.

Chapter 18.12 (Sewers) regulates the city's sanitary sewer system. Section 18.12.060 requires that a permit be obtained from the City Engineer for the connection of any sewer service lateral to any sewer main. Every premises improved with a building where persons reside, congregate, or are employed shall be connected to the sewer main by the owner of the premises. No such premises shall utilize a septic tank, cesspool, or other individual sewage disposal system. The city may require such connection to be made by the property owner through the extension of a sewer main within a public utility easement or city street right-of-way to the point of the service lateral connection as determined by the City Engineer.

3.15.3 THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines Appendix G, the proposed 2040 General Plan would have a significant effect on water supplies, wastewater, solid waste, or stormwater conveyance if demand associated with projected growth would result in any of the following conditions:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the proposed 2040 General Plan and reasonably foreseeable future development during normal, dry, and multiple dry years;
- Result in a determination by the wastewater treatment provider which serves or may serve the proposed 2040 General Plan that it has adequate capacity to serve the proposed 2040 General Plan's projected demand in addition to the provider's existing commitments;
- 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; and
- Comply with federal, State, and local statutes and regulations related to solid waste.

3.15.4 ANALYSIS, IMPACTS, AND MITIGATION MEASURES

Impacts to utilities and service systems resulting from implementation of the proposed 2040 General Plan are discussed below. The following impact analysis is based on an assessment of existing and future conditions for the Sausalito Planning Area related to water supplies, wastewater treatment capacity, landfill capacity, and storm drain capacity. This analysis identifies potential impacts to water supply, wastewater, solid waste, and

storm drains based on development anticipated from buildout of the proposed 2040 General Plan.

Impact UTIL-1	**The proposed 2040 General Plan would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.**

Water

As described under UTIL-2, the projected 2040 water supplies are adequate to meet demand that would be generated by buildout of the proposed 2040 General Plan. In addition, most new development accommodated under the proposed 2040 General Plan is expected to be infill and would rely on the existing distribution network that has sufficient capacity to convey available water supplies. As such, implementation and buildout of the proposed 2040 General Plan would not result in the need to construct or expand water supply and treatment facilities that have not already been described and accounted for the in the MMWD 2015 UWMP and Water Resources Plan 2040. Any additional water conveyance and treatment infrastructure needed in the future, would be considered by the MMWD, and analyzed for potential environmental impacts in separate environmental documents, consistent with requirements of CEQA.

Therefore, buildout of the proposed 2040 General Plan would not result in insufficient water supplies from MMWD, and no new or expanded water treatment facilities would be needed under the proposed 2040 General Plan. Thus, impacts would be ***less than significant***.

Wastewater

As described under Impact UTIL-3, the Sausalito Marin City Sanitary District can accommodate wastewater collection and treatment generated by buildout of the proposed 2040 General Plan. Future development under buildout of the proposed 2040 General Plan would be located within the city and near existing wastewater infrastructure. As such, implementation and buildout of the proposed 2040 General Plan would not result in the need to construct or expand wastewater collection and treatment facilities that have not already been described and accounted for the in the Sausalito Marin City Sanitary District Sewer System Master Plan and Strategic Plan. Should additional wastewater collection and treatment infrastructure be needed after 2040 or as a result of some future new development elsewhere in the service area, those subsequent infrastructure projects would be considered and analyzed for potential environmental impacts consistent with the requirements of CEQA.

Therefore, buildout of the proposed 2040 General Plan would not result in insufficient wastewater collection and treatment, and no new or expanded wastewater treatment facilities would be needed as part of the proposed 2040 General Plan. Thus, impacts would be ***less than significant***.

Storm Drain Capacity

As described under Impact HYD-5, the city can accommodate additional stormwater runoff generated by buildout of the proposed 2040 General Plan. Future development would be located within the city and near existing stormwater infrastructure. As such, implementation and buildout of the proposed 2040 General Plan would not result in the need to construct or expand stormwater collection infrastructure that have not already been described and accounted for the in the CIP. Should additional stormwater drainage infrastructure be needed after 2040 or as a result of future new development elsewhere in the service area, those subsequent infrastructure projects would be considered and analyzed for potential environmental impacts consistent with the requirements of CEQA.

Therefore, buildout of the proposed 2040 General Plan would not result in insufficient stormwater drainage infrastructure capacity, and no new or expanded stormwater drainage facilities would be needed as part of the proposed 2040 General Plan. Thus, impacts would be ***less than significant***

Electric Power, Natural Gas, and Telecommunications

As described previously, the electrical power distribution system within the City of Sausalito is owned and operated by PG&E and home phone service and internet service is provided by ATT, ECG, and Pioneer Telephone. Future development under buildout of the proposed 2040 General Plan would be located within the city and near existing electric power, natural gas, and telecommunications infrastructure. This new growth would increase the city's population by approximately 542 residents and approximately 1,836 employees. Some of these new employees are expected to be residents of the Planning Area.

PG&E and telecommunications companies would be responsible for updating and maintaining their associated infrastructure. The associated increase in population and employment would not be expected to substantially increase demand for electric power, natural gas, and telecommunications. New development would connect to existing infrastructure located within the city. As such, implementation and buildout of the proposed 2040 General Plan would not result in the need to construct or expand electric power, natural gas, and telecommunications infrastructure. Should additional electric power, natural gas, and telecommunications infrastructure be needed after 2040 or as a result of some future new development elsewhere in the service area, those subsequent infrastructure projects would be considered and analyzed for potential environmental impacts consistent with the requirements of CEQA.

Therefore, buildout of the proposed 2040 General Plan would not result in insufficient electric power, natural gas, and telecommunications infrastructure capacity, and no new or expanded electric power, natural gas, and telecommunications facilities would be needed as part of the proposed 2040 General Plan. Thus, impacts would be ***less than significant***

Impact UTIL-2 Sufficient water supplies would be available to serve development facilitated by the proposed 2040 General Plan and reasonably foreseeable future development during normal, dry, and multiple dry years.

Development accommodated under the proposed 2040 General Plan could result in additional residents and businesses in the city. As described in Section 2, Project Description, the proposed 2040 General Plan is expected to accommodate approximately 304 new residential dwelling units, 587,960 square feet of new commercial space, and 146,124 square feet of new industrial space within the Planning Area. This new growth would increase the city's population by approximately 467 residents (6.3 percent) and approximately 1,762 employees (31 percent). Some of these new employees are expected to be residents of the Planning Area.

Development and growth in the city under the proposed 2040 General Plan would result in an increased demand for potable water. As previously stated, the City of Sausalito receives its water supply from the MMWD. The proposed 2040 General Plan would have a significant impact if water demand for development facilitated by the proposed 2040 General Plan could not be met by MMWD's existing entitlements and water supply resources.

Potable Water

As indicated in its 2015 UWMP, the MMWD's water supply comes primarily from a network of seven local, rain-fed reservoirs, supplemented with water from the SCWA. The 2015 UWMP estimated that reservoir storage operated by MMWD is 25.9 billion gallons (79,566 afy), and MMWD estimates that operational yield of the reservoirs is just under 30,000 afy. According to the MMWD's UWMP, no future potable water supply projects are considered necessary at this time, as conservation measures are projected to maintain the water demand at a level that can be supplied from existing water sources. The Water Resources Plan 2040 affirms this assessment but recommends that MMWD evaluate expanding its existing water conservation programs, invest in watershed management, and explore groundwater partnering opportunities to improve water supply resiliency.

Table 3.15-2 summarizes, by source, the total amount of projected supply from 2020 through 2040 in five-year increments. Also included is the total right or safe yield associated with each of the district's supply.

Recycled/Reclaimed Water

As described in the 2015 UWMP, MMWD began the use of recycled water during the drought of 1976–77. The 2015 Urban Water Management Plan indicates that MMWD's

recycled water system currently delivers about 650 afy through 343 service connections and has 1.7 million gallons of storage. Irrigation for parks, playgrounds, and landscaping uses 95 percent of the recycled water produced by MMWD. Table 3.15-3 below shows projected supply and demand for recycled water.

The MMWD studied the period from 2000 through 2015 and determined that the recycled system demand averaged approximately 695 afy. However, the actual recycled water supplied to the recycled system averaged 565 afy, or about 81 percent of the total demand. Recycled water deliveries in 2015 were 520 afy; which is assumed to remain constant in future years.

The MMWD's 2010 UWMP projected demand for recycled water in 2015 to be 649 acre-feet, and projected recycled water production in 2015 to be 534 acre-feet. However, actual recycled water use in 2015 was 520 acre-feet, which is 129 acre-feet less than the total demand projected in the 2010 UWMP, and only 13 afy less than the projected recycled water supply in the 2010 UWMP. MMWD accounts this difference to water efficiency training provided to local landscape maintenance firms, the district's conservation program, and reduced water use in response to the drought.[22] As such, MMWD would be able to meet recycled water demands within its service area through 2040.

Average, Single-Dry and Multiple-Dry Hydrologic Years

The district's drought planning considers aggregated water supplies from all sources during single-dry and multiple-dry years as defined below:

- Average Year: Defined as the year that most closely represents the average water supply available to the district.
- Single-Dry Year: Defined as the year that represents the lowest water supply available to the district.
- Multiple-Dry Year: Defined as the period that represents the lowest water supply available to the district for a consecutive 3-year period.

[22] RMC Water and Environment. 2016. Marin Municipal Water District Urban Water Management Plan: 2015 Update. June.

TABLE 3.15-2: WATER SUPPLIES – PROJECTED (AFY)

CATEGORY	YEAR									
	2020		2025		2030		2035		2040	
	REASONABLY AVAILABLE VOLUME	TOTAL RIGHT OR SAFE YIELD	REASONABLY AVAILABLE VOLUME	TOTAL RIGHT OR SAFE YIELD	REASONABLY AVAILABLE VOLUME	TOTAL RIGHT OR SAFE YIELD	REASONABLY AVAILABLE VOLUME	TOTAL RIGHT OR SAFE YIELD	REASONABLY AVAILABLE VOLUME	TOTAL RIGHT OR SAFE YIELD
PURCHASED/IMPORTED WATER (FROM SCWA)	8,460	14,300	9,920	14,300	10,000	14,300	10,000	14,300	10,000	14,300
SUPPLY FROM STORAGE	0	--	0	--	0	--	0	--	0	--
GROUNDWATER	0	--	0	--	0	--	0	--	0	--
SURFACE WATER	141,970	20,000	141,970	20,000	141,970	20,000	141,970	20,000	141,970	20,000
RECYCLED WATER	520	520	520	520	520	520	520	520	520	520
DESALINATED WATER	0	--	0	--	0	--	0	--	0	--
STORMWATER USE	0	--	0	--	0	--	0	--	0	--
TRANSFERS	0	--	0	--	0	--	0	--	0	--
EXCHANGES	0	--	0	--	0	--	0	--	0	--
OTHER (RAW WATER TO GOLF COURSES)	304	343	304	343	304	343	304	343	304	343
TOTAL WATER SUPPLY (MGY)	**151,254**	**35,163**	**152,714**	**35,163**	**152,794**	**35,163**	**152,794**	**35,163**	**152,794**	**35,163**

Notes: Recycled water right or safe yield columns reflect the maximum capacity for treatment of disinfected recycled water for unrestricted reuse.

afy = acre feet per year

Source: RMC Water and Environment. 2016. Marin Municipal Water District Urban Water Management Plan: 2015 Update. June. Table 6-11.

TABLE 3.15-3: CURRENT AND PROJECTED RECYCLED WATER DIRECT BENEFICIAL USES WITHIN SERVICE AREA (AFY)

BENEFICIAL USE TYPE	GENERAL DESCRIPTION OF 2015 USES	LEVEL OF TREATMENT	WATER USE BY YEAR					
			2015	2020	2025	2030	2035	2040
AGRICULTURAL IRRIGATION	--	--	0	0	0	0	0	0
LANDSCAPE IRRIGATION (EXC GOLF COURSES)	Parks, schools, medians, cemeteries, residential	Tertiary	307	307	307	307	307	307
GOLF COURSE IRRIGATION	McInnis Park Golf Center	Tertiary	61	61	61	61	61	61
COMMERCIAL USE	Building landscape, car wash	Tertiary	113	113	113	113	113	113
INDUSTRIAL USE	Cooling tower, other industrial	Tertiary	23	23	23	23	23	23
GEOTHERMAL AND OTHER ENERGY PRODUCTION	--		0	0	0	0	0	0
SEAWATER INTRUSION BARRIER	--		0	0	0	0	0	0
RECREATIONAL IMPOUNDMENT	--		0	0	0	0	0	0
WETLANDS OR WILDLIFE HABITAT	--		0	0	0	0	0	0
GROUNDWATER RECHARGE (IPR)	--		0	0	0	0	0	0
SURFACE WATER AUGMENTATION (IPR)	--		0	0	0	0	0	0
DIRECT POTABLE REUSE	--		0	0	0	0	0	0
OTHER	Toilet/urinal flushing in commercial and Residential settings		16	16	16	16	16	16
TOTAL			**520**	**520**	**520**	**520**	**520**	**520**

Note:
afy = acre feet per year
Source: RMC Water and Environment. 2016. Marin Municipal Water District Urban Water Management Plan: 2015 Update. June.

The average year was determined by taking the average supply available to the district over the period of record. The year 2004 was determined to have been most representative of the average supply available (141,970 afy). The year 1977 was determined to have had the lowest supply available to the district (11,296 afy) and is thus used as the basis for the single dry year type. The period from 1975 through 1977 had the lowest supply available for a consecutive 3-year period (143,646 afy total) and is thus used as the basis for the multiple dry year type. The dry years were compared to normal water years, shown as a percentage of normal water year supply.

Table 3.15-4, Table 3.15-5, and Table 3.15-6 show projected water supplies and demands under normal, single dry, and multiple dry water years, respectively. Dry year supplies in the following tables reflect the supplies that were available during the respective year type as noted.

TABLE 3.15-4: NORMAL YEAR SUPPLY AND DEMAND COMPARISON (AFY)

	YEAR				
	2020	2025	2030	2035	2040
SUPPLY TOTALS (FROM DWR TABLE 6-9)	151,254	152,714	152,794	152,794	152,794
DEMAND TOTALS (FROM DWR TABLE 4-3)	40,235	41,797	41,685	41,835	42,109
DIFFERENCE	111,019	110,917	111,109	110,959	110,685

Notes: (1) These demands reflect only passive conservation. The district intends to implement active conservation, with savings shown in Table 4-7. With active conservation, 2040 demand is projected to be lower than presented herein (projected 2040 demand with active conservation and recycled water is 40,417 afy, as shown in Appendix E). (2) Recycled water is included in the supply and demand presented.

Source: RMC Water and Environment. 2016. Marin Municipal Water District Urban Water Management Plan: 2015 Update. June.

TABLE 3.15-5: SINGLE DRY YEAR SUPPLY AND DEMAND COMPARISON (AFY)

	YEAR				
	2020	2025	2030	2035	2040
LOCAL SUPPLIES	55,142	55,142	55,142	55,142	55,142
SCWA SUPPLIES	5,300	5,300	5,300	5,300	5,300
SUPPLY TOTALS	60,442	60,442	60,442	60,442	60,442
DEMAND TOTALS	41,940	41,797	41,685	41,835	42,109
DIFFERENCE	18,502	18,645	18,757	18,607	18,333

Source: RMC Water and Environment. 2016. Marin Municipal Water District Urban Water Management Plan: 2015 Update. June.

TABLE 3.15-6: MULTIPLE DRY YEARS SUPPLY AND DEMAND COMPARISON (AFY)

		YEAR				
		2020	2025	2030	2035	2040
FIRST YEAR	SUPPLY TOTALS	123,407	123,407	123,407	123,407	123,407
	DEMAND TOTALS	41,940	41,797	41,685	41,835	42,109
	DIFFERENCE	81,467	81,610	81,722	81,572	81,298
SECOND YEAR	SUPPLY TOTALS	76,300	76,300	76,300	76,300	76,300
	DEMAND TOTALS	41,940	41,797	41,685	41,835	42,109
	DIFFERENCE	34,360	34,503	34,615	34,465	34,191
THIRD YEAR	SUPPLY TOTALS	60,442	60,442	60,442	60,442	60,442
	DEMAND TOTALS	41,940	41,797	41,685	41,835	42,109
	DIFFERENCE	18,502	18,645	18,757	18,607	18,333

Note: (1) Estimated supplies available reflect additional storage resulting from raising Kent Reservoir in 1982 and renegotiating SCWA agreements. (2) Demands reflect passive conservation only. The district intends to implement active conservation, with savings shown in Table 4-7. With active conservation, 2040 starting demand is projected to be lower than presented herein (projected 2040 demand with active conservation and recycled water is 40,417 afy, as shown in Appendix E). (3) Any errors are attributed to rounding. (4) Recycled water is included in the supply and demand presented.

Source: RMC Water and Environment. 2016. Marin Municipal Water District Urban Water Management Plan: 2015 Update. June.

Based on this comparison, the district will have sufficient supplies to meet the demands during normal and dry water years. This is attributed to the measures already implemented by the district to increase storage and SCWA supply, as well as the district's conservation measures and the district's Dry Year Water Use Reduction Program. As part of the 2040 Water Resources Plan, the district identified and evaluated additional supply options, as well as provided a recommended supply portfolio.

If the MMWD should experience a shortage of supply during a drought, it will activate its current Water Shortage Contingency Plan to reduce water consumption. The district developed its current rationing plan (Title 13 sections 13.020.30-13.02.040) in 1999, with updates in 2011, 2014, and 2015. With the ongoing implementation of conservation programs and the effects of demand hardening, a voluntary rationing program at the 10 percent level was established to preserve water in the early stages of a potential dry period. Mandatory rationing levels set at 25 percent and 50 percent were also established to conserve water in extended dry periods. Table 3.15-7 shows the three stages of water shortage currently used by the district, including a 10 percent voluntary rationing, a 25 percent mandatory rationing, and a 50 percent mandatory rationing (water shortage emergency). The water rationing stages are linked to the amount of water in the district's reservoirs.

TABLE 3.15-7: STAGES OF WATER SHORTAGE CONTINGENCY PLAN

STAGE	PERCENT SUPPLY REDUCTION	WATER SUPPLY CONDITION
ALERT STAGE (VOLUNTARY RATIONING)	10 percent	Total reservoir storage is less than 50,000 acre-feet on April 1
MANDATORY RATIONING	25 percent	Total reservoir storage is less than 40,000 acre-feet on April 1
WATER SHORTAGE EMERGENCY	50 percent	Total reservoir storage on December 1 is projected to be in the vicinity of, or less than, 30,000 acre-feet

Source: RMC Water and Environment. 2016. Marin Municipal Water District Urban Water Management Plan: 2015 Update. June.

Buildout of the proposed 2040 General Plan is anticipated to result in an increase of water demand within the Planning Area up to 1,694 afy[23] for new residential uses and up to 25.7 afy[24] for new commercial and industrial uses by 2040. The total new increase of approximately 1,720 afy[25] water demand represents 4 percent of total projected demand within the MMWD service area by 2040. Since the MMWD 2015 UWMP's projected demand is based on general growth in its service area, the projected water demand from buildout of the proposed 2040 General Plan is accounted for in the overall demand forecast.

The proposed 2040 General Plan includes a range of policies and programs to ensure an adequate water supply for development and to minimize the potential adverse effects of increased water use. Policy S-4-1 only allows construction to proceed for only those projects that demonstrate the availability of adequate potable water, sewer, septic leach fields, and storm drainage. Program S-4.1.2 requires written documentation from MMWD for proof of service prior to project approval for those projects subject to MMWD review. Program S-4.1.4 requires written documentation from the City Engineer of proof of adequate domestic water supply (well water) if water service is not available from MMWD prior to project approval. Program S-4.1.5 requires written documentation from the Marin County Environmental Health Department that there is sufficient capacity for leach fields prior to project approval in areas dependent upon septic tanks. Policy EQ-4.7 requires the city to promote and encourage water conservation measures to assure that an adequate and safe supply of high-quality water is available for residents. Program EQ-4.7.2 requires the city to continue to implement the local water conservation ordinance in coordination

[23] Assumes 0.33 afy per dwelling unit (MMWD. 2016. 2015 UWMP, page 4-13); (5,134 x 0.33).

[24] Assumes 13 gallons per employee per day (1,836 x 13 x 365). EPA Energy Star Portfolio Manager Water Use Tracking. 2012. Website: https://www.energystar.gov/sites/default/files/buildings/tools/DataTrends_Water_20121002.pdf. Accessed March 18, 2020.

[25] Most conservative estimate as some of the new residents may also be new employees in the Planning Area.

with MMWD. Lastly, Program EQ-4.7.3 requires the city to continue to implement programs from MMWD's Water Resources Plan 2040.

Conclusion

While development facilitated by the proposed 2040 General Plan would result in an increased demand for both potable and recycled water, the MMWS 2015 UWMP determined that the water supply will be sufficient to accommodate future demand in the MMWD service area through 2040, under normal circumstances. If the MMWD should experience a shortage of supply during a drought, it will activate its current Water Shortage Contingency Plan to reduce water consumption.

In addition, with SB X7-7 and the State and county water conservation ordinances in place, each jurisdiction within the MMWD service area is required to conserve its water use through establishing water efficiency measures. The City of Sausalito will continue to coordinate with regional water districts regarding water conservation efforts, including compliance with drought plans. This coordination and compliance would serve to reduce water use and demand overall and especially during drought years.

If larger development projects occur within the Planning Area, such development would be subject to SB 610 and SB 221, which require preparation of a WSA to confirm whether current and projected water supplies could accommodate the development as proposed.

In conclusion, compliance with the policies and programs in the proposed 2040 General Plan, compliance with SB 610 and SB 221, and compliance with existing water conservation regulations and drought plans, would reduce impacts related to water supply to ***less than significant***.

Impact UTIL-3 The wastewater treatment provider would have adequate capacity to serve the proposed 2040 General Plan's projected demand in addition to the provider's existing commitments.

Development accommodated under the proposed 2040 General Plan would increase the city's population by approximately 467 residents and approximately 1,762 employees, which would result in an increased demand for wastewater collection and treatment.

Table 3.15-8 summarizes the net increases in effluent generation as a result of proposed 2040 General Plan buildout. As discussed previously, the city's estimated 7,416 residents conveyed an ADWF of approximately 0.85 mgd to Sausalito Marin City Sanitary District.[26]

[26] United States Environmental Protection Agency and San Francisco Bay Regional Water Quality Control Board. 2007. Sausalito - Marin City Sanitary District (NPDES No. CA 0038067) Wastewater Treatment Plant Inspection.

Assuming a daily average generation factor of 114[27] gallons of wastewater per day per person, the increased residents and employees would lead to an increase of 0.25 MGD.[28]

TABLE 3.15-8: WASTEWATER GENERATION ESTIMATE

EXISTING POPULATION	EXISTING EFFLUENT GENERATION	PER CAPITA EFFLUENT GENERATION RATE	NET NEW SERVICE POPULATION	NET NEW EFFLUENT GENERATION
7,416	0.85 MGD	114 gallons / day	2,229	0.25 MGD

Note:

Service population represents new residents and employees.

Source: United States Environmental Protection Agency and San Francisco Bay Regional Water Quality Control Board. 2007. Sausalito - Marin City Sanitary District (NPDES No. CA 0038067) Wastewater Treatment Plant Inspection.

As previously described, wastewater collection and disposal services for the City of Sausalito are provided by the Sausalito Marin City Sanitary District The wastewater is conveyed to the Sausalito Marin City Sanitary District conveyance interceptor, where it is delivered to the WWTP for treatment and discharge through a deep-water outfall to the San Francisco Bay. The WWTP processes an existing ADWF of 1.8 mgd of wastewater and has a maximum permitted design capacity of 6.0 mgd.

The San Francisco Bay RWQCB established wastewater treatment requirements for the Sausalito Marin City Sanitary District WWTP in an NPDES Permit (Order No. R2-2018-0025), adopted June 13, 2018 and became effective August 1, 2018. The Order sets out a framework for compliance and enforcement applicable to operation of the WWTP and its effluent, as well as those contributing influent to the Sausalito Marin City Sanitary District WWTP. This NPDES Order currently allows peak wet weather discharges of up to 6 mgd.

The Sausalito Marin City Sanitary District SSMP included a capacity assessment to determine the adequacy of the collection system to handle current and future wastewater flows. The Plan also included a system evaluation, based on results of two sewer system capacity studies, as well as an extensive wet weather flow monitoring program as required under the administrative compliance order by the U.S. EPA in 2008, and a Capacity Assessment and Capacity Assurance Plan as part of the third submittal of its Sewer Spill Reduction Action Plan, required by the EPA order.

The hydraulic analysis evaluated the Sausalito Marin City Sanitary District capacity based on peak wet weather flow conditions, which demonstrate the maximum potential wastewater flows that could impact the system. The hydraulic analysis identified several deficiencies including inadequate gravity interceptor systems upstream of the Locust Street Pump

[27] Calculation as follows: (0.85 mgd/7,416 residents) x 1,000,000 gallons = 114 gallons per day per resident

[28] Calculated as follows: (114 gpd x (467 residents + 1,762 employees)) = 254,106 gallons per day or 0.25 mgd.

Station and capacity limitations leading to potential overflows. As stated in the SSMP, all of the deficiencies will be addressed with CIP projects as well as planned improvements to the pump stations and upgrades to the WWTP.[29] In addition, both Sausalito and Tamalpais Community Services District are also undertaking sewer rehabilitation work, which will contribute to reductions in deficiencies in the Sausalito Marin City Sanitary District system. Furthermore, the Sausalito Marin City Sanitary District continues to update its sewer system rate plan to fund capacity enhancements.[30]

According to the Final Sanitary Sewer Strategic Plan 2019-2024, the Treatment and Wet Weather Flow Upgrade Project (Upgrade Project) includes needed upgrades and rehabilitation of the Sausalito Marin City Sanitary District's infrastructure addressing new discharge regulations, mitigates peak wet weather overflows, and improves treatment plant performance and reliability. Upon completion, the Upgrade Project would increase the plant's secondary treatment capacity from 6.5 mgd to 9.0 and increase tertiary treatment capacity from 1.0 mgd to 6.0 mgd.[31]

The proposed 2040 General Plan includes policies and programs to support and enhance efforts to reduce wastewater generation flows in the Planning Area. For example, Policy S-4.1 would allow construction to proceed for only those projects that demonstrate the availability of adequate potable water, sewer, septic leach fields, and storm drainage. Program S-4.1.3 requires written documentation from the Sausalito-Marin City Sanitation District that there is available and adequate sewer capacity prior to project approval. Program S-4.1.8 requires the city to continue to upgrade the city's sewer system in accordance with prioritization Sausalito's Capital Improvement and Strategic Plans.

The Sausalito Municipal Code also contains rules and regulations related to wastewater. Chapter 18.12 establishes standards for connecting to the public sanitary sewer system. Section 18.12.060 includes regulations regarding the process for connecting to the public sanitary sewer system.

Conclusion

While development facilitated by the proposed 2040 General Plan would result in an incremental increase in the demand for wastewater collection and treatment, the Sausalito Marin City Sanitary District WWTP has sufficient capacity to support new infill development within the Planning Area. Furthermore, the CIP contains projects and improvements to the Sausalito Marin City Sanitary District system that would ensure sufficient capacity for future development. In addition, future projects would be required to comply with requirements of the proposed 2040 General Plan and the Sausalito Municipal Code to reduce wastewater generation flows. Lastly, the city will continue to coordinate with the Sausalito Marin City

[29] RMC Water and Environment. 2013. SSMP 2013, page 9-3.
[30] RMC Water and Environment. 2013. SSMP 2013, page 9-3.
[31] Sausalito Marin City School District. 2019. Sausalito-Marin City Sanitary District Strategic Plan 2019-2024, page 9.

Sanitary District to ensure that adequate wastewater collection and treatment facilities are provided to serve development in the city. Therefore, impacts related to wastewater collection and treatment would be ***less than significant***.

Impact UTIL-4 **Development facilitated by the proposed 2040 General Plan would not 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.**

As described in Section 2, Project Description, the proposed 2040 General Plan is expected to accommodate approximately 304 new residential dwelling units, 587,960 square feet of new commercial space, and 146,124 square feet of new industrial space within the Planning Area. This new growth would increase the city's population by approximately 467 residents and approximately 1,762 employees. Some of these new employees are expected to be residents of the Planning Area. As such, development and growth in the city under the proposed 2040 General Plan would result in an increased generation of solid waste.

As detailed in the Regulatory Setting section, under the Marin County IWMP, each jurisdiction in the County is required to divert 50 percent of its solid waste from landfills. The City of Sausalito is a member of the Marin County Hazardous and Solid Waste Joint Powers Authority (Zero Waste Marin), which reports the number of solid waste programs and annual per capita disposal rates to CalRecycle. In 2018, the disposal rate was 5.2 pounds/person/day for residents and 11.8 pounds/person/day per employee.[32] The County has been exceeding the 50 percent diversion goal for many years and in 2017 had a CalRecycle equivalent diversion rate of 69%. However, this was down from 75% from 2011-2014 and did not meet the County 80% goal for 2012.[33]

Table 3.15-9 summarizes the additional solid waste that could be generated from development facilitated by the proposed 2040 General Plan.

[32] California Department of Resources Recycling and Recovery. 2018. Website: https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionDetail?year=2018&jurisdictionID=110. Accessed March 26, 2020.

[33] Marin County Hazardous and Solid Waste Joint Powers Authority. 2018. Financial Statements and Auditors' Report.

TABLE 3.15-9: SOLID WASTE GENERATION ESTIMATE

CATEGORY	WASTE GENERATION RATE	NET NEW SERVICE POPULATION	WASTE GENERATION INCREASE	
			DAILY	ANNUALLY
Resident	5.2 pounds / day	467 residents	2,428 pounds	443 tons
Employee	11.8 pounds / day	1,762 employees	20,792 pounds	3,794 tons
–	–	–	23,220 pounds (11.61 tons)	**4,237 tons (3,026 cubic yards)**

Notes:

1 ton = 2,000 pounds
1 cubic yard = 1.4 tons

Source: FCS, 2020.

Assuming disposal rates established by CalRecycle in 2018 remain constant through 2040, new growth under the proposed 2040 General Plan would result in an increase of approximately 2,428 pounds/person/day for residents, and approximately 20,792 pounds/person/day for employees. This would result in approximately 23,220 additional pounds (11.61 tons) per day of additional solid waste or 4,237 additional tons of solid waste per year.

As previously stated, the City of Sausalito is served by Bay Cities Refuse, which transports the city's solid waste to the Golden Bear Waste Recycling Center located in Richmond. As of January 1, 2014, the facility had a permitted capacity to accept 1,000 tons of material daily and up to 7,000 tons per week. The city's additional solid waste of 11.61 tons per day from the proposed 2040 General Plan would not exceed the existing daily capacity of the Golden Bear Waste Recycling Center. The city's annual solid waste generation under the proposed 2040 General Plan is well within the permitted capacity of the Golden Bear Waste Recycling Center.

The recyclable materials generated by the proposed 2040 General Plan would be transferred to the West County Resource Recovery facility in Richmond, which has a maximum permitted throughput of 1,200 tons per day and a maximum permitted capacity of 1,200 tons per day.[34] The food waste/green waste would be taken to the West Contra Costa County Sanitary Landfill Organic Materials Processing facility in Richmond, which has a maximum permitted throughput of 1,134 tons per day.[35] Both the West County Resource Recovery facility and the West Contra Costa County Sanitary Landfill Organic Materials

[34] CalRecycle. 2020. West County Resource Recovery Facility. Website: https://www2.calrecycle.ca.gov/SWFacilities/Directory/07-AA-0034/Detail/. Accessed June 4, 2020.

[35] CalRecycle. 2020. West Contra Costa County Sanitary Landfill Organic Materials Processing. Website: https://www2.calrecycle.ca.gov/swfacilities/Directory/07-AA-0044/. Accessed June 4, 2020.

Processing facility have existing capacity to serve the additional recycling and green waste generated by the proposed 2040 General Plan.

The remainder of the solid waste would be transferred to the Keller Canyon Landfill in Pittsburg. Another landfill in the region that has capacity is the Potrero Hills Landfill in Suisun City. As shown in Table 3.15-10, these two landfills combined have approximately 77.2 million cubic yards of capacity remaining. Accordingly, adequate landfill capacity exists to serve the proposed 2040 General Plan.

TABLE 3.15-10: LANDFILL SUMMARY

NAME	LOCATION	PERMITTED DAILY THROUGHPUT	REMAINING CAPACITY	ESTIMATED CLOSURE DATE
Potrero Hills Landfill	Suisun City	4,300 tons / day	13.8 million cubic yards	2/14/2048
Keller Canyon Landfill	Pittsburg	3,500 tons / day	63.4 million cubic yards	12/31/2030

Source: California Department of Resources Recycling and Recovery, 2020.

While there is adequate permitted landfill capacity to accommodate future growth, the proposed 2040 General Plan includes programs and policies to reduce impacts on solid waste services. Policy S-4.2 requires the city to reduce the amount of solid waste generated in Sausalito in accordance with State law and Zero Waste Marin goals. Program S-4.2.1 requires the city to coordinate local recycling efforts and publicity efforts with those of the County Solid Waste Management Plan. Program S-4.2.2 requires the city to continue to implement the existing residential recycling program and establish a commercial recycling program in coordination with the Chamber of Commerce and local businesses. Policy S-6.1 requires the city to work with the Zero Waste towards Zero Waste by 2025. Lastly, Policy S-6.2 requires the city to implement education and social media programs to change Sausalito's waste-related behavior, emphasizing composting and recycling.

Zero Waste Marin has developed programs for residential and businesses that are designed to meet the zero waste goal. For example, residential programs include a recycling guide, online suggestions for recycling various wastes, and required composting for multifamily complexes generating four cubic yards of trash per week. Business programs include 65 percent diversion of construction and demolition waste, and compliance with State recycling and composting statutes.

The Sausalito Municipal Code contains rules and regulations related to solid waste. Chapters 12.24, 11.20, and 11.30 set city policies on collection and removal of solid waste and prohibits the use of single use plastic bags and packaging materials. The city would be required to continue to comply with all federal, State, and local statutes and regulations related to solid waste through buildout of the proposed 2040 General Plan.

While development facilitated by the proposed 2040 General Plan would result in increased generation of solid waste in the Planning Area, future projects would be required to comply with requirements of the proposed 2040 General Plan and Sausalito Municipal Code to divert solid waste from the local landfills. In addition, the city will be required to comply with existing and new federal, State, and local statutes and regulations related to solid waste. Therefore, impacts related to solid waste would be ***less than significant***.

Impact UTIL-5 Implementation of the proposed 2040 General Plan would comply with federal, State, and local statutes and regulations related to solid waste.

As described in Section 2, Project Description, the proposed 2040 General Plan is expected to accommodate approximately 304 new residential dwelling units, 587,960 square feet of new commercial space, and 146,124 square feet of new industrial space within the Planning Area. This new growth would increase the city's population by approximately 467 residents and approximately 1,762 employees. Some of these new employees are expected to be residents of the Planning Area. As such, development and growth in the city under the proposed 2040 General Plan would result in an increased generation of solid waste.

As described in Impact UTIL-4, the City of Sausalito would not result in a significant increase in solid waste generation such that the Keller Canyon Landfill and other landfills in the region would not have adequate capacity to serve future development. The proposed 2040 General Plan contains policies to ensure compliance with the goals of waste reduction and implement recycling programs. In addition, the Sausalito Municipal Code contains measures that aim to reduce solid waste generation, such as prohibiting single-use plastic bags and packaging materials. Furthermore, Zero Waste Marin has developed programs for residential and businesses that are designed to meet the zero waste goal consistent with State regulations.

While development facilitated by the proposed 2040 General Plan would result in an increased generation of solid waste in the Planning Area, future projects would be required to comply with requirements of the 2040 General Plan and Sausalito Municipal Code to divert solid waste from the local landfills. In addition, the city will be required to comply with existing and new federal, State, and local statutes and regulations related to solid waste. Therefore, impacts related to solid waste regulations would be ***less than significant***.

Impact UTIL-6 Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to water supply, wastewater, solid waste, and storm drain facilities.

This analysis evaluates whether the impacts of the proposed 2040 General Plan, together with the impacts of cumulative development, would result in a cumulatively significant impact with respect to water supply, wastewater, solid waste, or storm drain facilities. This analysis then considers whether incremental contribution of impacts associated with the

implementation of the proposed 2040 General Plan would be significant. Both conditions must apply for a project's cumulative effects to rise to the level of significance.

Water Supply

The geographic context for the analysis of cumulative impacts related to water supply includes the MMWD service area. While development facilitated by the proposed 2040 General Plan would contribute to an increased cumulative demand for water supply within the MMWD service area, the increased demand would not exceed the long-term supply under normal circumstances, as discussed under Impact UTIL-2. MMWD anticipates that sufficient water supplies are also available to meet demands during a single-dry year and multiple dry-year through 2040.

As discussed under Impact UTIL-2, if the MMWD should experience a shortage of supply during a drought, it will activate its Water Shortage Contingency Plan to reduce water consumption. These measures would be implemented in conjunction with other State, County, and local water conservation requirements and water efficiency measures.

As previously discussed, development facilitated by the proposed 2040 General Plan would be required to conform with federal, State, and local policies that would reduce water supply impacts to less-than-significant levels. When applicable, any additional new development within the Sausalito Planning Area would be subject, on a project-by-project basis, to independent CEQA review as well as policies in the proposed 2040 General Plan, the Sausalito Municipal Code, and SB 610 and SB 221, which require WSAs for large development projects prior to approval. All cumulative projects within the MMWD service area would be subject to similar permit requirements and would be required to comply with city/County ordinances and proposed 2040 General Plan policies, as well as other regulations that address water supply.

Overall, cumulative water demands would neither exceed planned levels of supply nor require building new water treatment facilities or expanding existing facilities beyond what is currently planned. For these reasons, impacts of the proposed 2040 General Plan on water supply are not cumulatively considerable and the cumulative impact would be ***less than significant***.

Wastewater

The geographic context for the analysis of cumulative impacts related to wastewater conveyance and treatment includes the Sausalito Marin City Sanitary District. While development facilitated by the proposed 2040 General Plan would result in an increased demand for wastewater collection and treatment, the Sausalito Marin City Sanitary District can accommodate wastewater collection and treatment generated at buildout (see Impact UTIL-3). In addition, future projects within the Sausalito Planning Area would be required to comply with requirements of the proposed 2040 General Plan and Sausalito Municipal Code that aim to reduce wastewater generation flows.

All cumulative projects would be required to comply with city/County ordinances and proposed 2040 General Plan policies, as well as other regulations related to wastewater collection and treatment. As described under Impact UTIL-3, the Sausalito Marin City Sanitary District WWTP would have sufficient wastewater conveyance and treatment capacity. The WWTP is currently allowed peak wet weather discharges of up to six mgd. Planned CIP programs as described in the SSMP would ensure the Sausalito Marin City Sanitary District would contain sufficient capacity to convey and treat wastewater within its service area.

For the reasons described above, impacts of the proposed 2040 General Plan related to wastewater conveyance and treatment are not cumulatively considerable and the cumulative impact would be ***less than significant***.

Solid Waste

The geographic context for the analysis of cumulative impacts related to solid waste includes the jurisdictions that are served by the Keller Canyon Landfill. While development and growth in the city under the proposed 2040 General Plan would result in an increased generation of solid waste, the Keller Canyon Landfill and other regional landfills have enough capacity to serve the city through the proposed 2040 General Plan horizon (see Impact UTIL-4). In addition, development facilitated by the proposed 2040 General Plan would be required to comply with policies and programs of the proposed 2040 General Plan and the regulations of the Sausalito Municipal Code that aim to divert solid waste from the local landfill. The city will also be required to comply with existing and new federal, State, and local statutes and regulations related to solid waste (See UTIL-5).

Cumulative development within other jurisdictions would contribute to an incremental increase in solid waste delivered to the Keller Canyon Landfill and other landfills in the region. Other future projects within the cumulative geographic context, would be required to comply with federal, State, and local laws and policies to address potential impacts related to solid waste. For these reasons, impacts of the proposed 2040 General Plan on solid waste are not cumulatively considerable and the cumulative impact would be ***less than significant***.

Storm Drain Facilities

The geographic context for analysis of cumulative impacts to storm drain facilities includes the incorporated and unincorporated lands surrounding the Sausalito Planning Area. Cumulative development contributes to an incremental increase in impervious surfaces that could increase stormwater runoff and impact existing storm drain facilities.

As discussed under Impact UTIL-1, the proposed 2040 General Plan contains policies and programs to reduce stormwater runoff. Likewise, the sections of the Sausalito Municipal Code that protect water quality, also minimize stormwater runoff, such as Chapter 11.17 and 11.18. All future development under the proposed 2040 General Plan would also be

required to comply with the Clean Water Act and regulations enforced by the RWQCB, which reduce stormwater runoff.

All cumulative projects would be required to comply with city/County ordinances and proposed 2040 General Plan policies, as well as other regulations that minimize stormwater runoff, such as the Clean Water Act. For these reasons, impacts of the proposed 2040 General Plan on storm drain facilities are not cumulatively considerable and the cumulative impact would be ***less than significant***.

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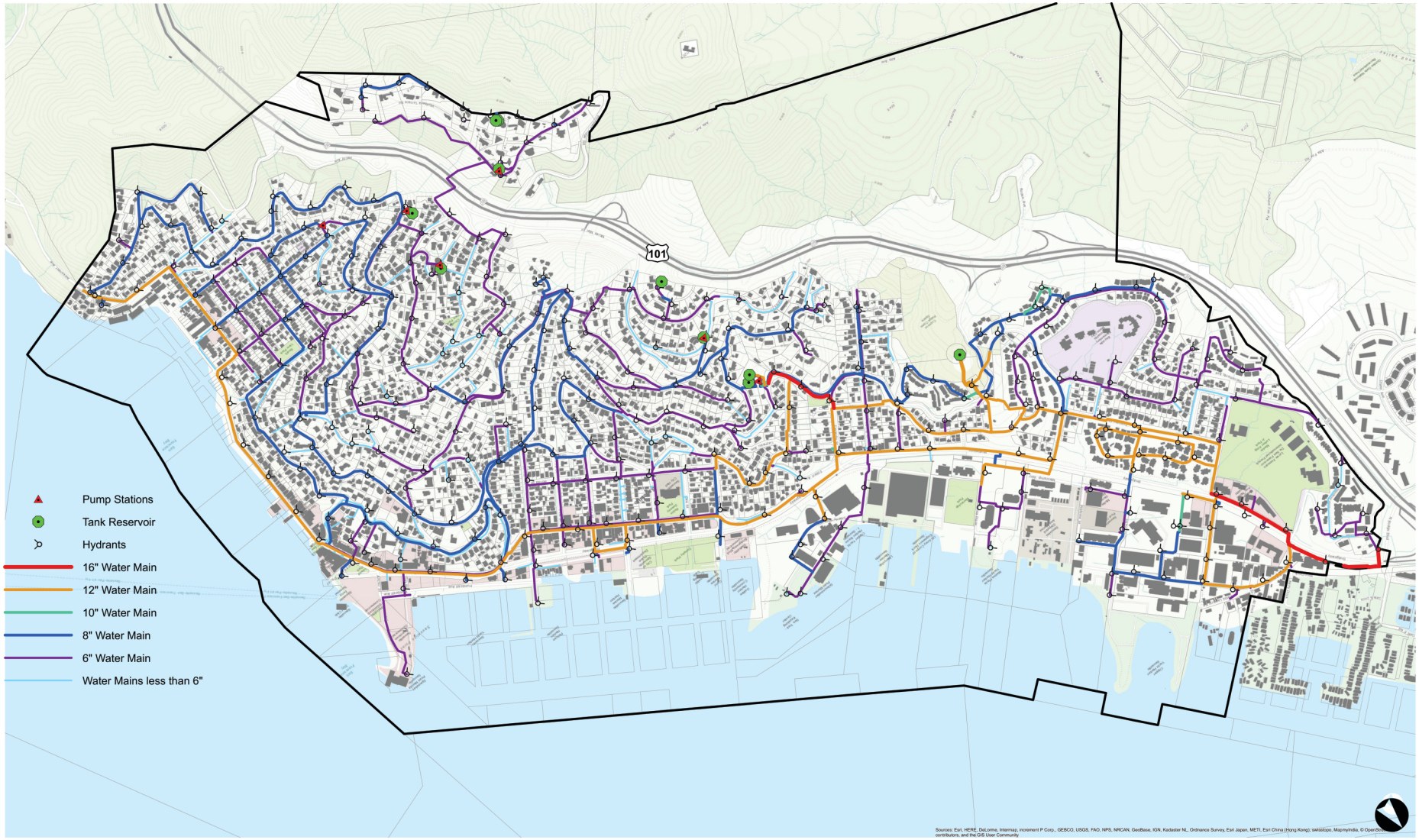

Source: City of Sausalito, Marin County. BKF Engineers, Surveyors, Planners.

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Exhibit 3.15-1
Water Distribution System

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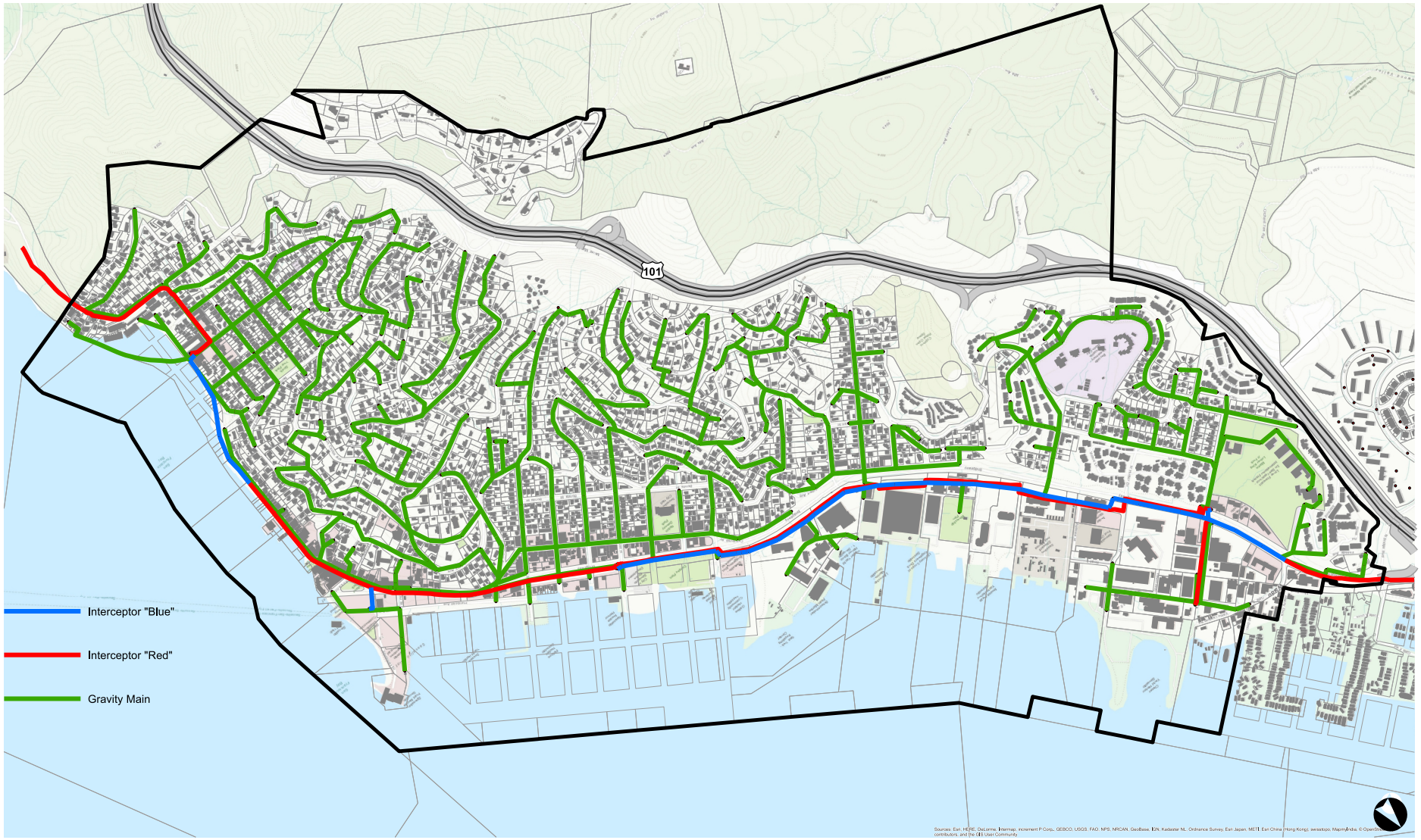

Source: City of Sausalito, Marin County. BKF Engineers, Surveyors, Planners.

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Exhibit 3.15-2
Sanitary Sewer System

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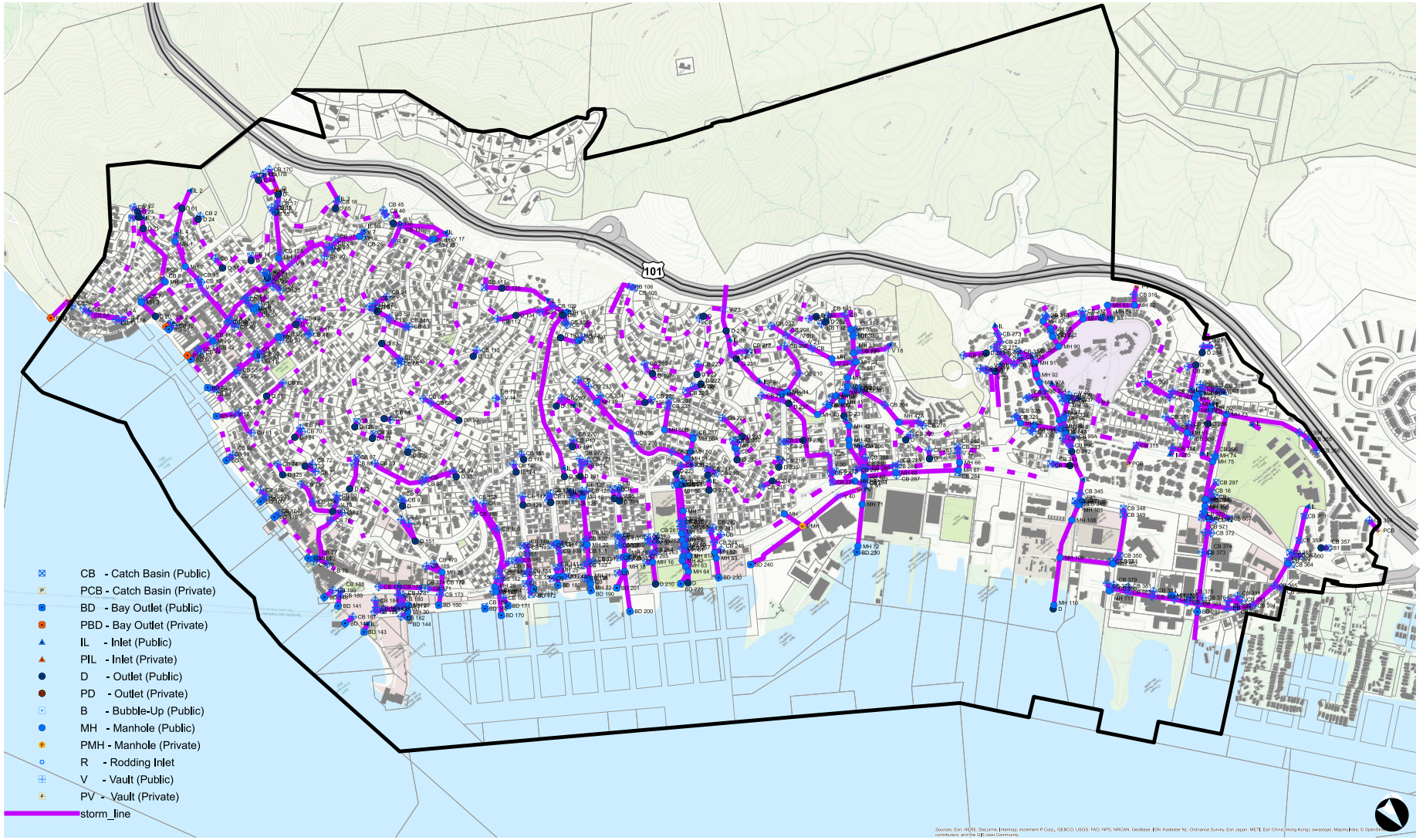

Source: City of Sausalito, Marin County. BKF Engineers, Surveyors, Planners.

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Exhibit 3.15-3
Storm Drain System

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3.16 WILDFIRE

Wildfires are on average becoming more frequent and more destructive due to a combination of higher temperatures, longer dry periods, and increased human development within wooded areas. Grassland or other vegetation in California is easily ignited, particularly in dry seasons. Wildfire is a serious hazard in high, dry fuel load areas, particularly near areas of natural vegetation and steep slopes since fires tend to burn more rapidly on steeper terrain. Wildfire is also a serious hazard in areas of high wind, given that fires will travel faster and farther geographically when winds are higher. Furthermore, wildfire is more likely in areas where electric power lines are located above ground where they can encounter either vegetation or building materials.

This section of the Draft EIR describes the existing wildfire conditions in the Sausalito Planning Area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to wildfire that could result from implementation of the proposed 2040 General Plan. See Section 3.13, Public Services and Recreation, for a discussion of fire protection services.

Information in this section is based on statements, data, and figures provided by the following reference materials:

- Marin County Community Wildfire Protection Plan (CWPP);
- California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zone Viewer;
- Marin County Multi-Jurisdictional Local Hazard Mitigation Plan;
- Strategic Fire Plan for Marin County; and
- Golden Gate National Recreation Area (GGNRA) Fire Management Plan.

3.16.1 EXISTING SETTING

Wildfire Risk

The City of Sausalito could be susceptible to wildfires due to steep topography, abundant fuel load, and climatic conditions. According to CAL FIRE, there are no Fire Hazard Safety Zones (FHSZs) within the Planning Area (Exhibit 3.16-1). Most of the Planning Area is within a Local Responsibility Area (LRA), but the western area of city limits that includes the GGNRA is a Federal Responsibility Area (FRA). The nearest Very High FHSZs are just northwest of city limits in unincorporated Marin City and Tamalpais Valley.[1] Areas in the FRA within the Planning Area

[1] California Department of Forestry and Fire Protection. Fire Hazard Severity Zone Viewer. Website: https://egis.fire.ca.gov/FHSZ/. Accessed March 12, 2020.

are mostly Low to Moderate Wildland Fire Hazard Rating, but some areas are Moderate to High.[2]

However, while CAL FIRE FHSZ maps are useful in examining potential fire hazard severity at the State level, the underlying data and methods used to develop FHSZ maps can be improved on by using local, more recent fuel characteristics and fuel modeling methods. The CAL FIRE FHSZ maps also do not consider local perspectives or priorities regarding communities at risk and areas of concern.[3]

To improve on the currently available State fire hazard assessment, the County conducted an independent hazard, asset, and risk assessment to help identify and prioritize areas within the County that are potentially at high wildfire risk based on more recent fuels data, advanced modeling techniques, and local input. The assessment was performed by modeling potential fire behavior and the probability that an area would burn given an ignition. This output was combined with areas of concern and assets at risk. Composite maps were generated indicating relative potential fire hazards throughout the County. The culmination of this effort was the Marin CWPP, adopted in 2016.[4] Portions of the city were identified in the CWPP as having high risk (a combination of potential flame length, rate of spread, and population density). However, the city is not within any of the County Areas of Concern identified in the CWPP.

The closest BAAQMD air data monitoring station with recent data is located at the San Francisco Southeast Sewage Treatment Plant, approximately 9.73 miles southeast of the City of Sausalito. The average monthly wind speed in San Francisco in 2019 ranged from six to 12 miles per hour (mph) and the highest monthly wind speed ranged from 20 to 29 mph.[5] Winds tend to travel in a northeastern direction at the San Francisco monitoring station.[6]

Due to these conditions, Southern Marin Fire District (SMFD) has established wildland-urban interface (WUI) areas covering most of the city, north of Alexander Avenue, and west of Bridgeway, identifying them as areas with significant risk from wildfires (see Exhibit 3.16-2).[7] However, according to SMFD Officials, most fires in the city are caused by human activity.

Homes located at the tops of ridges or canyon heads are particularly vulnerable to fires ignited from below since hillside topography can draw fire up canyons and steep hillsides. High winds

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2 National Park Service. 2005. Fire Management Plan Final Environmental Impact Statement: Golden Gate National Recreation Area. November.

3 Marin County Fire Department. 2016. Community Wildfire Protection Plan. July.

4 Ibid.

5 Bay Area Air Quality Management District. 2020. Wind Speed. March. Website: https://www.baaqmd.gov/about-air-quality/current-air-quality/air-monitoring-data/?DataViewFormat=yearly&DataView=met&StartDate=12/11/2017&ParameterId=203&StationId=4902#/met?id=203&style=table&zone=-1&date=2019-01-01&view=monthly. Accessed March 12, 2020.

6 Bay Area Air Quality Management District. 2020. Wind Direction. March. Website: https://www.baaqmd.gov/about-air-quality/current-air-quality/air-monitoring-data/?DataViewFormat=yearly&DataView=met&StartDate=12/11/2017&ParameterId=203&StationId=4902#/met?id=204&style=table&zone=-1&date=2019-01-01&view=monthly. Accessed March 12, 2020.

7 Southern Marin Fire Protection District. 2019. Ordinance No. 2019/2020-01. September 18.

can exacerbate fire risk. Electric power lines in the city mostly occur above and belowground along public streets, as well as natural gas pipelines, though these are limited to underground.

One of the most recent fires in Marin County was the Muir Fire just north of the unincorporated community of Muir Beach approximately six miles west of the city. The fire burned 67 acres and started on October 24, 2019.[8]

Post-fire Slope Instability and Drainage Pattern Changes

The major post-wildfire hazards in Marin County are unstable hill slopes and altered drainage patterns. Slope instability from wildfire scarring of the landscape can result in slope instability in the form of more intensive flooding, landslides, and rockslides. These post-fire slope soils and altered drainage patterns can more easily creep away downslope sides of foundations and reduce lateral support. To direct drainage, runoff from the hillside is captured and diverted into Richardson's or San Francisco Bay.

Several landslides have been recorded within city limits. In February 2017, a landslide occurred on San Carlos Avenue near Bridgeway caused city power outages, and on Alexander Avenue south of city limits, forcing the road to close. The most recent landslide in the city occurred February 14, 2019 near the 400 block of Sausalito Boulevard. This slide originated downslope of Highway 101 and destroyed a duplex and a single-family home.[9]

3.16.2 REGULATORY SETTING

Federal

United States Department of Interior

Review and Update of the 1995 Federal Wildland Fire Management Policy

1. **Safety**—Firefighter and public safety is the first priority. All Fire Management Plans and activities must reflect this commitment
2. **Fire Management and Ecosystem Sustainability**—The full range of fire management activities will be used to help achieve ecosystem sustainability, including its interrelated ecological, economic, and social components
3. **Response to Wildland Fire**—Fire, as a critical natural process, will be integrated into land and resource management plans and activities on a landscape scale, and across agency boundaries. Response to wildland fire is based on ecological, social, and legal consequences of the fire. The circumstances under which a fire occurs, and the likely

[8] California Department of Forestry and Fire Protection. 2019. Muir Fire Incident Report. Website: https://www-calfirecloud.msappproxy.net/incidents/2019/10/24/muir-fire/. Accessed May 31, 2020.

[9] California Geological Survey. Reported California Landslides. Website: https://www.conservation.ca.gov/cgs/landslides. Accessed April 23, 2020.

consequences on firefighter and public safety and welfare, natural and cultural resources, and values to be protected dictate the appropriate management response to the fire.

4. **Use of Wildland Fire**—Wildland fire will be used to protect, maintain, and enhance resources and, as nearly as possible, be allowed to function in its natural ecological role. Use of fire will be based on approved Fire Management Plans and will follow specific prescriptions contained in operational plans.
5. **Rehabilitation and Restoration**—Rehabilitation and restoration efforts will be undertaken to protect and sustain ecosystems, public health, and safety, and to help communities protect infrastructure.
6. **Protection Priorities**—The protection of human life is the single, overriding priority. Setting priorities among protecting human communities and community infrastructure, other property and improvements, and natural and cultural resources will be based on the values to be protected, human health and safety, and the costs of protection. Once people have been committed to an incident, these human resources become the highest value to be protected.
7. **Wildland Urban Interface**—The operational roles of federal agencies as partners in the Wildland Urban Interface are wildland firefighting, hazardous fuels reduction, cooperative prevention and education, and technical assistance. Structural fire suppression is the responsibility of tribal, State, or local governments. Federal agencies may assist with exterior structural protection activities under formal Fire Protection Agreements that specify the mutual responsibilities of the partners, including funding. (Some federal agencies have full structural protection authority for their facilities on lands they administer, and may also enter into formal agreements to assist State and local governments with full structural protection.)
8. **Planning**—Every area with burnable vegetation must have an approved Fire Management Plan. Fire Management Plans are strategic plans that define a program to manage wildland and prescribed fires based on the area's approved land management plan. Fire Management Plans must provide for firefighter and public safety; include fire management strategies, tactics, and alternatives; address values to be protected and public health issues; and be consistent with resource management objectives, activities of the area, and environmental laws and regulations.
9. **Science**—Fire Management Plans and programs will be based on a foundation of sound science. Research will support ongoing efforts to increase our scientific knowledge of biological, physical, and sociological factors. Information needed to support fire management will be developed through an integrated interagency fire science program. Scientific results must be made available to managers in a timely manner and must be used in the development of land management plans, Fire Management Plans, and implementation plans.
10. **Preparedness**—Agencies will ensure their capability to provide safe, cost-effective fire management programs in support of land and resource management plans through appropriate planning, staffing, training, equipment, and management oversight.

11. **Suppression**—Fires are suppressed at minimum cost, considering firefighter and public safety, benefits, and values to be protected, consistent with resource objectives.
12. **Prevention**—Agencies will work together and with their partners and other affected groups and individuals to prevent unauthorized ignition of wildland fires.
13. **Standardization**—Agencies will use compatible planning processes, funding mechanisms, training and qualification requirements, operational procedures, values-to-be-protected methodologies, and public education programs for all fire management activities.
14. **Interagency Cooperation and Coordination**—Fire management planning, preparedness, prevention, suppression, fire use, restoration and rehabilitation, monitoring, research, and education will be conducted on an interagency basis with the involvement of cooperators and partners.
15. **Communication and Education**—Agencies will enhance knowledge and understanding of wildland fire management policies and practices through internal and external communication and education programs. These programs will be continuously improved through the timely and effective exchange of information among all affected agencies and organizations.
16. **Agency Administrator and Employee Roles**—Agency administrators will ensure that their employees are trained, certified, and made available to participate in the wildland fire program locally, regionally, and nationally as the situation demands. Employees with operational, administrative, or other skills will support the wildland fire program as necessary. Agency administrators are responsible and will be held accountable for making employees available.
17. **Evaluation**—Agencies will develop and implement a systematic method of evaluation to determine effectiveness of projects through implementation of the 2001 Federal Fire Policy. The evaluation will assure accountability, facilitate resolution of areas of conflict, and identify resource shortages and agency priorities.

State

California Emergency Response Plan

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local governments and private agencies. Responding to hazardous-materials incidents is one part of this plan. The plan is administered by the California Governor's Office of Emergency Services, which coordinates the responses of other agencies. When Contra Costa County experiences an emergency, an Emergency Operations Center may be opened. In the event an Emergency Operations Center is opened, emergency response team members coordinate efforts and work with local fire and police agencies, emergency medical providers, the California Highway Patrol, CAL FIRE, CDFW, and Caltrans.

California Code of Regulations

Title 8 establishes fire suppression service standards. The standards range from fire hose size requirements to the design of emergency access roads.

Title 14 of the California Code of Regulations (CCR) establishes minimum standards for a variety of wildfire preparedness, prevention, and response regulations.

Title 19 of the CCR establishes a variety of emergency fire response, fire prevention and construction and construction materials standards.

California Building Code

The State of California provided a minimum standard for building design through the 2019 California Building Code (CBC), which is in Part 2 of Title 24 of the CCR. The 2019 CBC is based on the 2018 International Building Code but has been modified for California conditions. It is generally adopted on a jurisdiction by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local city and County building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in all new high-rise buildings and residential buildings; the establishment of fire resistance standards for fire doors, building material; and particular types of construction.

California Fire Code

The California Fire Code (CFC) is Part 9 of Title 24, CCR, also referred to as the California Building Standards Code. The CFC incorporates the 2018 International Fire Code of the International Code Council with necessary California amendments. The purpose of the CFC is to establish the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety and general welfare from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations.

California Public Resources Code

The California Public Resources Code (PRC) includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors[10] on construction equipment that use an internal combustion engine; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided on-site for various types of work in fire-prone areas.

These regulations include the following:

[10] A spark arrestor is any device that prevents the emission of flammable debris from a combustion source (i.e., fireplaces, internal combustion engines, and wood burning stoves).

- Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (PRC § 4442);
- Appropriate fire suppression equipment would be maintained during the highest fire danger period—from April 1 to December 1 (PRC § 4428);
- On days when a burning permit is required, flammable materials would be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor would maintain the appropriate fire suppression equipment (PRC § 4427); and
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (PRC § 4431).

California Department of Forestry and Fire Protection

CAL FIRE provides fire protection services for over 31 million acres of California's privately-owned wildlands, also known as State Responsibility Area (SRA) lands. CAL FIRE is divided into 21 operational units statewide. Within these units, CAL FIRE operates 802 fire stations (234 state and 568 local government).[11] There are no SRAs in the Planning Area.

CAL FIRE has mapped fire threat potential throughout California and ranks fire threat based on availability of fuel and likelihood of an area burning (based on topography, fire history, and climate). Rankings include no fire threat, moderate, high, and very high fire threat. Additionally, CAL FIRE produced the 2018 Strategic Fire Plan for California, which contains goals, objectives, and policies to prepare for and mitigate effects of fire on California's natural and built environments

Regional

Marin County Multi-Jurisdictional Local Hazard Mitigation Plan

The Marin County Multi-Jurisdictional Local Hazard Mitigation Plan (MCM LHMP), updated in 2018, was developed to reduce risks from natural disasters in unincorporated portions of the county and all incorporated Cities in Marin County. The MCM LHMP was last adopted by the City of Sausalito on May 14, 2019. The MCM LHMP identifies hazards within the city, such as earthquakes, liquefaction, severe storms, debris flow (landslides), flooding, wind, tsunamis, wildfire, and post-fire landslides. The MCM LHMP also contains a vulnerability analysis highlighting specific facilities at risk to natural hazards and outlines mitigation strategies for reducing risk of identified hazards.[12]

[11] California Department of Forestry and Fire Protection. 2018. What is CAL FIRE? September.
[12] Marin County. 2018. Marin County Multi-Jurisdictional Local Hazard Mitigation Plan.

Marin Operational Area Emergency Operations Plan

The purpose of the Marin Operational Area Emergency Operations Plan (EOP) is to plan responses to extraordinary emergencies due to large-scale disasters that affect Marin County.[13] The EOP identifies and facilitates inter-agency coordination in emergency operations, and applies to all emergencies in incorporated and unincorporated areas of Marin County when those emergencies require multi-agency coordination at the operational area level.

Marin County Community Wildfire Protection Plan

The Marin County Community Wildfire Protection Plan (CWPP), adopted in 2016, is a countywide strategic plan with action items to reduce fire hazard in the County, especially in areas of concern. The Plan is accompanied by appendices that address specific areas and projects by agency to meet strategic goals. Projects in Appendix B within the Planning Area include fuel removal and fuel break installations near the southern city limits and west of Highway 101.

Local

Sausalito General Plan

The proposed 2040 General Plan includes the following relevant policies and programs that assist in reducing or avoiding potential impacts related to wildfires:

Community Design, Historic, and Cultural Preservation Element

Policy CD-7.1: Public Stairs. Preserve and enhance public stairs and pathways for purposes of pedestrian safety and enjoyment, as well as emergency evacuation.

Program CD-7.4.5: Climate-Appropriate Landscaping: Encourage the use of plant materials that are drought tolerant, climate appropriate, low maintenance, and fire resistant. Encourage best practices at all levels, including soil management.

Environmental Quality Element

Policy EQ-1.4: Threatened and Endangered Species. Protect threatened and endangered species of wildlife and plants native to Sausalito and the Southern Marin area.

Program EQ-1.4.5: Eradication. Attempt to eradicate broom populations in open space areas where the plant serves as a fuel in the Wildland-Urban Interface (WUI) or threatens important native plants or wildlife habitats.

Policy EQ-2.4: Open Space Management. Maintain habitat and scenic value of open space and ensure the protection of public health and safety through the well-planned management of open space lands.

[13] Marin County Sheriff's Office of Emergency Services. 2014. Marin Operational Area Emergency Operations Plan. October.

Program EQ-2.4.3: Urban Wildland Interface. Work with local agencies to address hazards within existing and proposed open space areas related to wildfire prevention.

Health, Safety, and Community Resilience Element

Policy HS-1.3: Fire Safety. Minimize the risk of property damage and personal injury resulting from structural and wildland fires.

Program HS-1.3.1: Building and Fire Codes Amendment. Amend the Building and Fire codes as necessary to address fire hazard conditions unique to Sausalito.

Program HS-1.3.2: Plant Materials List. Develop a list of plant materials selected to minimize fire hazards to residential structures as a resource to potential applicants.

Program HS-1.3.3: Water Fire and Rescue Equipment. Continue to study the potential location of a boathouse or other means to house City water-based fire and rescue safety equipment.

Program HS-1.3.4: Roofing Material. Continue to require that all roofing material used in new construction or substantial remodel be fire rated "A."

Program HS-1.3.5: Removal of Brush. Establish a program for the removal of brush, certain trees, and other excess fuel materials on public and/or lands in coordination with open space management programs (see Policy EQ-2.4: Open Space Management).

Program HS-1.3.6: Public Awareness of Fire Safety. Develop and initiate a public awareness educational program about fire safety through the Community Safety/Disaster Preparedness Committee.

Program HS-1.3.8: Mapping of Fire Hazard Areas. Maintain a mapping program which identifies and maps fire hazard areas.

Program HS-1.3.9: Fire Suppression Plans. Develop fire suppression plans and strategies for those areas that are mapped as fire hazard areas.

Program HS-1.3.10: Water-Deficient Areas. Develop a plan to correct the fire suppression water supply deficiencies for the areas designated on Figure 7-8 [of the proposed 2040 General Plan].

Program HS-1.3.11: Inter-Jurisdictional Cooperation. Coordinate with local and regional jurisdictions to maintain adequate water capacity for fire protection.

Program HS-1.3.12: Floating Homes. Require that all floating home areas, whether in the City or within the Sphere of Influence, have a dedicated fire main at MMWD pressure.

Program HS-1.3.12: Construction Requirements. Require that all floating homes have the same fire construction requirements as land-based homes.

Policy HS-2.1: Emergency Preparedness. Ensure that the City, its citizens, businesses, and services are prepared for an effective response and recovery in the event of emergencies or disasters.

Policy HS-2.4: Access for Emergency Vehicles. Provide and maintain adequate access for emergency vehicles and equipment, particularly fire-fighting equipment. Proactive measures may be necessary to encourage efficient measures.

Policy HS-2.5: Overhead Utilities. Minimize the risk to public health and safety from overhead utilities via undergrounding.

Policy HS-2.6: Fire load. Manage plants in Wildland-Urban Interface (WUI) area to minimize fuel load for potential wildfire.

Program HS-2.6.1: Open Space Management. Work with the Marin County Fire Department and open space property owners to manage fuel load for potential wildfires.

Program HS-2.6.2: Residential Landscaping. Inform residential property owners about FIRESafe Marin's home hardening education program and other methods of reducing fuel load in residential areas.

Program HS-2.6.3: Firewise Communities. Promote and support the growth of Firewise Communities throughout the City. Firewise Communities can also be the basis for forming Neighborhood Response Groups (NRGs).

Sustainability Element

Policy S-3.1: Resilient Plants. Promote planting and maintenance of plants which are drought, fire, and disease-resistant.

Program S-3.1.1: WUI Ordinance. Maintain Wildland Urban Interface program under City's WUI Ordinance.

Sausalito Municipal Code

Chapter 8.42 (Adequacy of fire protection) of the Sausalito Municipal Code establishes fire protection requirements for building permits along with penalties for violations.

Chapter 12.04 (Fire prevention regulations) makes outdoor fires unlawful and creates a penalty for violating the regulation. An oral permit from the SMFD can be obtained for confined outdoor fires in the form of barbecue pit, barbecue stove, or other outdoor cooking device.

Southern Marin Fire Ordinance Code

The SMFD Fire Ordinance adopts the 2019 CFC and Appendix A of the 2018 International Wildland-Urban Interface Code. The Ordinance contains amendments to the CFC and includes requirements for WUI fire areas. Some of the requirements are related to hazardous vegetation and fuel management, defensible space, firework permits. The city ratified the SMFD fire ordinance codes in November of 2019.

3.16.3 THRESHOLDS OF SIGNIFICANCE

According to the CEQA Guidelines Appendix G, the proposed project will have a significant impact related to wildfire if it would:

- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires;
- If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:
    - 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.

3.16.4 ANALYSIS, IMPACTS, AND MITIGATION MEASURES

Impacts related to wildfires resulting from implementation of the proposed 2040 General Plan are discussed below. The following impact analysis is based on an assessment of baseline conditions for the Sausalito Planning Area, including emergency response and evacuation plan requirements, wildland fire exposure risk, and post-fire geologic hazards. The evaluation also includes a determination of whether changes to the physical environment caused by the proposed 2040 General Plan impair or interfere with emergency response plans, expose people to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire, expose people/structures to downslope flooding or landslides, or include installation or maintenance of infrastructure that may exacerbate fire risk.

Impact WILD-1 **Implementation of the proposed 2040 General Plan would not result in the exposure of people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.**

The City of Sausalito could be susceptible to wildfires due to steep topography, abundant fuel load, and climatic conditions. According to CAL FIRE, there are no Fire Hazard Severity Zones (FHSZs) within the Planning Area. Most of the Planning Area is within an Local Responsibility Area (LRA), but the western area of city limits that includes the GGNRA is a Federal Responsibility Area (FRA), as depicted in Exhibit 3.16-1. The nearest Very High FHSZs are just

northwest of city limits in unincorporated Marin City and Tamalpais Valley.[14] Areas in the FRA within the Planning Area are mostly Low to moderate Wildland Fire Hazard Rating, but some areas are moderate to High.[15]

Development and growth in the city under the proposed 2040 General Plan could result in an incremental increase in number of people and structures exposed to wildland fire hazards. However, most development under the proposed 2040 General Plan is expected to be located near Bridgeway and the waterfront in eastern portions of the Planning Area. Some of this development could occur in WUI areas, and an incremental increase in development could occur in the center of the Planning Area or west of Highway 101 in WUI areas and nearer to moderate federal wildland fire hazard zones.[16]

As described in the Regulatory Setting section, the Marin County Community Wildfire Protection Plan (CWPP) was adopted in 2017. The plan assists in protecting human life and reducing property loss from wildfire throughout Marin County. The Plan describes wildfire risk, hazard, and recommendations for improving wildfire preparedness at the County level, achieving the following:

- Outlines community characteristics that relate to wildfire risk and hazard including climate, weather, vegetation, and population.
- Describes the fire environment, including the description of the County WUI and regional weather.
- Assesses wildfire hazard and risk at the County level.
- Describes existing and proposed community outreach that is integral to improving wildfire preparedness.
- Identifies mitigation strategies that could be applied to address wildfire hazard and risk.
- Describes Plan as a living document to be updated periodically.

The Plan is accompanied by appendices that address specific areas and projects by agency to meet strategic goals. Projects in Appendix B within the Planning Area include fuel removal and fuel break installations near the southern city limits and west of Highway 101.

The Marin County Multi-Jurisdictional LHMP dedicates a subsection to wildfire and post-fire debris flow. The LHMP identifies the following to assist the County in reducing wildfire risk:

- Provide potential mitigation such as advance identification of evacuation routes and no parking zones near fire hazard zones, and expanding vegetation management
- Ensure adequate water supply in high risk wildfire areas for local fire departments.

[14] California Department of Forestry and Fire Protection. Fire Hazard Severity Zone Viewer. Website: https://egis.fire.ca.gov/FHSZ/. Accessed March 12, 2020.

[15] National Park Service. 2005. Fire Management Plan Final Environmental Impact Statement: Golden Gate National Recreation Area. November.

[16] Ibid.

The SMFD conducts evacuation exercises annually to prepare for emergency situations. Evacuations in the planning area are an emergency support function that local law enforcement organizes and coordinates with the SMFD.[17]

As described in the Regulatory Setting section, the Marin Operational Area Emergency Operations Plan, assists in inter-agency coordination in emergency operations. The city also participates in programs to reduce wildfire risks that are offered by SMFD, FIRESafe Marin, and CAL FIRE.

The proposed 2040 General Plan contains policies and programs that reduce risks from wildland fires before development occurs. Specifically, Policy HS-1.3 contains several programs to minimize fire risk to property and people, including maintaining building codes and construction requirements related to fire hazards. Additionally, Objective HS-3 on disaster planning includes Policies HS-2.1, HS-2.4, HS-2.5, HS-2.6, and HS-3.9. All policies contain specific programs with requirements and enforcement measures to reduce fire risk.

The SMFD Fire Ordinance contains amendments to the CFC and includes requirements for WUI fire areas. Some of the requirements are related to hazardous vegetation and fuel management, defensible space, firework permits.

Conclusion

Development envisioned by the proposed 2040 General Plan could result in an incremental increase in exposure of people and structures to wildland fires and associated hazards within the Planning Area. However, future projects would be required to comply with fire protection measures in the SMFD Fire Ordinance and proposed 2040 General Plan. Further, continued implementation of the Marin County Community Wildfire Protection Plan and Marin Operational Area Emergency Operations Plan will assist in protecting life and property in the event of a wildfire. Therefore, impacts related to exposure of people and structures to wildland fires and associated hazards, either directly or indirectly, would be ***less than significant***.

Impact WILD-2 **Development facilitated by the proposed 2040 General Plan in or near State responsibility areas or lands classified as very high fire hazard severity zones would not substantially impair an adopted emergency response plan or emergency evacuation plan.**

The California Fire Code establishes requirements for emergency access for fire apparatus. Examples include requirements for multiple points for access for certain types of development, minimum street widths, and maximum acceptable grades for new roads. To the extent that these requirements facilitate emergency access, they also facilitate emergency evacuation. New development projects that occur pursuant to the proposed 2040 General Plan would be assessed for compliance with applicable Fire Code requirements that pertain to emergency access. Therefore, impacts would be ***less than significant***.

[17] Christian Tubbs, Fire Chief. 2020. Email correspondence with Lilly Whalen, Community Development Department Head. April 20.

Impact WILD-3 **Development facilitated by the proposed 2040 General Plan in areas located in or near State responsibility areas or lands classified as very high fire hazard severity zones would not substantially expose future occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire, due to slope, prevailing winds, and other factors.**

According to CAL FIRE, there are no Fire Hazard Severity Zones within the Planning Area.[18] However, as described under Impact WILD-1, SMFD has established a WUI covering most of city, and there are requirements of the SMFD Ordinance and proposed 2040 General Plan related to special fire protection measures that are required within the WUI zone. Furthermore, implementation of the Marin County Community Wildfire Protection Plan and Marin Operational Area Emergency Operations Plan include public education programs to reduce potential for fires to start, and also set action plans to remove flammable vegetation from around buildings and ensure adequate water supply in high risk wildfire areas. Reducing potential for fires to start and mitigating wildfire spread once started reduces exposure to smoke and air pollution. Safely evacuating people affected by wildfires also reduces exposure.

Moreover, land use designations within WUI areas are not being modified under the proposed 2040 General Plan. As a result, the degree of wildland fire hazard would not substantially change with adoption of the proposed 2040 General Plan, and current hazards would not be significantly increased. Therefore, impacts under this topic would be ***less than significant***.

Impact WILD-4 **Implementation of the proposed 2040 General Plan in areas located in or near State responsibility areas or lands classified as very high fire hazard severity zones may require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities); however, the installation and maintenance of such infrastructure would not substantially exacerbate fire risk or result in significant temporary or ongoing impacts to the environment.**

According to CAL FIRE, there are no Fire Hazard Severity Zones within the Planning Area.[19] As previously described, most development under the proposed 2040 General Plan would be located in eastern portions of the Planning Area, some of which could occur in WUI areas, and an incremental increase could occur in the center of the Planning Area or west of Highway 101. However, all areas of the city are already relatively developed and existing infrastructure is already in place. Installation and maintenance of any incrementally new infrastructure would comply with CCR Title 19, Division 1 (State Fire Marshal), which establishes standards for construction materials, equipment, and methods in order to prevent fires. New infrastructure would also comply with the 2019 CFC, which contains general fire safety precautions to be implemented during construction and demolition activities. These requirements seek to maintain required levels of fire protection, limit fire spread, establish

[18] Christian Tubbs, Fire Chief. 2020. Email correspondence with Lilly Whalen, Community Development Department Head. April 20.

[19] Ibid.

appropriate operation of equipment, and promote prompt response to fire emergencies. Features regulated include fire protection systems, firefighter access to sites and buildings, means of egress, hazardous materials storage and use, temporary heating equipment, and other ignition sources. As such, installation and maintenance of any new infrastructure would not substantially exacerbate fire risk, and impacts would be ***less than significant***.

Impact WILD-5 **Development facilitated by the proposed 2040 General Plan in areas located in or near State responsibility areas or lands classified as very high fire hazard severity zones would not substantially 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.**

The western portion of the Planning Area contains sloping hillsides which are susceptible to landslides and flooding after fire has removed protective vegetative cover. These secondary hazards associated with wildfires are described in the Marin County Multi-Jurisdictional LHMP. In a post-fire scenario, wildfires can secondarily cause contamination of reservoirs, as well as transmission line and road destruction. Slopes that have been stripped of vegetation are exposed to greater amounts of erosive runoff, which can weaken soils and cause slope failure. Major landslides can occur several years after a wildfire. Most wildfires burn hot and for long durations that can bake soils, especially those high in clay content, thus increasing ground imperviousness and runoff generated by storm events, increasing the chance of flooding.

An incremental increase in development under the proposed 2040 General Plan would occur in the eastern portions of the Planning Area; some development could also occur in WUI areas, and in the center of the Planning Area or west of Highway 101 in WUI areas. However, as described in Section 3.6, Geology, Soils, and Seismicity, and Section 3.9, Hydrology and Water Quality, development under the proposed 2040 General Plan would be subject to the rules and regulations of the Sausalito Municipal Code and the proposed 2040 General Plan regarding development on unstable geologic soils and controlling stormwater runoff during and after construction. In the absence of a wildland fire, future development under the proposed 2040 General Plan would not substantially alter drainage patterns, result in significant downslope or downstream flooding, or result in significant effects related to landslides.

In a post-fire scenario, development that could occur in the central portion of the Planning Area and west of Highway 101 could result in an incremental increase in secondary hazards associated with wildfires. However, land use designations in the city are not being modified under the proposed 2040 General Plan. As a result, the degree of secondary wildland fire hazard would not substantially change with adoption of the proposed 2040 General Plan, and current hazards would not be significantly increased. Therefore, impacts under this topic would be ***less than significant***.

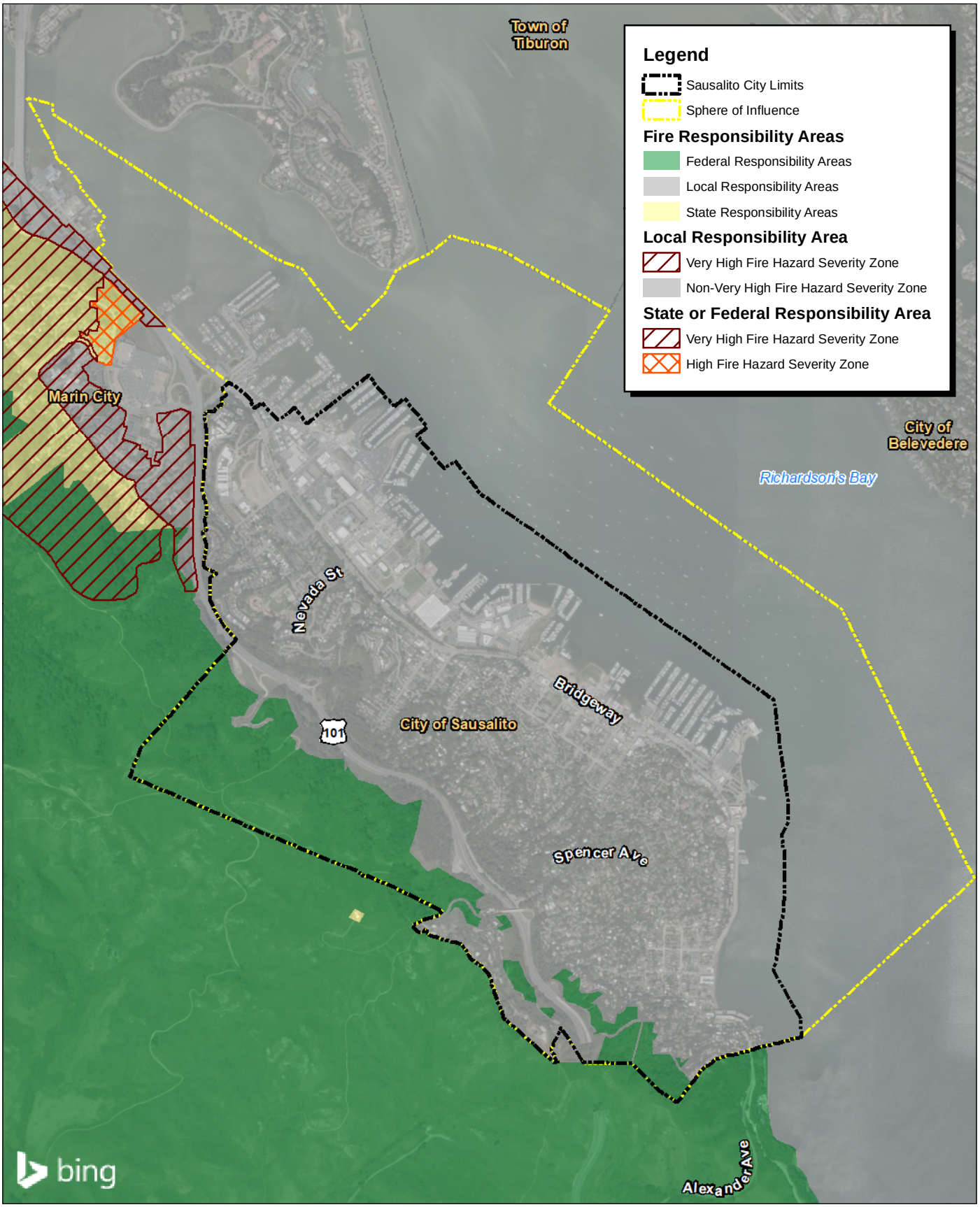
Impact WILD-6 Development facilitated by the proposed 2040 General Plan, in combination with past, present, and reasonably foreseeable projects, would not result in significant cumulative impacts with respect to wildfire.

This analysis evaluates whether impacts of the proposed 2040 General Plan, together with impacts of cumulative development, would result in a cumulatively significant impact with respect to wildfire. This analysis then considers whether incremental contribution of impacts associated with implementation of the proposed 2040 General Plan would be significant. Both conditions must apply for a project's cumulative effects to rise to the level of a significant impact. The geographic context for this analysis includes the Sausalito Planning Area and adjacent unincorporated areas.

As previously discussed, development and growth in the city under the proposed 2040 General Plan could result in an incremental increase in exposure of people and structures to wildland fires and associated hazards, particularly for development within the WUI. However, land use designations within the WUI would not be modified under the proposed 2040 General Plan. As a result, the degree of wildland fire hazard, including secondary hazards, would not substantially change with adoption of the proposed 2040 General Plan, and current hazards would not significantly increase.

Nonetheless, new development within the WUI would be required to comply with the special fire protection measures identified in the SMFD Fire Ordinance. Further, continued implementation of the Marin County Community Wildfire Protection Plan and Marin Operational Area Emergency Operations Plan will assist in protecting life and property in the event of a wildfire.

All cumulative projects would be subject to similar fire protection development standards and be required to comply with Marin County ordinances and proposed 2040 General Plan policies to assist in protecting life and property in the event of a wildfire. In addition, all cumulative projects would be covered under existing emergency response plans by the County. Lastly, implementation of the Marin County Community Wildfire Protection Plan, would reduce cumulative impacts related to wildfire. Therefore, impacts of the proposed 2040 General Plan related to wildfire are not cumulatively considerable and the cumulative impact would be ***less than significant***.



Source: Bing Aerial Imagery. Marin County GIS Data.

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Exhibit 3.16-1
Wildfire Hazards

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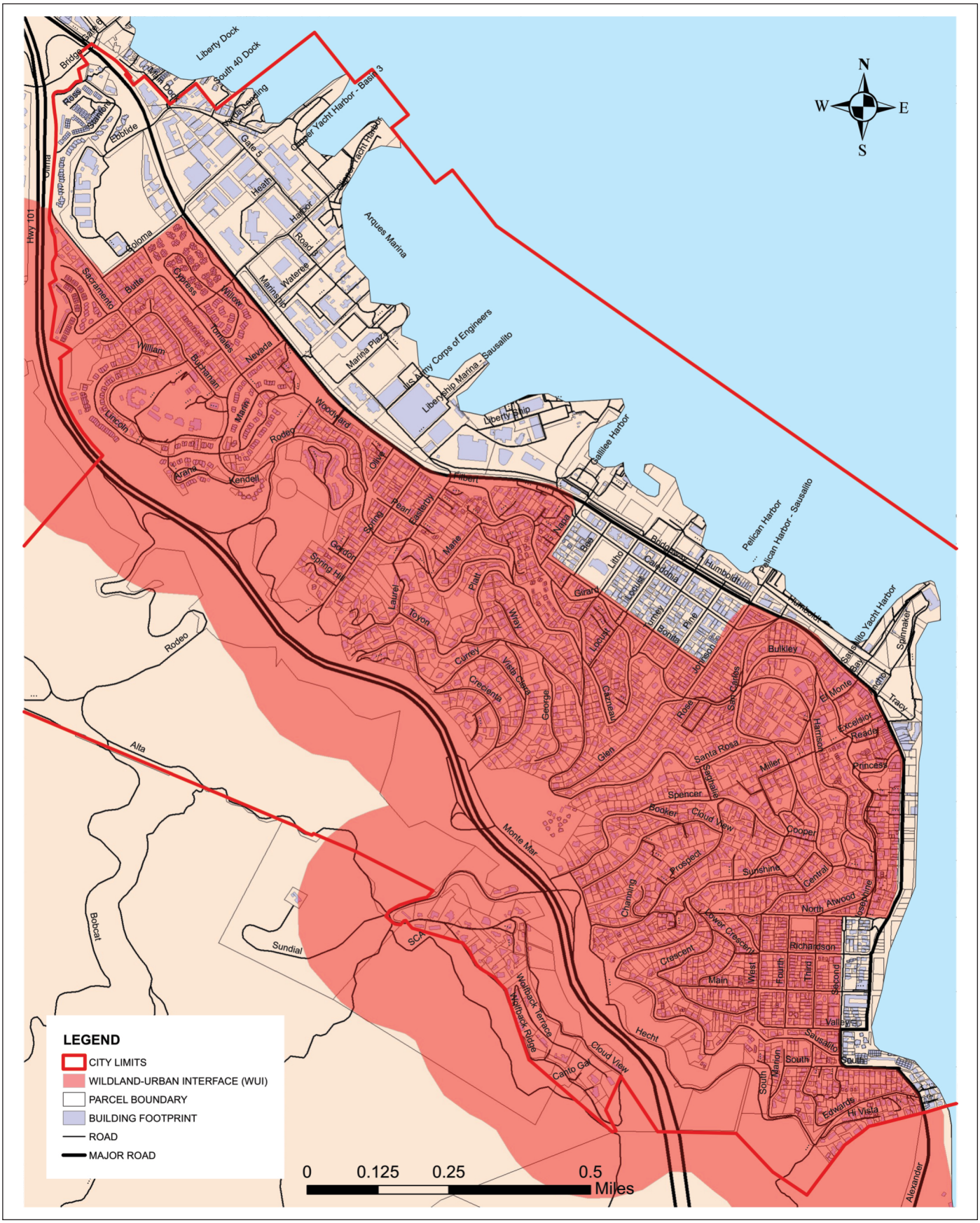

Source: Southern Marin Fire Protection District.

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Exhibit 3.16-2
City of Sausalito Wildland-Urban Interface

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4.0 ALTERNATIVES TO THE PROPOSED 2040 GENERAL PLAN

The following section contains a comparative impact assessment of potentially feasible alternatives to the proposed 2040 General Plan. The primary purpose of an alternatives analysis under the California Environmental Quality Act (CEQA) is to provide the decision-makers, other interested parties, and the general public with a reasonable number of potentially feasible project alternatives that could attain most of the basic project objectives, while avoiding or reducing any of the proposed 2040 General Plan's significant adverse environmental effects.

However, as brought forth in this section, all impacts of the proposed 2040 General Plan are less than significant. Therefore, the proposed 2040 General Plan does not have any significant unavoidable impacts. Findings rejecting alternatives are required only if one or more significant environmental effects will not be avoided or substantially lessened by mitigation measures. The City of Sausalito, as the lead agency, need not make findings rejecting alternatives described in the Draft Environmental Impact Report (Draft EIR) as all of the proposed 2040 General Plan's significant impacts will be avoided. (*See Laurel Hills Homeowners Ass'n v. City Council* (1978) 83 Cal. App. 3rd 515 (*see also Stevens v. City of Glendale* (1981) 125 Cal. App. 3rd 986, 996; *No Slo Transit, Inc. v. City of Long Beach* (1987) 197 Cal. App. 3rd 241.) Thus, if the City of Sausalito finds that all of the proposed 2040 General Plan's significant adverse effects will be avoided, it need not make findings that environmentally superior alternatives are infeasible. (*See Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal. App. 4th 477; *Protect Our Water v. County of Merced* (2003) 110 Cal. App. 4th 362, 373; *Kings County Farm Bureau v City of Hanford* (1990) 221 Cal. App. 3rd 692.)

Accordingly, analysis of the following three alternatives to the proposed 2040 General Plan are provided for informational purposes and to allow the decision makers to consider the proposed 2040 General Plan in light of hypothetical alternative development scenarios, thereby promoting CEQA's purpose as an information disclosure statute. This analysis is guided by the following considerations set forth under CEQA Guidelines Section 15126.6:

- An EIR need not consider every conceivable alternative to a project;
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process;
- Reasons for rejecting an alternative include:
  - Failure to meet most of the basic project objectives;
  - Infeasibility; or
  - Inability to avoid significant environmental effects.

4.1 SIGNIFICANT UNAVOIDABLE IMPACTS

The proposed 2040 General Plan was analyzed for potentially significant impacts related to each of the environmental topic areas discussed in Sections 3.1 through 3.16. The results of the analysis

demonstrate that the proposed 2040 General Plan would not result in significant and unavoidable impacts.

4.2 ALTERNATIVES TO THE PROPOSED 2040 GENERAL PLAN

For informational purposes, this Draft EIR presents a reasonable range of potentially feasible alternatives to the proposed 2040 General Plan for analysis and evaluation of their comparative merits, pursuant to CEQA Guidelines Section 15126.6, discussed above. Where a project does not include any significant and unavoidable impacts and the potential impacts associated with a project are below a level of significance, the analysis properly considers alternatives that would also reduce or eliminate those less than significant impacts. CEQA Guidelines Section 15126.6(a) states that an EIR need not evaluate every conceivable alternative to a project. For informational purposes, the following analysis is provided for each alternative to allow a meaningful comparison with the proposed 2040 General Plan.

The three alternatives to the proposed 2040 General Plan analyzed in this section are as follows:

- No Project Alternative/1995 General Plan
- Increased Mixed-Use Housing Alternative
- Decreased Commercial and Industrial Development Alternative

4.3 PROJECT OBJECTIVES

CEQA Guidelines Section 15124(b) requires a statement of objectives sought by a proposed project, including the underlying purpose of the project. The 2040 General Plan is intended to guide growth and land development of the community, while conserving resources in a manner consistent with the quality of life desired by Sausalito residents. For the purpose of this Draft EIR analysis, the following objectives have been identified for the 2040 General Plan:

- Reflect the current goals and vision expressed by Sausalito residents, businesses, decision-makers, and other stakeholders.
- Address issues and concerns identified by Sausalito residents, businesses, decision-makers, and other stakeholders.
- Maintain Sausalito's small-scale residential neighborhoods, recognizing their geographical, architectural, and cultural diversity, while supporting a range of housing options.
- Recognize and perpetuate the defining characteristics of Sausalito, including its scenic features, natural and built environment, its history, and its diverse culture.
- Recognize the importance of Sausalito's economic vitality, encourage businesses and activities that have high municipal revenue generation potential and low environmental impact.
- Adopt policies in all of the elements of the General Plan that guide the direction of the physical and economic development of the city in a way that is economically sustainable.

- Preserve Sausalito's waterfront as a natural resource while carefully balancing the needs and desires of water-dependent businesses, water-related activities, and amenities for the public, including access to and from the water.
- Recognize the Marinship's role and importance to the San Francisco Bay Area and the city's cultural, historic, and economic diversity, and quality of life; encourage industrial, arts and water-dependent or water-related activities in the Marinship and support these activities through the inclusion of compatible businesses and uses that can adapt to changing economic conditions.
- Ensure fiscal sustainability to provide an appropriate level of public services including upgrading, modernizing, and maintaining Sausalito's infrastructure.
- Safeguard the natural environment and ensure community health, safety, and resilience, including addressing the inherent risks of climate change, sea level rise, and subsidence.
- Provide a variety of circulation options through and within Sausalito.
- Manage tourism to minimize impacts on the community while supporting a quality visitor experience.
- Engage proactively with regional and State-level policy efforts to ensure that Sausalito's vision, goals, and quality of life are sustained in the long term.
- Seek innovative and sustainable solutions to sea level rise in collaboration with County and regional agencies and innovators, to sustain the quality of life in Sausalito and its active waterfront uses.
- Address new requirements of State law.

4.4 ALTERNATIVE 1 — NO PROJECT ALTERNATIVE/1995 GENERAL PLAN

CEQA Guidelines Section 15126.6(e) requires an EIR to evaluate a 'No Project Alternative,' which is defined as what would be reasonably expected to occur in the foreseeable future if the project were not approved. Under this alternative, the 1995 General Plan would remain as the comprehensive planning document, including focused updates in the Circulation and Parking Element (amended in 1999), the Housing Element (2015), and the Health and Safety Element (2019). Development would occur as allowed under the 1995 General Plan and the Marinship Specific Plan (revised 1989). It is reasonable to expect that the city would develop the Sausalito Planning Area under the 1995 General Plan under existing land uses if the proposed 2040 General plan is not approved (see Exhibit 4-1).

Although development build-out would be similar to that projected in the 2040 General Plan, there would be no new policies or programs in place that provide direction for issues of sustainability and climate resiliency, sea level rise, release of pollutants due to project site inundation, vibration impacts near historic properties, and wildland fire management. Therefore, the city would not have in place any overarching policy guidance for how those issues will be addressed over the long term. As shown in Table 4-1 and Table 4-2, residential and non-residential buildout potential under the No Project Alternative/1995 General Plan would be similar to the proposed 2040 General Plan, and could result in up to 304 new residential units, 587,961 new square feet of commercial uses and 146,124 new square feet of industrial uses.

TABLE 4-1: NO PROJECT ALTERNATIVE/1995 GENERAL PLAN – PROJECTED RESIDENTIAL GROWTH AT BUILDOUT

LAND USE DESIGNATION	EXISTING (NUMBER OF UNITS)	TOTAL UNDER NO PROJECT ALTERNATIVE/ 1995 GENERAL PLAN (NUMBER OF UNITS)	PROJECTED INCREASE UNDER NO PROJECT ALTERNATIVE/ 1995 GENERAL PLAN (NUMBER OF UNITS)	TOTAL UNDER PROPOSED 2040 GENERAL PLAN (NUMBER OF UNITS)	NET CHANGE RELATIVE TO PROPOSED 2040 GENERAL PLAN (NUMBER OF UNITS)
Very Low Density Residential (VLR)	40	56	16	56	0
Low Density Residential (LR)	124	127	3	127	0
Medium Low Density Residential (MLR)	913	932	19	932	0
Medium Density Residential (MR)	90	92	2	92	0
Medium High Density Residential (MHR)	1,366	1,395	29	1,395	0
Planned Development – High Density Residential (PR)	281	281	0	281	0
High Density Residential (HR)	1,171	1,230	59	1,230	0
Arks (A)	6	6	0	6	0
Houseboats (H)	386	386	0	386	0
Mixed Residential and Commercial (CR)	117	162	45	162	0
Central Commercial (CC)	114	114	0	114	0
Neighborhood Commercial (CN)	16	22	6	22	0
Industrial (I)	9	9	0	9	0
Waterfront (W)	146	177	31	177	0
Public Institutional (PI)	7	7	0	7	0
Open Space (OS)	5	5	0	5	0
Conservation Overlay (SOI)	3	3	0	3	0
Accessory Dwelling Units	36	130	94	130	0
Totals	**4,830**	**5,134**	**304**	**5,134**	**0**

Sources: 2017 Marin County Assessor's GIS Data. Sausalito 2018 Annual Housing Element Progress Report. M-Group 2020. FCS 2020.

TABLE 4-2: NO PROJECT ALTERNATIVE/1995 GENERAL PLAN – PROJECTED NON-RESIDENTIAL GROWTH AT BUILDOUT

LAND USE DESIGNATION	EXISTING (SQUARE FEET)	TOTAL UNDER NO PROJECT ALTERNATIVE/ 1995 GENERAL PLAN (SQUARE FEET)	PROJECTED INCREASE UNDER NO PROJECT ALTERNATIVE/1995 GENERAL PLAN (SQUARE FEET)	TOTAL UNDER PROPOSED 2040 GENERAL PLAN (SQUARE FEET)	NET CHANGE RELATIVE TO PROPOSED 2040 GENERAL PLAN (SQUARE FEET)
Mixed Residential and Commercial (CR)	129,832	199,414	69,582	199,414	0
Central Commercial (CC)	190,330	269,529	79,199	269,529	0
Neighborhood Commercial (CN)	110,248	144,010	33,762	144,010	0
Commercial Waterfront (CW)	50,029	106,852	56,823	106,852	0
Shopping Center (CS)	22,751	22,751	0	22,751	0
Industrial (I)	1,119,836	1,265,960	146,124	1,265,960	0
Waterfront (W)	271,869	611,930	340,061	611,930	0
Public Institutional (PI)	213,871	213,871	0	213,871	0
General Commercial (SOI)	18,593	27,127	8,534	27,127	0
Total	**2,127,359**	**2,861,444**	**734,085**	**2,861,444**	**0**

Sources: 2017 Marin County Assessor's GIS Data. Sausalito 2018 Annual Housing Element Progress Report. M-Group 2020. FCS 2020.

4.4.1 IMPACT ANALYSIS

Aesthetics, Light, and Glare

As noted in this Draft EIR, the proposed 2040 General Plan's impacts to aesthetics, light, and glare would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-1 and 4-2, buildout under the No Project Alternative/1995 General Plan would be similar to the proposed 2040 General Plan. Therefore, the potential impacts from the No Project Alternative/1995 General Plan would be virtually the same as for the proposed 2040 General Plan.

Therefore, the No Project Alternative/1995 General Plan would result in the same impacts on aesthetics, light, and glare as the proposed 2040 General Plan and impacts would be less than significant without mitigation.

Air Quality

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to air quality would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-1 and Table 4-2, buildout under the No Project Alternative/1995 General Plan would be similar to that of the proposed 2040 General Plan. Similar implementation of applicable regulations and General Plan policies and programs would apply. Therefore, the No Project Alternative/1995 General Plan would result in similar impacts on air quality as the proposed 2040 General Plan and impacts would be less than significant without mitigation.

Biological Resources

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to biological resources would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-1 and Table 4-2, buildout under the No Project Alternative/1995 General Plan would be similar to that of the proposed 2040 General Plan. Therefore, potential disturbance to biological resources would be similar. As such, the No Project Alternative/1995 General Plan would result in similar impacts on biological resources as the proposed 2040 General Plan and impacts would be less than significant without mitigation.

Cultural Resources/Tribal Cultural Resources

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to cultural resources and tribal cultural resources would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-1 and Table 4-2, buildout under the No Project Alternative/1995 General Plan would be similar to that of the proposed 2040 General Plan. Therefore, potential disturbance to cultural resources and tribal cultural resources would be similar. As such, the No Project Alternative/1995 General Plan would result in similar impacts on cultural resources and tribal cultural resources as the proposed 2040 General Plan and impacts would be less than significant without mitigation.

Energy

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to energy would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-1 and Table 4-2, buildout under the No Project Alternative/1995 General Plan would be similar to that of the proposed 2040 General Plan. Therefore, potential energy impacts would be similar. As such, the No Project Alternative/1995 General Plan would result in similar impacts on energy as the proposed 2040 General Plan and impacts would be less than significant without mitigation.

Geology, Soils, and Seismicity

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to geology, soils, and seismicity would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-1 and Table 4-2, buildout under the No Project Alternative/1995 General Plan would be similar to that of the proposed 2040 General Plan. Therefore, potential geology, soils, and seismicity impacts would be similar. As such, the No Project Alternative/1995 General Plan would result in similar impacts on energy as the proposed 2040 General Plan and impacts would be less than significant without mitigation.

Greenhouse Gas Emissions

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to greenhouse gas emissions would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-1 and Table 4-2, buildout under the No Project Alternative/1995 General Plan would be similar to that of the proposed 2040 General Plan. Therefore, potential greenhouse gas emission impacts would be similar. As such, the No Project Alternative/1995 General Plan would

result in similar greenhouse gas emission impacts as the proposed 2040 General Plan and impacts would be less than significant without mitigation.

Hazards and Hazardous Materials

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to hazards and hazardous materials would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-1 and Table 4-2, buildout under the No Project Alternative/1995 General Plan would be similar to that of the proposed 2040 General Plan. Therefore, potential hazards and hazardous material impacts would be similar. As such, the No Project Alternative/1995 General Plan would result in similar hazards and hazardous material impacts as the proposed 2040 General Plan and impacts would be less than significant without mitigation.

Hydrology and Water Quality

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to hydrology and water quality would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-1 and Table 4-2, buildout under the No Project Alternative/1995 General Plan would be similar to that of the proposed 2040 General Plan. However, the proposed 2040 General Plan contains new Program 2.1.7, Release of Pollutants Due to Project Site Inundation, which requires the city to develop an action plan to identify how the city will address the potential release of pollutants within the city's flood hazard and tsunami zones, should they become inundated. Therefore, potential hydrology and water quality impacts would be greater under this alternative. As such, the No Project Alternative/1995 General Plan would result in greater hydrology and water quality impacts than the proposed 2040 General Plan, although the potential impacts would remain less than significant without mitigation.

Land Use

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to land use would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-1 and Table 4-2, buildout under the No Project Alternative/1995 General Plan would be similar to that of the proposed 2040 General Plan. Therefore, potential land use impacts would be similar. As such, the No Project Alternative/1995 General Plan would result in similar land use impacts as the proposed 2040 General Plan and impacts would be less than significant without mitigation.

Noise

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to noise would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-1 and Table 4-2, buildout under the No Project Alternative/1995 General Plan would be similar to that of the proposed 2040 General Plan. However, the 2040 General Plan contains new Policy HS-3.6, Mitigate Construction-related Vibration Impacts on Historic Structures, and new Program HS-3.6.1, Construction Vibration, to address construction within 150 feet of a historic structure. Therefore, potential noise impacts would be greater under this alternative. As such, the No Project Alternative/1995 General Plan would result in greater noise impacts than the proposed 2040 General Plan, although the potential impacts would remain less than significant without mitigation.

Population and Housing

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to population and housing would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-1 and Table 4-2, buildout under the No Project Alternative/1995 General Plan would be similar to that of the proposed 2040 General Plan. Therefore, potential population and housing impacts would be similar. As such, the No Project Alternative/1995 General Plan would result in similar population and housing impacts as the proposed 2040 General Plan and impacts would be less than significant without mitigation.

Public Services and Recreation

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to public services and recreation would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-1 and Table 4-2, buildout under the No Project Alternative/1995 General Plan would be similar to that of the proposed 2040 General Plan. Therefore, potential public services and recreation impacts would be similar. As such, the No Project Alternative/1995 General Plan would result in similar public services and recreation impacts as the proposed 2040 General Plan and impacts would be less than significant without mitigation.

Transportation

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to transportation would be less than significant with the implementation of mitigation and applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-1 and Table 4-2, buildout under the No Project Alternative/1995 General Plan would be similar to that of the proposed 2040 General Plan. Therefore, potential transportation

impacts would be similar. As such, the No Project Alternative/1995 General Plan would result in similar transportation impacts as the proposed 2040 General Plan and impacts would be less than significant without mitigation.

Utilities and Service Systems

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to utilities and service systems would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-1 and Table 4-2, buildout under the No Project Alternative/1995 General Plan would be similar to that of the proposed 2040 General Plan. Therefore, potential utilities and service systems impacts would be similar. As such, the No Project Alternative/1995 General Plan would result in similar utilities and service systems impacts as the proposed 2040 General Plan and impacts would be less than significant without mitigation.

Wildfire

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to wildfire would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-1 and Table 4-2, buildout under the No Project Alternative/1995 General Plan would be similar to that of the proposed 2040 General Plan. However, the 2040 General Plan contains new Policy HS-2.6, Fire Load, which requires the city to manage plants in the Wildland-Urban Interface (WUI) area to minimize fuel load for potential wildfire, and associated Program HS-2.6.1 (Open Space Management), Program HS-2.6.2 (Residential Landscaping), and Program HS-2.6.3 (Firewise Communities). Therefore, potential impacts related to wildfire would be greater under this alternative. As such, the No Project Alternative/1995 General Plan would result in greater wildfire impacts than the proposed 2040 General Plan, although the potential impacts would remain less than significant without mitigation.

4.4.2 CONCLUSION

The No Project Alternative/1995 General Plan would have similar impacts to the proposed 2040 General Plan's less-than-significant impacts associated with aesthetics, light, and glare, air quality, biological resources, cultural resources/tribal cultural resources, energy, geology, soils, and seismicity, greenhouse gas emissions, hazards and hazardous materials, land use, population and housing, public services and recreation, transportation, and utilities and service systems. This alternative would increase the severity of the proposed 2040 General Plan's less-than-significant impacts associated with hydrology and water quality, noise, and wildfire, because the new programs and policies in these areas would not be implemented; however, the potential impacts would remain less than significant without mitigation. Similar to the proposed 2040 General Plan, the No Project Alternative/1995 General Plan would be required to comply with applicable regulations including General Plan policies and programs.

The No Project Alternative/1995 General Plan would not meet all of the project objectives because this alternative would not include new policies and programs that provide direction for issues of sustainability and climate resiliency, sea level rise, hydrology and water quality, noise, and wildfire, in addition to addressing new requirements of State law. As the new policies and programs in the proposed 2040 General Plan reflect the current goals and vision expressed by Sausalito residents, businesses, decision-makers, and other stakeholders, the first objective of the proposed 2040 General Plan would not be met under the No Project Alternative/1995 General Plan. As the new policies and programs in the proposed 2040 General Plan address issues and concerns identified by Sausalito residents, businesses, decision-makers, and other stakeholders, the second objective of the proposed 2040 General Plan would not be met under the No Project Alternative/1995 General Plan. In addition, the proposed 2040 General Plan reflects new State law requirements, and therefore the last objective of the proposed 2040 General Plan would not be met under the No Project Alternative/1995 General Plan.

4.5 ALTERNATIVE 2 — INCREASED MIXED-USE HOUSING ALTERNATIVE

Under this alternative, the potential for increased residential development would occur by assuming greater residential mixed-use development in specific Central Commercial (CC), Mixed Residential & Commercial (CR), and Neighborhood Commercial (CN) land use designation areas throughout the Planning Area (see Exhibit 4-2). This could occur through rezoning to increase the allowable density and/or through other development incentives. Development under the Increased Mixed-Use Housing Alternative could result in up to 375 new residential units (see Table 4-3). The overall effect would be an increase of 71 housing units at buildout as compared to the proposed 2040 General Plan. Commercial and industrial development would be the same to that of the proposed 2040 General Plan (587,961 new square feet of commercial uses and 146,124 new square feet of industrial uses; total of 734,085 square feet), as shown in Table 4-4.

4.5.1 IMPACT ANALYSIS

Aesthetics, Light, and Glare

As noted in this Draft EIR, the proposed 2040 General Plan's impacts to aesthetics, light, and glare would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-3 and Table 4-4, this alternative would result in a net increase of 71 residential units as compared to the proposed 2040 General Plan at buildout. Like the proposed 2040 General Plan, this alternative would ensure potential impacts are less than significant with the implementation of applicable regulations including General Plan policies and programs. However, the increased residential buildout would be expected to result in a commensurable increase in building massing, lighting, and surfaces capable of creating glare. Therefore, while still less than significant, the Increased Mixed-Use Housing Alternative would result in slightly increased impacts on aesthetics, light, and glare as compared to the proposed 2040 General Plan.

TABLE 4-3: INCREASED MIXED-USE HOUSING ALTERNATIVE – PROJECTED RESIDENTIAL GROWTH AT BUILDOUT

LAND USE DESIGNATION	EXISTING (NUMBER OF UNITS)	TOTAL UNDER INCREASED MIXED-USE HOUSING ALTERNATIVE (NUMBER OF UNITS)	PROJECTED INCREASE UNDER INCREASED MIXED-USE HOUSING ALTERNATIVE (NUMBER OF UNITS)	TOTAL UNDER PROPOSED 2040 GENERAL PLAN (NUMBER OF UNITS)	NET CHANGE RELATIVE TO PROPOSED 2040 GENERAL PLAN (NUMBER OF UNITS)
Very Low Density Residential (VLR)	40	56	16	56	0
Low Density Residential (LR)	124	127	3	127	0
Medium Low Density Residential (MLR)	913	932	19	932	0
Medium Density Residential (MR)	90	92	2	92	0
Medium High Density Residential (MHR)	1,366	1,395	29	1,395	0
Planned Development – High Density Residential (PR)	281	281	0	281	0
High Density Residential (HR)	1,171	1,230	59	1,230	0
Arks (A)	6	6	0	6	0
Houseboats (H)	386	386	0	386	0
Mixed Residential and Commercial (CR)	117	191	74	162	29
Central Commercial (CC)	114	131	17	114	17
Neighborhood Commercial (CN)	16	38	22	22	16
Industrial (I)	9	9	0	9	0
Waterfront (W)	146	177	31	177	0
Public Institutional (PI)	7	7	0	7	0
Open Space (OS)	5	5	0	5	0
Conservation Overlay (SOI)	3	3	0	3	0
Accessory Dwelling Units	36	139	103	130	9
Totals	**4,830**	**5,205**	**375**	**5,134**	**71**

Sources: 2017 Marin County Assessor's GIS Data. Sausalito 2018 Annual Housing Element Progress Report. M-Group 2020. FCS 2020.

TABLE 4-4: INCREASED MIXED-USE HOUSING ALTERNATIVE – PROJECTED NON-RESIDENTIAL GROWTH AT BUILDOUT

LAND USE DESIGNATION	EXISTING (SQUARE FEET)	TOTAL UNDER INCREASED MIXED-USE HOUSING ALTERNATIVE (SQUARE FEET)	PROJECTED INCREASE UNDER INCREASED MIXED-USE HOUSING ALTERNATIVE (SQUARE FEET)	TOTAL UNDER PROPOSED 2040 GENERAL PLAN (SQUARE FEET)	NET CHANGE RELATIVE TO PROPOSED 2040 GENERAL PLAN (SQUARE FEET)
Mixed Residential and Commercial (CR)	129,832	199,414	69,582	199,414	0
Central Commercial (CC)	190,330	269,529	79,199	269,529	0
Neighborhood Commercial (CN)	110,248	144,010	33,762	144,010	0
Commercial Waterfront (CW)	50,029	106,852	56,823	106,852	0
Shopping Center (CS)	22,751	22,751	0	22,751	0
Industrial (I)	1,119,836	1,265,960	146,124	1,265,960	0
Waterfront (W)	271,869	611,930	340,061	611,930	0
Public Institutional (PI)	213,871	213,871	0	213,871	0
General Commercial (SOI)	18,593	27,127	8,534	27,127	0
Total	**2,127,359**	**2,861,444**	**734,085**	**2,861,444**	**0**

Sources: 2017 Marin County Assessor's GIS Data. Sausalito 2018 Annual Housing Element Progress Report. M-Group 2020. FCS 2020.

Air Quality

As noted in this Draft EIR, the proposed 2040 General Plan's impacts to air quality would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-3 and Table 4-4, this alternative would result in a net increase of 71 residential units as compared to the proposed 2040 General Plan at buildout. Like the proposed 2040 General Plan, this alternative would ensure potential impacts are less than significant with the implementation of applicable regulations including General Plan policies and programs. However, the increased residential buildout would be expected to result in a commensurable increase in construction and operational air quality emissions. Therefore, while still less than significant, the Increased Mixed-Use Housing Alternative would result in slightly increased impacts on air quality as compared to the proposed 2040 General Plan.

Biological Resources

As noted in this Draft EIR, the proposed 2040 General Plan's impacts to biological resources would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-3 and Table 4-4, this alternative would result in a net increase of 71 residential units as compared to the proposed 2040 General Plan at buildout. Like the proposed 2040 General Plan, this alternative would ensure potential impacts are less than significant with the implementation of applicable regulations including 2040 General Plan policies and programs. However, the increased residential buildout would be expected to result in a commensurable increase in ground disturbance and related biological resource impacts. Therefore, while still less than significant, the Increased Mixed-Use Housing Alternative would result in slightly increased impacts on biological resources as compared to the proposed 2040 General Plan.

Cultural Resources/Tribal Cultural Resources

As noted in this Draft EIR, the proposed 2040 General Plan's impacts to cultural resources and tribal cultural resources would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-3 and Table 4-4, this alternative would result in a net increase of 71 residential units as compared to the proposed 2040 General Plan at buildout. Like the proposed 2040 General Plan, this alternative would ensure potential impacts are less than significant with the implementation of applicable regulations including General Plan policies and programs. However, the increased residential buildout would be expected to result in a commensurable increase in ground disturbance and related potential cultural resources and tribal cultural resources impacts. Therefore, while still less than significant, the Increased Mixed-Use Housing Alternative would

result in slightly increased impacts on cultural resources and tribal cultural resources as compared to the proposed 2040 General Plan.

Energy

As noted in this Draft EIR, the proposed 2040 General Plan's energy impacts would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-3 and Table 4-4, this alternative would result in a net increase of 71 residential units as compared to the proposed 2040 General Plan at buildout. Like the proposed 2040 General Plan, this alternative would ensure potential impacts are less than significant with the implementation of applicable regulations including General Plan policies and programs. However, the increased residential buildout would be expected to result in a commensurable increase in energy use. Therefore, while still less than significant, the Increased Mixed-Use Housing Alternative would result in slightly increased energy impacts as compared to the proposed 2040 General Plan.

Geology, Soils, and Seismicity

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to geology, soils, and seismicity would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-3 and Table 4-4, this alternative would result in a net increase of 71 residential units as compared to the proposed 2040 General Plan at buildout. Like the proposed 2040 General Plan, this alternative would ensure potential impacts are less than significant with the implementation of applicable regulations including General Plan policies and programs. However, the increased residential buildout would be expected to result in a commensurable increase in ground disturbance and related geology, soils, and seismicity impacts. Therefore, while still less than significant, the Increased Mixed-Use Housing Alternative would result in slightly increased impacts related to geology, soils, and seismicity as compared to the proposed 2040 General Plan.

Greenhouse Gas Emissions

As noted in this Draft EIR, the proposed 2040 General Plan's greenhouse gas impacts would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-3 and Table 4-4, this alternative would result in a net increase of 71 residential units as compared to the proposed 2040 General Plan at buildout. Like the proposed 2040 General Plan, this alternative would ensure potential impacts are less than significant with the implementation of applicable regulations including General Plan policies and programs. However, the increased residential buildout would be expected to result in a commensurable increase in

greenhouse gas emissions. Therefore, while still less than significant, the Increased Mixed-Use Housing Alternative would result in slightly increased greenhouse gas emission impacts as compared to the proposed 2040 General Plan.

Hazards and Hazardous Materials

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to hazards and hazardous materials would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-3 and Table 4-4, this alternative would result in a net increase of 71 residential units as compared to the proposed 2040 General Plan at buildout. Like the proposed 2040 General Plan, this alternative would ensure potential impacts are less than significant with the implementation of applicable regulations including General Plan policies and programs. However, the increased residential buildout would be expected to result in a commensurable increase in ground disturbance and hazardous material use. Therefore, while still less than significant, the Increased Mixed-Use Housing Alternative would result in slightly increased impacts related to hazards and hazardous materials as compared to the proposed 2040 General Plan.

Hydrology and Water Quality

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to hydrology and water quality would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-3 and Table 4-4, this alternative would result in a net increase of 71 residential units as compared to the proposed 2040 General Plan at buildout. Like the proposed 2040 General Plan, this alternative would ensure potential impacts are less than significant with the implementation of applicable regulations including General Plan policies and programs. However, the increased residential buildout would be expected to result in a commensurable increase in ground disturbance and impervious surfaces. Therefore, while still less than significant, the Increased Mixed-Use Housing Alternative would result in slightly increased impacts related to hydrology and water quality as compared to the proposed 2040 General Plan.

Land Use

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to land use would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-3 and Table 4-4, this alternative would result in a net increase of 71 residential units as compared to the proposed 2040 General Plan at buildout. Like the proposed 2040 General Plan, this alternative would ensure potential impacts are less than significant with the implementation of applicable regulations including General Plan policies and programs. The

increased residential buildout would not be expected to physically divide an established community, nor would it conflict with a land use plan. Therefore, the Increased Mixed-Use Housing Alternative would result in similar land use impacts as compared to the proposed 2040 General Plan.

Noise

As noted in this Draft EIR, proposed 2040 General Plan's impacts related to noise would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-3 and Table 4-4, this alternative would result in a net increase of 71 residential units as compared to the proposed 2040 General Plan at buildout. Like the proposed 2040 General Plan, this alternative would ensure potential impacts are less than significant with the implementation of applicable regulations including General Plan policies and programs. However, the increased residential buildout would be expected to result in a commensurable increase in construction and operational noise. Therefore, while still less than significant, the Increased Mixed-Use Housing Alternative would result in slightly increased noise impacts as compared to the proposed 2040 General Plan.

Population and Housing

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to population and housing would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-3 and Table 4-4, this alternative would result in a net increase of 71 residential units as compared to the proposed 2040 General Plan at buildout. This increase would not be expected to result in unplanned population growth. Therefore, the Increased Mixed-Use Housing Alternative would result in similar population and housing impacts as compared to the proposed 2040 General Plan.

Public Services and Recreation

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to public services and recreation would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-3 and Table 4-4, this alternative would result in a net increase of 71 residential units as compared to the proposed 2040 General Plan at buildout. Like the proposed 2040 General Plan, this alternative would ensure potential impacts are less than significant with the implementation of applicable regulations including General Plan policies and programs. However, the increased residential buildout would be expected to result in a commensurable increase in the need for public services and recreation facilities. Therefore, while still less than significant, the

Increased Mixed-Use Housing Alternative would result in slightly increased impacts related to public services and recreation as compared to the proposed 2040 General Plan.

Transportation

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to public services and recreation would be less than significant with the implementation of mitigation and applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-3 and Table 4-4, this alternative would result in a net increase of 71 residential units as compared to the proposed 2040 General Plan at buildout. Like the proposed 2040 General Plan, this alternative would ensure potential impacts are less than significant with the implementation of applicable regulations including General Plan policies and programs. The increased residential buildout would be expected to result in a commensurable increase in the trip generation and overall total vehicle miles traveled. However, the vehicle miles traveled per service population would be expected to marginally decrease under this alternative because VMT tends to decrease with an increased density of residents, services, and employment opportunities. Therefore, the Increased Mixed-Use Housing Alternative would result in slightly decreased impacts related to transportation as compared to the proposed 2040 General Plan.

Utilities and Service Systems

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to utilities and service systems would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-3 and Table 4-4, this alternative would result in a net increase of 71 residential units as compared to the proposed 2040 General Plan at buildout. Like the proposed 2040 General Plan, this alternative would ensure potential impacts are less than significant with the implementation of applicable regulations including General Plan policies and programs. However, the increased residential buildout would be expected to result in a commensurable increase in the need for utilities and service systems. Therefore, while still less than significant, the Increased Mixed-Use Housing Alternative would result in slightly increased impacts related to utilities and service systems as compared to the proposed 2040 General Plan.

Wildfire

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to wildfire would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-3 and Table 4-4, this alternative would result in a net increase of 71 residential units as compared to the proposed 2040 General Plan at buildout. Like the proposed 2040 General Plan, this alternative would ensure potential impacts are less than significant with the

implementation of applicable regulations including General Plan policies and programs. However, the increased residential buildout would be expected to result in a commensurable increase in wildfire hazards and impacts. Therefore, while still less than significant, the Increased Mixed-Use Housing Alternative would result in slightly increased wildfire impacts as compared to the proposed 2040 General Plan.

4.5.2 CONCLUSION

The Increased Mixed-Use Housing Alternative would have similar impacts to the proposed 2040 General Plan's less-than-significant impacts associated with land use and population and housing. This alternative would decrease the severity of the proposed 2040 General Plan's less-than-significant impacts associated with transportation. This alternative would increase the severity of the proposed 2040 General Plan's less-than-significant impacts associated with aesthetics, light, and glare, air quality, biological resources, cultural resources/tribal cultural resources, energy, geology, soils, and seismicity, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, public services and recreation, utilities and service systems, and wildfire. Similar to the proposed 2040 General Plan, the Increased Mixed-Use Housing Alternative would be required to comply with applicable regulations including General Plan policies and programs.

The Increased Mixed-Use Housing Alternative would meet all project objectives including the maintenance of the city's small-scale residential neighborhoods by placing the additional 71 housing units within mixed-use commercial areas.

4.6 ALTERNATIVE 3 — DECREASED COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Under this alternative, commercial and industrial development would see an increase from existing conditions, but to a lesser degree than the buildout projected in General Plan 2040. The land use designation areas throughout the Planning Area associated this alternative are depicted on Exhibit 4-3 and include: Central Commercial (CC), Mixed Residential & Commercial (CR), Neighborhood Commercial (CN), Waterfront (W), and Industrial (I). This alternative would be more reflective of the city's recent development activity, particularly in industrial areas of the Marinship and commercial areas in the downtown.

Under this alternative, residential buildout would be consistent with that projected in General Plan 2040 and could result in up to 304 new residential units (see Table 4-5). Under this alternative, a total of 529,133 new square feet of commercial uses and 116,899 new square feet of industrial uses could be developed (see

TABLE 4-6). This alternative would result in a net decrease of 58,798 square feet of commercial development and a net decrease of 29,225 square feet of industrial development (88,023 square feet in total) at buildout as compared to the proposed 2040 General Plan.

TABLE 4-5: DECREASED COMMERCIAL AND INDUSTRIAL DEVELOPMENT ALTERNATIVE – PROJECTED RESIDENTIAL GROWTH AT BUILDOUT

LAND USE DESIGNATION	EXISTING (NUMBER OF UNITS)	TOTAL UNDER DECREASED COMMERCIAL AND INDUSTRIAL DEVELOPMENT ALTERNATIVE (NUMBER OF UNITS)	PROJECTED INCREASE UNDER DECREASED COMMERCIAL AND INDUSTRIAL DEVELOPMENT ALTERNATIVE (NUMBER OF UNITS)	TOTAL UNDER PROPOSED 2040 GENERAL PLAN (NUMBER OF UNITS)	NET CHANGE RELATIVE TO PROPOSED 2040 GENERAL PLAN (NUMBER OF UNITS)
Very Low Density Residential (VLR)	40	56	16	56	0
Low Density Residential (LR)	124	127	3	127	0
Medium Low Density Residential (MLR)	913	932	19	932	0
Medium Density Residential (MR)	90	92	2	92	0
Medium High Density Residential (MHR)	1,366	1,395	29	1,395	0
Planned Development – High Density Residential (PR)	281	281	0	281	0
High Density Residential (HR)	1,171	1,230	59	1,230	0
Arks (A)	6	6	0	6	0
Houseboats (H)	386	386	0	386	0
Mixed Residential and Commercial (CR)	117	162	45	162	0
Central Commercial (CC)	114	114	0	114	0
Neighborhood Commercial (CN)	16	22	6	22	0
Industrial (I)	9	9	0	9	0
Waterfront (W)	146	177	31	177	0
Public Institutional (PI)	7	7	0	7	0
Open Space (OS)	5	5	0	5	0
Conservation Overlay (SOI)	3	3	0	3	0
Accessory Dwelling Units	36	130	94	130	0
Totals	**4,830**	**5,134**	**304**	**5,134**	**0**

Sources: 2017 Marin County Assessor's GIS Data. Sausalito 2018 Annual Housing Element Progress Report. M-Group 2020. FCS 2020.

Table 4-6: Decreased Commercial and Industrial Development Alternative – Projected Non-Residential Growth at Buildout

LAND USE DESIGNATION	EXISTING (SQUARE FEET)	TOTAL UNDER DECREASED COMMERCIAL AND INDUSTRIAL DEVELOPMENT ALTERNATIVE (SQUARE FEET)	PROJECTED INCREASE UNDER DECREASED COMMERCIAL AND INDUSTRIAL DEVELOPMENT ALTERNATIVE (SQUARE FEET)	TOTAL UNDER PROPOSED 2040 GENERAL PLAN (SQUARE FEET)	NET CHANGE RELATIVE TO PROPOSED 2040 GENERAL PLAN (SQUARE FEET)
Mixed Residential and Commercial (CR)	129,832	192,456	62,624	199,414	(6,958)
Central Commercial (CC)	190,330	261,609	71,279	269,529	(7,920)
Neighborhood Commercial (CN)	110,248	140,633	30,385	144,010	(3,377)
Commercial Waterfront (CW)	50,029	101,169	51,140	106,852	(5,683)
Shopping Center (CS)	22,751	22,751	0	22,751	0
Industrial (I)	1,119,836	1,236,735	116,899	1,265,960	(29,255)
Waterfront (W)	271,869	577,924	306,055	611,930	(34,006)
Public Institutional (PI)	213,871	213,871	0	213,871	0
General Commercial (SOI)	18,593	26,273	7,680	27,127	(854)
Total	**2,127,359**	**2,773,421**	**646,062**	**2,861,444**	**(88,023)**

Sources: 2017 Marin County Assessor's GIS Data. Sausalito 2018 Annual Housing Element Progress Report. M-Group 2020. FCS 2020.

4.6.1 IMPACT ANALYSIS

Aesthetics, Light, and Glare

As noted in this Draft EIR, the proposed 2040 General Plan's impacts to aesthetics, light, and glare would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-5 and Table 4-6, this alternative would result in a net decrease of 88,023 square feet of commercial and industrial development as compared to the proposed 2040 General Plan at buildout. Therefore, it is expected that this alternative would similarly result in less than significant aesthetics, light, and glare impacts. However, the reduction in buildout would be expected to result in reduced building massing, lighting, and surfaces capable of creating glare. Therefore, the Decreased Commercial and Industrial Alternative would result in reduced impacts on aesthetics, light, and glare as compared to the proposed 2040 General Plan.

Air Quality

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to air quality would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-5 and Table 4-6, this alternative would result in a net decrease of 88,023 square feet of commercial and industrial development as compared to the proposed 2040 General Plan at buildout. Therefore, it is expected that this alternative would similarly result in less than significant air quality impacts. However, the reduction in buildout would be expected to result in a commensurable reduction in construction and operational air quality emissions. Therefore, the Decreased Commercial and Industrial Alternative would result in reduced impacts on air quality as compared to the proposed 2040 General Plan.

Biological Resources

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to biological resources would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-5 and Table 4-6, this alternative would result in a net decrease of 88,023 square feet of commercial and industrial development as compared to the proposed 2040 General Plan at buildout. Therefore, it is expected that this alternative would similarly result in less than significant biological resource impacts. However, the reduction in buildout would be expected to result in a commensurable reduction in ground disturbance and related biological resource impacts. Therefore, the Decreased Commercial and Industrial Alternative would result in reduced impacts on biological resources as compared to the proposed 2040 General Plan.

Cultural Resources/Tribal Cultural Resources

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to cultural resources and tribal cultural resources would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-5 and Table 4-6, this alternative would result in a net decrease of 88,023 square feet of commercial and industrial development as compared to the proposed 2040 General Plan at buildout. Therefore, it is expected that this alternative would similarly result in less than significant cultural resources and tribal cultural resources impacts. However, the reduction in buildout would be expected to result in a commensurable reduction in ground disturbance and related biological resource impacts. Therefore, the Decreased Commercial and Industrial Alternative would result in reduced impacts on cultural resources and tribal cultural resources as compared to the proposed 2040 General Plan.

Energy

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to energy would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-5 and Table 4-6, this alternative would result in a net decrease of 88,023 square feet of commercial and industrial development as compared to the proposed 2040 General Plan at buildout. Therefore, it is expected that this alternative would similarly result in less than significant energy impacts. However, the reduction in buildout would be expected to result in a commensurable reduction in energy use. Therefore, the Decreased Commercial and Industrial Alternative would result in reduced energy impacts as compared to the proposed 2040 General Plan.

Geology, Soils, and Seismicity

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to geology, soils, and seismicity would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-5 and Table 4-6, this alternative would result in a net decrease of 88,023 square feet of commercial and industrial development as compared to the proposed 2040 General Plan at buildout. Therefore, it is expected that this alternative would similarly result in less than significant geology, soils, and seismicity impacts. However, the reduction in buildout would be expected to result in a commensurable reduction in ground disturbance and related geology, soils, and seismicity impacts. Therefore, the Decreased Commercial and Industrial Alternative would result in reduced impacts on geology, soils, and seismicity as compared to the proposed 2040 General Plan.

Greenhouse Gas Emissions

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to greenhouse gasses would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-5 and Table 4-6, this alternative would result in a net decrease of 88,023 square feet of commercial and industrial development as compared to the proposed 2040 General Plan at buildout. Therefore, it is expected that this alternative would similarly result in less than significant greenhouse gas emission impacts. However, the reduction in buildout would be expected to result in a commensurable reduction in construction and operational greenhouse gas emissions. Therefore, the Decreased Commercial and Industrial Alternative would result in reduced impacts related to greenhouse gas emissions as compared to the proposed 2040 General Plan.

Hazards and Hazardous Materials

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to hazards and hazardous materials would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-5 and Table 4-6, this alternative would result in a net decrease of 88,023 square feet of commercial and industrial development as compared to the proposed 2040 General Plan at buildout. Therefore, it is expected that this alternative would similarly result in less than significant hazards and hazardous materials impacts. However, the reduction in buildout would be expected to result in a commensurable reduction in ground disturbance and hazardous materials use. Therefore, the Decreased Commercial and Industrial Alternative would result in reduced impacts related to hazards and hazardous materials as compared to the proposed 2040 General Plan.

Hydrology and Water Quality

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to hydrology and water quality would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-5 and Table 4-6, this alternative would result in a net decrease of 88,023 square feet of commercial and industrial development as compared to the proposed 2040 General Plan at buildout. Therefore, it is expected that this alternative would similarly result in less than significant hydrology and water quality impacts. However, the reduction in buildout would be expected to result in a commensurable reduction in ground disturbance and impervious surfaces and associated potential effects to hydrology and water quality. Therefore, the Decreased Commercial and Industrial Alternative would result in reduced impacts related to hydrology and water quality as compared to the proposed 2040 General Plan.

Land Use

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to land use would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-5 and Table 4-6, this alternative would result in a net decrease of 88,023 square feet of commercial and industrial development as compared to the proposed 2040 General Plan at buildout. Therefore, it is expected that this alternative would similarly result in less than significant land use impacts. The reduction in buildout would not physically divide an established community, nor would it conflict with a land use plan. Therefore, the Decreased Commercial and Industrial Alternative would result in similar land use impacts as compared to the proposed 2040 General Plan.

Noise

As noted in this Draft EIR, proposed 2040 General Plan's impacts related to noise would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-5 and Table 4-6, this alternative would result in a net decrease of 88,023 square feet of commercial and industrial development as compared to the proposed 2040 General Plan at buildout. Therefore, it is expected that this alternative would similarly result in less than significant noise impacts. However, the reduction in buildout would be expected to result in a commensurable reduction in construction and operational noise. Therefore, the Decreased Commercial and Industrial Alternative would result in reduced noise impacts as compared to the proposed 2040 General Plan.

Population and Housing

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to population and housing would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-5 and Table 4-6, this alternative would result in a net decrease of 88,023 square feet of commercial and industrial development as compared to the proposed 2040 General Plan at buildout. This reduction would not be expected to result in unplanned population growth. Therefore, the Decreased Commercial and Industrial Alternative would result in similar population and housing impacts as compared to the proposed 2040 General Plan.

Public Services and Recreation

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to public services and recreation would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-5 and Table 4-6, this alternative would result in a net decrease of 88,023 square feet of commercial and industrial development as compared to the proposed 2040 General Plan at buildout. Therefore, it is expected that this alternative would similarly result in less than significant public service and impacts. However, the reduction in buildout would be expected to result in a commensurable reduction in the need for public services and recreation. Therefore, the Decreased Commercial and Industrial Alternative would result in reduced impacts related to public services and recreation as compared to the proposed 2040 General Plan.

Transportation

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to transportation would be less than significant with the implementation of mitigation and applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-5 and Table 4-6, this alternative would result in a net decrease of 88,023 square feet of commercial and industrial development as compared to the proposed 2040 General Plan at buildout. Like the proposed 2040 General Plan, this alternative would ensure potential impacts are less than significant with the implementation of applicable regulations including General Plan policies and programs. The reduction in buildout would be expected to result in a commensurable reduction in trip generation and overall total vehicle miles traveled. However, the vehicle miles traveled per service population would be expected to marginally increase under this alternative because residents and visitors to Sausalito would be expected to travel outside of the city for some commercial and employment activity. Therefore, while still less than significant, the Decreased Commercial and Industrial Alternative would result in slightly increased impacts related to transportation as compared to the proposed 2040 General Plan.

Utilities and Service Systems

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to utilities and services systems would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-5 and Table 4-6, this alternative would result in a net decrease of 88,023 square feet of commercial and industrial development as compared to the proposed 2040 General Plan at buildout. Therefore, it is expected that this alternative would similarly result in less than significant utilities and service systems impacts. However, the reduction in buildout would be expected to result in a commensurable reduction in the need for utilities and service systems. Therefore, the Decreased Commercial and Industrial Alternative would result in reduced impacts related to utilities and services systems as compared to the proposed 2040 General Plan.

Wildfire

As noted in this Draft EIR, the proposed 2040 General Plan's impacts related to wildfire would be less than significant with the implementation of applicable regulations including General Plan policies and programs. No mitigation is necessary.

As shown in Table 4-5 and Table 4-6, this alternative would result in a net decrease of 88,023 square feet of commercial and industrial development as compared to the proposed 2040 General Plan at buildout. Therefore, it is expected that this alternative would similarly result in less than significant wildfire impacts. However, the reduction in buildout would be expected to result in a commensurable reduction in wildfire hazards. Therefore, the Decreased Commercial and Industrial Alternative would result in reduced impacts related to wildfire as compared to the proposed 2040 General Plan.

4.6.2 CONCLUSION

The Decreased Commercial and Industrial Alternative would have similar impacts to the proposed 2040 General Plan's less-than-significant impacts associated with land use and population and housing. This alternative would increase the proposed 2040 General Plan's less-than-significant impacts associated transportation. This alternative would reduce the proposed 2040 General Plan's less-than-significant impacts associated with aesthetics, light, and glare, air quality, biological resources, cultural resources/tribal cultural resources, energy, geology, soils, and seismicity, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, public services and recreation, utilities and service systems, and wildfire. Similar to the proposed 2040 General Plan, the Decreased Commercial and Industrial Alternative would be required to comply with applicable regulations including General Plan policies and programs.

The Decreased Commercial and Industrial Alternative would not meet all of the project objectives because this alternative would reduce the buildout of commercial and industrial square footage within the Sausalito Planning Area. For example, this alternative would not meet the objective of recognizing the importance of Sausalito's economic vitality and encouraging businesses and activities that have high municipal revenue generation potential to the same degree as the proposed 2040 General Plan. This alternative would not meet the objective encouraging industrial, arts and water-dependent or water-related activities in the Marinship and support these activities through the inclusion of compatible businesses and uses that can adapt to changing economic conditions to the same degree as the proposed 2040 General Plan.

4.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The qualitative environmental effects of each alternative in relation to the proposed 2040 General Plan are summarized in Table 4-7. The significance conclusion for each alternative is also identified in the table. As explained in detail above, because there are no significant and unavoidable impacts, the comparison contained in Table 4-7, and the subsequent discussion are provided for informational purposes only.

CEQA Guidelines Section 15126(e)(2) requires an EIR to identify an environmentally superior alternative. If the No Project Alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives.

TABLE 4-7: COMPARISON OF ALTERNATIVES

ENVIRONMENTAL TOPIC AREA	PROPOSED 2040 GENERAL PLAN SIGNIFICANCE LEVEL	ALTERNATIVE 1 NO PROJECT ALTERNATIVE/ 1995 GENERAL PLAN	ALTERNATIVE 2 INCREASED MIXED-USE HOUSING ALTERNATIVE	ALTERNATIVE 3 DECREASED COMMERCIAL AND INDUSTRIAL DEVELOPMENT
Aesthetics, Light, and Glare	LTS	Similar (LTS)	Increased (LTS)	Reduced (LTS)
Air Quality	LTS	Similar (LTS)	Increased (LTS)	Reduced (LTS)
Biological Resources	LTS	Similar (LTS)	Increased (LTS)	Reduced (LTS)
Cultural Resources/Tribal Cultural Resources	LTS	Similar (LTS)	Increased (LTS)	Reduced (LTS)
Energy	LTS	Similar (LTS)	Increased (LTS)	Reduced (LTS)
Geology, Soils, and Seismicity	LTS	Similar (LTS)	Increased (LTS)	Reduced (LTS)
Greenhouse Gas Emissions	LTS	Similar (LTS)	Increased (LTS)	Reduced (LTS)
Hazards and Hazardous Materials	LTS	Similar (LTS)	Increased (LTS)	Reduced (LTS)
Hydrology and Water Quality	LTS	Greater (LTS)	Increased (LTS)	Reduced (LTS)
Land Use	LTS	Similar (LTS)	Similar (LTS)	Similar (LTS)
Noise	LTS	Greater (LTS)	Increased (LTS)	Reduced (LTS)
Population and Housing	LTS	Similar (LTS)	Similar (LTS)	Similar (LTS)
Public Services and Utilities	LTS	Similar (LTS)	Increased (LTS)	Reduced (LTS)
Transportation	LTS	Similar (LTS)	Reduced (LTS)	Increased (LTS)
Utilities and Service Systems	LTS	Similar (LTS)	Increased (LTS)	Reduced (LTS)
Wildfire	LTS	Greater (LTS)	Increased (LTS)	Reduced (LTS)

Note:
LTS = Less than significant
Source: FCS 2020.

As shown in Table 4-7, the Decreased Commercial and Industrial Development Alternative is the environmentally superior alternative because, unlike the No Project Alternative/1995 General Plan, it would result in a reduction of 88,023 square feet of non-residential development. This reduced buildout potential would result in an overall reduction in the level of impacts.

4.8 ALTERNATIVES CONSIDERED BUT REJECTED FROM FURTHER CONSIDERATION

CEQA Guidelines 15126.6(c) requires an EIR to discuss alternatives that were initially considered but rejected from further consideration. The following are alternatives that were initially considered but rejected from further consideration for the reasons described below.

4.8.1 ALTERNATIVE LOCATION

CEQA Guidelines Section 15126.6(f)(2) sets forth considerations to be used in evaluating an alternative location. The section states that if a lead agency concludes that no feasible alternative locations exist for the proposed action, it must disclose its reasons for that conclusion.

In this case, an alternative location does not constitute a feasible alternative because the project in question consists of a comprehensive update to the City of Sausalito General Plan. A General Plan serves as the comprehensive land use planning document for the jurisdiction that adopts it; as such, the geographical area encompassed by the plan is an immutable, fundamental characteristic. Thus, it is not possible to evaluate an alternative location for the proposed 2040 General Plan.

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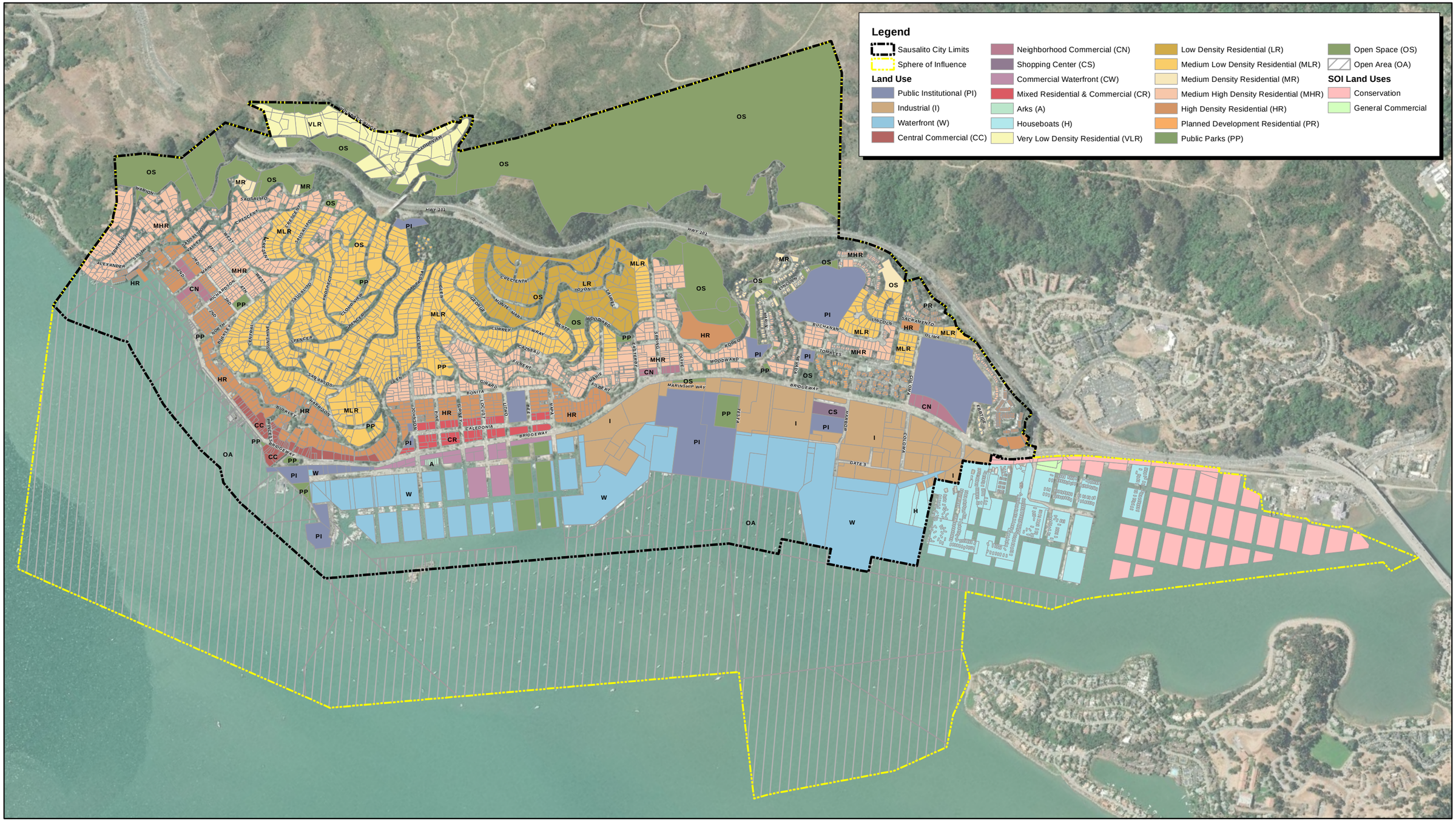

Source: ESRI Aerial Imagery. Marin County GIS data. M-Group.

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Exhibit 4-1
Alternative 1 – No Project Alternative/1995 General Plan

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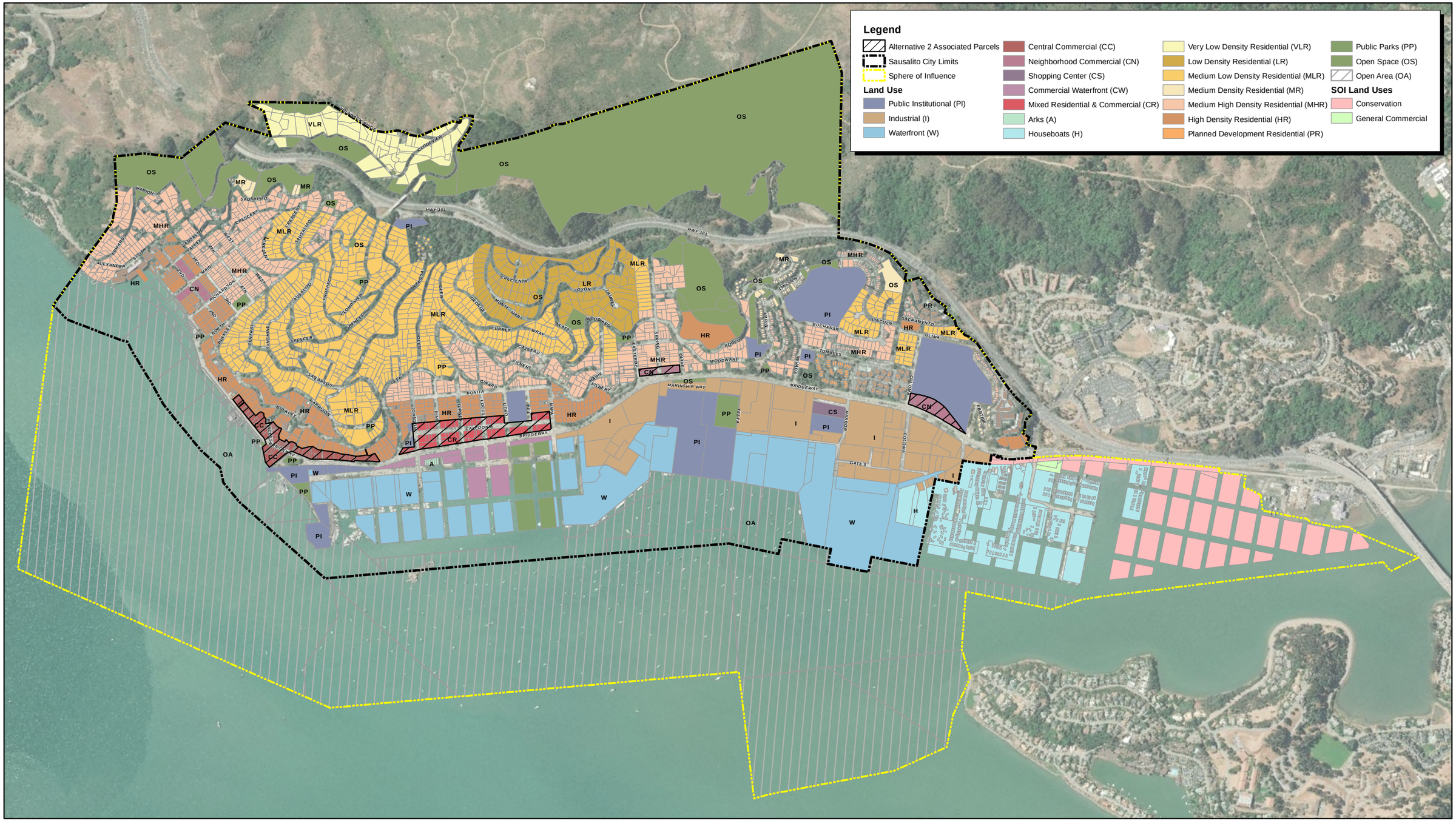

Source: ESRI Aerial Imagery. Marin County GIS data. M-Group.

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Exhibit 4-2
Alternative 2 - Increased Mixed-Use Housing Alternative

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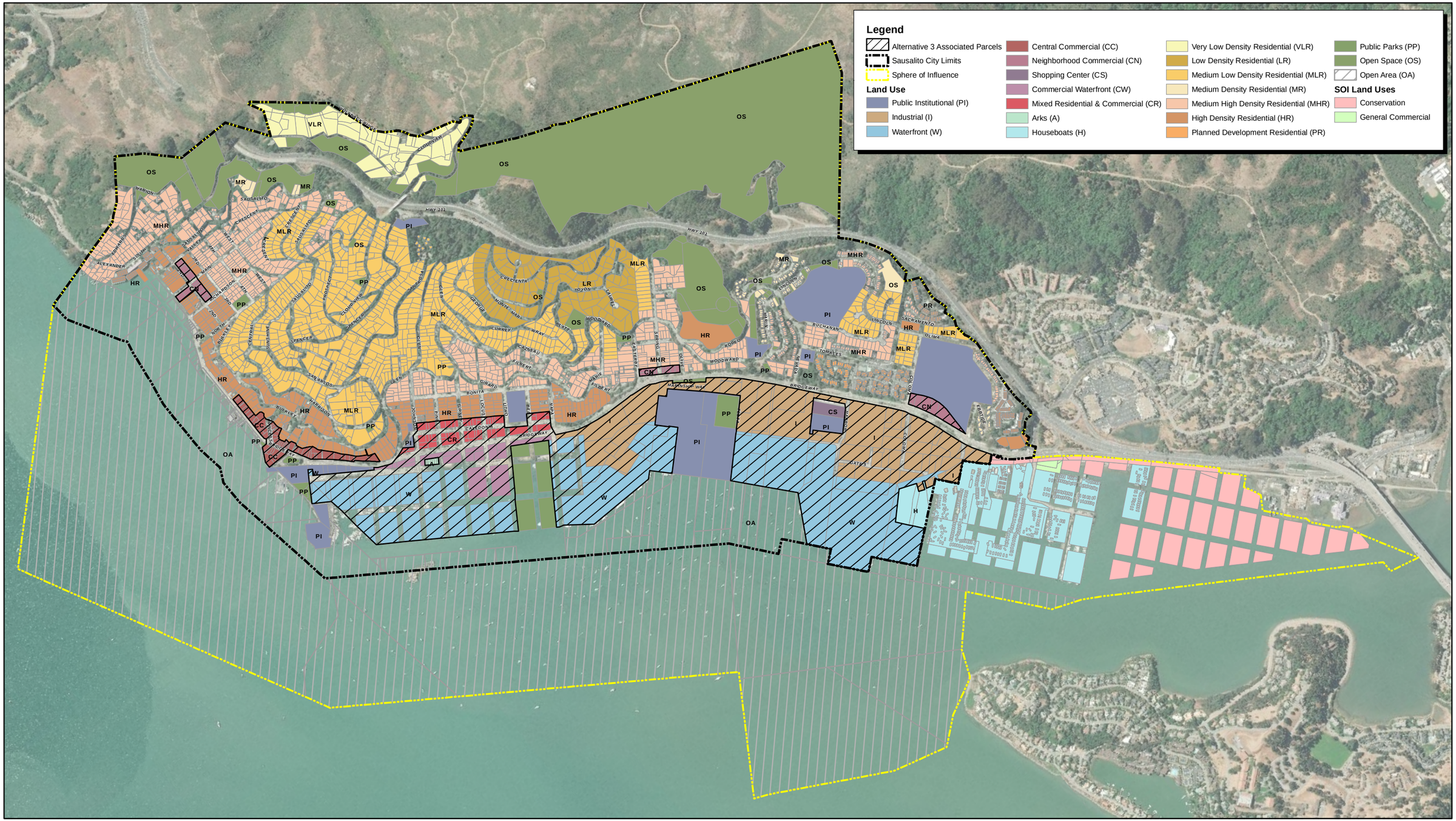

Source: ESRI Aerial Imagery. Marin County GIS data. M-Group.

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Exhibit 4-3
Alternative 3 - Decreased Commercial and Industrial Development Alternative

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5.0 OTHER CEQA CONSIDERATIONS

5.1 SIGNIFICANT UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(a)(b) requires an EIR to identify and focus on significant environmental effects of a project, including effects that cannot be avoided if the proposed 2040 General Plan were implemented.

Based on the analysis contained in this EIR, the city has determined that the proposed 2040 General Plan would not result in any significant and unavoidable impacts.

5.2 GROWTH-INDUCING IMPACTS

There are two types of growth-inducing impacts: direct and indirect. To assess potential for growth-inducing impacts, proposed 2040 General Plan Elements that may encourage and facilitate activities that individually or cumulatively may affect the environment must be evaluated (CEQA Guidelines Section 15126.2(d)). CEQA Guidelines, as interpreted by the city, state that a significant growth-inducing impact may result if the proposed 2040 General Plan would:

- Induce substantial population growth in an area (for example, by proposing new homes and commercial or industrial businesses beyond the land use density/intensity envisioned in the general plan);
- Substantially alter the planned location, distribution, density, or growth rate of the population of an area; or
- Include extensions of roads or other infrastructure not assumed in the general plan or adopted capital improvements project list, when such infrastructure exceeds the needs of the project and could accommodate future developments.

Direct growth-inducing impacts occur when development imposes new burdens on a community by directly inducing population growth, or by leading to construction of additional developments in the same area. Also in this category is removal of physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant with excess capacity that could allow additional development in the service area). Construction of these types of infrastructure cannot be considered isolated from the development they facilitate and serve. Physically removing obstacles to growth, or indirectly inducing growth may provide a catalyst for future unrelated development in an area, such as a new residential community that requires additional commercial uses to support residents.

Implementing the proposed 2040 General Plan would directly induce growth in the city, but not in a manner that is far beyond citywide land use densities/intensities or the 2015-2023 Housing Element. The California Department of Finance estimated the total population of the City of

Sausalito to be 7,416 as of January 1, 2019.[1] The city projects a population of 7,883 by 2040 based on buildout of the proposed 2040 General Plan. Buildout of the proposed 2040 General Plan is expected to result in the development of up to 304 residential units, resulting in an additional population of 467 persons or 5.9 percent of the total 2019 population. Therefore, direct population growth as a result of the proposed 2040 General Plan is considered negligible.

In addition to residential units, direct growth from the proposed 2040 General Plan is projected to include industrial, waterfront, and commercial growth, which could add approximately 1,762 jobs. The Planning Area is already a well-developed area with a suburban residential character. Infrastructure and services would be expanded as necessary to serve city growth, without significant excess capacity, and thus would not encourage additional growth beyond that already planned for in the proposed 2040 General Plan. As a result, the proposed 2040 General Plan would create minimal to no indirect growth, and the planned buildout would be consistent with city projections.

The proposed 2040 General Plan would also not significantly or adversely affect the permanent jobs/housing balance. The proposed 2040 General Plan would allow for creation of nonresidential development and jobs but would not create a housing demand above what would otherwise occur in the city. The proposed 2040 General Plan could allow for up to 304 residential units and up to approximately 467 new residents. The Planning Area is served by transportation infrastructure, including several Golden Gate Transit stops and two ferry services. Therefore, housing included under the proposed 2040 General Plan would help the city achieve a more even job/housing balance by providing much-needed housing.

The Planning Area is already well-developed, thus implementing the proposed 2040 General Plan would not likely require extensions of electrical, natural gas, or water utility infrastructure, but would require connections to existing infrastructure on and adjacent to future projects. The proposed 2040 General Plan would not extend urban infrastructure other than to future projects within the Planning Area, and thus would not induce growth in other areas outside the city's Sphere of Influence. Furthermore, the proposed 2040 General Plan would be compatible with existing residential and commercial uses and not pressure adjacent areas to redevelop with new or different land uses. As a result, it is not anticipated that nearby residents would relocate. Therefore, the proposed 2040 General Plan would not remove a barrier to growth nor create an indirect population increase.

Since the proposed 2040 General Plan would not result in indirect growth, negatively alter the existing jobs/housing balance, or be inconsistent with the 2015 Housing Element Update, growth-inducing impacts would be less than significant.

5.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

As mandated by CEQA Guidelines Section 15126.2(c), the EIR must address significant irreversible environmental changes that would result from implementation of the project. Specifically, such an irreversible environmental change would occur if:

[1] State of California Department of Finance. 2019. E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011-2019. May.

- The proposed 2040 General Plan would involve a large commitment of nonrenewable resources;
- Irreversible damage can result from environmental accidents associated with the proposed 2040 General Plan; and
- The proposed consumption of resources is not justified (e.g., the proposed 2040 General Plan results in the wasteful use of energy). (Refer to Section 3.5, Energy, which addresses this topic in accordance with CEQA Guidelines Appendix F.)

The proposed 2040 General Plan contemplates 304 new dwelling units and 734,085 square feet of new non-residential development at buildout.

Construction would include use of building materials such as petroleum-based products and metals that cannot reasonably be recreated. Construction also would involve significant consumption of energy, usually petroleum-based fuels that deplete supplies of nonrenewable resources. Construction of structures and infrastructure would consume energy and water. Construction debris recycling practices would be expected to allow for recovery and reuse of building materials such as concrete, lumber, and steel, and would limit disposal of these materials, some of which are non-renewable. Additionally, construction equipment would have to meet Bay Area Air Quality Management District standards as described in Section 3.2, Air Quality. Section 3.5, Energy, addresses appropriate consumption of energy for development construction.

Once construction is complete, land uses associated with buildout of the proposed 2040 General Plan would use some nonrenewable fuels to heat and light structures and would consume water. New residential uses would be required to be built and adhere to the latest adopted edition of the California Green Building Standards Code, which would reduce energy demand, water consumption, and wastewater and solid waste generation that would collectively reduce demand for resources. This would lessen emissions and generation of pollution and effluent, and so the severity of corresponding environmental effects. Thus, although the proposed 2040 General Plan would result in an irretrievable commitment of non-renewable resources, energy for heat and light and water for irrigation and plumbing would not be consumed inefficiently, unnecessarily, or wastefully.

The proposed 2040 General Plan may have potential to cause significant environmental accidents through hazardous material releases into the environment by new commercial or industrial land uses. However, compliance with State law and implementation of a Stormwater Pollution Prevention Plan during construction activities would ensure that future development would not create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving release of hazardous materials (see Section 3.8, Hazards and Hazardous Materials). According to California Department of Forestry and Fire Protection, the Planning Area is not located in a Fire Hazard Severity Zone, and the closest Very High Fire Hazard Severity Zones are just northwest of city limits in unincorporated Marin City and Tamalpais Valley.[2] Land use designations within the Wildland Urban Interface would not be modified under the proposed 2040 General Plan. As a result, the degree of wildland fire hazard,

[2] California Department of Forestry and Fire Protection. Fire Hazard Severity Zone Viewer. Website: https://egis.fire.ca.gov/FHSZ/. Accessed March 12, 2020.

including secondary hazards, would not substantially change with adoption of the proposed 2040 General Plan, and current hazards would not significantly increase (see Section 3.16, Wildfire). In addition, as discussed in Section 3.13, Public Services and Recreation, existing fire protection facilities would be adequate to serve the Planning Area under the proposed 2040 General Plan, and the proposed 2040 General Plan would not result in a significant and unavoidable impact related to need for new or altered fire protection facilities. Thus, implementation of the proposed 2040 General Plan would not have potential to result in significant environmental accidents related to wildfire hazards and would not result in significant irreversible environmental changes (see Section 3.16, Wildfire).

6.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

6.1 INTRODUCTION

This section of the EIR is based on the Notice of Preparation (NOP), dated October 16, 2019, and contained in Appendix A of this EIR. The NOP was prepared to identify potentially significant effects of the project and was circulated for public review between October 17, 2019 and December 9, 2019. During this evaluation, certain impacts were found to be less than significant because construction and operation of potential development under the proposed General Plan would not result in such impacts.

This section provides a brief description of effects found not to be significant or less than significant, based on the NOP, NOP public comments received, or more detailed analysis conducted as part of the EIR preparation process. Note that several impacts found to be less than significant are addressed in the various EIR topical sections to allow for additional details to support the determination (see Sections 3.1 through 3.16).

Information in this section is based on statements, data, and figures provided by the following reference materials:

- Sausalito 2040 General Plan;
- Sausalito Zoning Map;
- Sausalito Municipal Code;
- California Department of Conservation, Farmland Mapping and Monitoring Program Map;
- U.S. Department of Agriculture, U.S. Forest Service Maps; and
- California Department of Conservation, Division of Mines and Geology, Mineral Land Classification Reports and Maps.

6.2 ENVIRONMENTAL EFFECTS FOUND NOT TO BE SIGNIFICANT

6.2.1 AGRICULTURE AND FORESTRY RESOURCES

Important Farmland

The Sausalito Planning Area is located within an urbanized area and does not support agricultural land use activities. The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) maps the Planning Area as “Urban and Built-up Land” and “Other Land,” both of which are non-agricultural designations.[1] Urban and Built-up Land is defined as land occupied by structures such as residential, industrial, or commercial uses. Other Land is defined as land not included in any other mapping category such as low-density rural developments, brush, timber, wetland, and vacant land surrounded by urban development. As

[1] California Department of Conservation, Division of Land Resources Protection. 2018. Marin County Important Farmland 2016. April.

such, implementation of the proposed 2040 General Plan would not convert Important Farmland to non-agricultural uses and no impact would occur.

Agricultural Zoning and Williamson Act Contracts

The Planning Area does not contain any land zoned for agricultural uses by the Sausalito Zoning Ordinance.[2,3] The proposed 2040 General Plan does not support agricultural land use activities and, therefore, would not be eligible for a Williamson Act contract. This condition precludes the possibility of conflicts with agricultural zoning or a Williamson Act contract. No impact would occur.

Forest Land

In accordance with the definition provided in California Public Resources Code Section 12220(g), "forest land" is land that can support, under natural conditions, 10 percent native tree cover of any species, including hardwoods, and that allows for the preservation or management of forest-related resources such as timber, aesthetic value, fish and wildlife, biodiversity, water quality, recreational facilities, and other public benefits.

The Sausalito Planning Area is located within an urbanized area and does not support forest land use activities. As mapped by the United States Department of Agriculture Forest Service, there are no National Forest lands within the Planning Area.[4]

The California Department of Conservation FMMP maps all land uses east of Highway 101 as "Urban and Built-up Land." The areas west of Highway 101, designated as Very Low Density Residential on the General Plan Land Use Map, are also mapped as "Urban and Built-up Land." Urban and Built-up Land is defined as land occupied by structures such as residential, industrial, or commercial uses. As such, these areas do not support forest land use activities, and would not result in the conversion of forest land to non-forest uses.

The remaining areas within the Planning Area west of Highway 101, designated as Open Space on the Sausalito General Plan Land Use Map, are identified "Other Land" by the California Department of Conservation FMMP. Other Land is defined as land not included in any other mapping category such as low-density rural developments, brush, timber, wetland, and vacant land surrounded by urban development. The Open Space designation includes maintained natural recreation spaces as well as the federally owned lands of the Golden Gate National Recreation Area. Development is not to take place in these areas except for minor site improvements as deemed appropriate. As such, any development under the proposed General Plan would only include minor site improvements and would not convert forest land to non-forest uses.

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2 City of Sausalito Zoning Map. 2003. Website: https://www.sausalito.gov/departments/community-development/planning-division/current-planning/zoning-administrator. Accessed March 24, 2020.

3 Marin General Services Authority. Zoning Map. Website: http://www.marinmap.org/Html5Viewer/Index.html?viewer=zonelookup&Run=StartUpQuery&query=prop_id=%27064-165-12%27. Accessed January 27, 2020.

4 U.S. Department of Agriculture, Forest Service, National Forest Type Groups. Website: https://data.fs.usda.gov/geodata/rastergateway/forest_type/index.php. Accessed March 24, 2020.

Forest Zoning

The Planning Area does not contain any land zoned for forest uses or timberland by the Sausalito Zoning Ordinance.[5,6] As such, the proposed 2040 General Plan would not conflict with existing zoning for, or cause the rezoning of, forest land or timberland. No impact would occur.

Pressures to Convert Agricultural Land or Forest Land

The Sausalito Planning Area is located within an urbanized area and does not support agricultural or forest land use activities. As such, development under the proposed 2040 General Plan would not result in the conversion of agricultural or forest land uses to urban uses. No impact would occur.

6.2.2 MINERAL RESOURCES

In accordance with California's Surface Mining and Reclamation Act of 1975 (SMARA), the State Geologist, through the California Department of Conservation, California Geological Survey (formerly Division of Mines and Geology), is responsible for identifying and mapping the non-fuel mineral resources of the State. Economically significant mineral deposits are classified based on the known and inferred mineral resource potential of the land using the California Mineral Land Classification System, which includes the following four mineral resource zones.

- MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- MRZ-3: Areas containing mineral deposits, the significance of which cannot be evaluated.
- MRZ-4: Areas where available information is inadequate for assignment to any other zone.

The Sausalito Planning Area is designated as MRZ-1 and MRZ-4 by the California Department of Conservation, California Geological Survey.[7] However, in January 2018, a report was prepared by the State Mining and Geology Board to update the designation information previously presented in SMARA's Designation Report No. 7 "*Designation of Regionally Significant Construction Aggregate Resource Areas in the South San Francisco Bay, North San Francisco Bay, and Monterey Bay Production-Consumption Region,"* published in 1987.

The information that follows is based on the January 2018 report prepared by the State Mining and Geology Board titled "*Updated Designation of Regionally Significant Aggregate Resources in the North San Francisco Bay Production-Consumption Region, Sonoma, Napa, Marin, and*

[5] City of Sausalito Zoning Map. 2003. Website: https://www.sausalito.gov/departments/community-development/planning-division/current-planning/zoning-administrator. Accessed March 24, 2020.

[6] Marin General Services Authority. Zoning Map. Website: http://www.marinmap.org/Html5Viewer/Index.html?viewer=zonelookup&Run=StartUpQuery&query=prop_id=%27064-165-12%27. Accessed January 27, 2020.

[7] California Department of Conservation, Division of Mines and Geology. 1987. Classification of Aggregate Resources Areas: North San Francisco Bay Production-Consumption Region.

Southwestern Solano Counties, California." In 1987, the Board designated 7,586 acres, containing 1,876 million tons of aggregate resources, to be of regional significance in the North San Francisco Bay P-C Region. Since that time, the designated aggregate resources have been reduced by about 19 percent, or 363 million tons, due to depletion by mining (16 percent) and urbanization (3 percent). An additional 2,869 acres containing 821 million tons have been newly designated. As detailed in the report, the land comprising the Sausalito Planning Area was not originally designated in 1987 as containing aggregate resources. In addition, as stated in the report, the land comprising the Planning Area was not designated as a newly identified aggregate resource to be of regional significance. As such, construction and operation of potential development under the proposed General Plan would not result in the loss of availability of a known mineral resource of value to the region and residents of the State. Therefore, no impact related to mineral resources would occur.

7.0 PERSONS AND ORGANIZATIONS CONSULTED/LIST OF PREPARERS

7.1 PUBLIC AGENCIES

7.1.1 LEAD AGENCY

City of Sausalito

Community Development Department Director .....Lilly Whalen
City Attorney.....Mary Wagner
Public Works Director/City Engineer .....Kevin McGowan
Parks & Recreation Director ..... Michael Langford
City Librarian/Director of Communications .....Abbot Chambers
Chief of Police ..... John Rohrbacher
Fire Chief.....Chris Tubbs

7.1.2 PUBLIC AGENCIES

State Agencies

Native American Heritage Commission
Cultural Resources Analyst.....Sarah Fonseca

Regional Agencies

San Francisco Bay Conservation and Development Commission
Coastal Planner .....Clesi Bennett

7.2 LIST OF PREPARERS

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M-Group

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Director of Urban Design .....Tom Ford, AICP
Associate Planner ..... Asher Kohn

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Project Manager ..... Lisa Davison
Analyst ..... Kathleen McCully
Analyst ..... Spencer Pignotti
Senior Noise & Air Quality Scientist ..... Philip Ault
Air Quality Scientist ..... Kimberly Johnson
Biologist ..... Robert Carroll
Cultural Resources Director ..... Dana DePietro, RPA

Parisi Transportation Consulting

Transportation Engineer ..... David Parisi
Transportation Engineer ..... Patrick Golier